SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form S-4

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Hawk Corporation

(Exact name of Registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

34-1608156

(I.R.S. Employer Identification Number)

6719

(Primary Standard Industrial Classification Code Number)

200 Public Square, Suite 30-5000 Cleveland, Ohio 44114 (216) 861-3553

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

SEE TABLE OF ADDITIONAL REGISTRANTS

Ronald E. Weinberg Chairman of the Board and Chief Executive Officer 200 Public Square, Suite 30-5000 Cleveland, Ohio 44114 (216) 861-3553

(Name, address, including zip code, and telephone number, including area code, of agent for service)

With copies to:

Marc C. Krantz, Esq. Steven C. Bersticker, Esq. Kohrman Jackson & Krantz P.L.L. 1375 East Ninth Street, 20th Floor Cleveland, Ohio 44114 (216) 736-7204 Jane Whitt Sellers, Esq. McGuireWoods LLP One James Center 901 East Cary Street Richmond, Virginia 23219 (804) 775-1000

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. \Box

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price per Unit	Proposed Maximum Amount of Aggregate Offering Price	Registration Fee
% Senior Notes due 2	\$65,000,000	100%	\$65,000,000	\$5,980(1)
Guarantees of the Senior Notes	—		—	— (2)

- (1) Calculated in accordance with Rule 457(f)(1).
- (2) Each direct or indirect domestic subsidiary of Hawk Corporation has guaranteed the notes being registered pursuant hereto. Pursuant to Rule 457(n), no separate fee is payable with respect to the guarantees of the notes being registered.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

TABLE OF ADDITIONAL REGISTRANTS

The address of the principal executive offices of each of the additional Registrants listed below, and the name and address of the agent for service therefor, is the same as is set forth for Hawk Corporation on the facing page of this Registration Statement.

Exact name of additional Registrant as specified in its charter	State or other jurisdiction of incorporation or organization	Primary Standard Industrial Classification Code Number	I.R.S. Employer Identification Number
Allegheny Clearfield, Inc.	Pennsylvania	3499	25-1408704
Friction Products Co.	Ohio	3499	34-1608009
Hawk Brake, Inc.	Ohio	3499	34-1657454
Hawk MIM, Inc.	Ohio	6719	34-1940518
Hawk Motors, Inc.	Delaware	3363	31-1815526
Hawk Precision Components Group, Inc.	Ohio	6719	30-0018123
Helsel, Inc.	Delaware	3499	35-1957561
Logan Metal Stampings, Inc.	Ohio	3460	34-1608159
Net Shape Technologies LLC	Delaware	3499	34-1899581
Quarter Master Industries, Inc.	Delaware	3714	36-4323703
S.K. Wellman Holdings, Inc.	Delaware	6719	34-1805476
S.K. Wellman Corp.	Delaware	3499	34-1804995
Sinterloy Corporation	Delaware	3499	31-1549254
Tex Racing Enterprises, Inc.	Delaware	3714	56-1323370

PROSPECTUS AND CONSENT SOLICITATION STATEMENT



Offer to Exchange

We are offering to exchange \$ of % Senior Notes due 2 , of which \$ in principal amount constitutes a consent payment for consents received before the consent payment deadline, for each \$1,000 principal amount of outstanding $10^{1}/_{4}$ % Senior Notes due 2003 of Hawk Corporation (CUSIP Nos. 420089AA2 and 420089AC8), and we are soliciting consents to amend the indenture for the $10^{1}/_{4}$ % Senior Notes due 2003.

The consent payment deadline (the time by which you must tender to receive the consent payment) will be 5:00 p.m., New York City time, on the later to occur of the date that we receive the required consents to amend the indenture or , 2002.

The exchange offer will expire at 5:00 p.m., New York City time, on , 2002, unless extended or earlier terminated.

- The exchange offer and consent solicitation are subject to the valid tenders of at least a majority in aggregate principal amount of the old notes, to the refinancing of our old credit facility on terms acceptable to us in our sole discretion and to other customary conditions.
- If the conditions of the exchange offer and consent solicitation are satisfied or waived by us, we will accept for exchange the old notes that are validly tendered and not withdrawn as of 5:00 p.m., New York City time, on the expiration date of the exchange offer.
- You may withdraw tenders of old notes at any time before we notify the trustee for the old notes that we have received valid and unrevoked consents representing a majority in aggregate principal amount of old notes.
- · We will pay in cash the accrued and unpaid interest on the old notes we acquire in the exchange.
- The exchange of old notes for new notes will be a taxable event for U.S. federal income tax purposes.
- The new notes will have the same interest payment dates but a different maturity date, a different optional redemption schedule and a different interest rate than the old notes. Other terms of the new notes will be substantially the same as the old notes before giving effect to the proposed amendments to the old indenture.
- Our domestic subsidiaries will guarantee the payment of interest and principal under the new notes.
- We have applied to list the new notes on the New York Stock Exchange.
- Concurrently with the exchange offer, we are soliciting consents from the holders of old notes to amend the old indenture. The proposed amendments would eliminate all of the subsidiary guarantees, all of the restrictive covenants and some of the events of default in the old indenture.
- You must consent to tender your old notes, and you must tender to consent.
- If the proposed amendments are adopted, you will be bound by the proposed amendments even if you do not consent.
- Any untendered old notes will be effectively subordinated in right of payment to the new notes.

You should consider the "Risk Factors" beginning on page of this prospectus and consent solicitation statement when you evaluate the exchange offer and consent solicitation.

Neither the Securities and Exchange Commission nor any state securities regulator has approved or disapproved these securities, or determined if this prospectus and consent solicitation statement is adequate or accurate. Any representation to the contrary is a criminal offense.

Exclusive Dealer Manager

Banc of America Securities LLC

The date of this prospectus and consent solicitation statement is

, 2002

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Hawk Corporation is not making the exchange offer and consent solicitation to, and will reject exchanges or consents from, holders of old notes in any jurisdiction where the exchange offer, the consent solicitation or the acceptance of outstanding old notes in exchange for new notes would violate the securities or blue sky laws of that jurisdiction.

None of Hawk Corporation, any of its subsidiaries, the dealer manager, the exchange agent, the information agent or the trustee under the old indenture and the new indenture makes any recommendation as to whether holders of old notes should exchange their securities in the exchange offer and consent to the proposed amendments to the old indenture.

You should rely only on the information contained or incorporated by reference in this prospectus and consent solicitation statement. We have not authorized any person (including any dealer, salesman or broker) to provide information or make any representations other than as provided in this prospectus and consent solicitation statement and, if given or made, you should not rely on any other information or representations as having been authorized by Hawk Corporation, any of its subsidiaries, the dealer manager or any agent or dealer. We are not making an offer of new notes in any state where the offer is not permitted. You should not assume that the information in this prospectus and consent solicitation statement is accurate as of any date other than the date on the cover page or that any information contained in any document we have incorporated by reference is accurate as of any date other than the date of the document we incorporated by reference.

Our federally registered trademarks include Hawk®, Wellman Friction Products®, Velvetouch®, Fibertuff®, Feramic®, Velvetouch Feramic®, Velvetouch Organik®, Velvetouch Metalik®, Hawk Brake® and Hawk Performance®. Velvetouch® is our principal trademark for use in the friction products aftermarket segment and is registered in 26 countries. We have applied for the registration of the Hawk Motors, Hawk Precision Components Group, Hawk Rotors, Mega V, Pro V, Quarter Master, Trilite, Tex Racing and Wellman Products Group trademarks. We also refer to trademarks of other corporations in this prospectus and consent solicitation statement.

SUMMARY

This summary highlights selected information from this prospectus and consent solicitation statement. It may not contain all of the information that is important to you. We urge you to carefully read and review the entire prospectus and consent solicitation statement and the other documents to which it refers to fully understand the terms of the new notes, the exchange offer and the consent solicitation. The terms "Hawk," "the company," "we," "us" and "our" used in this prospectus and consent solicitation statement refer to Hawk Corporation and its subsidiaries as a combined entity, except where it is made clear that the terms mean only Hawk. Throughout this prospectus and consent solicitation statement, we refer to our 10½% Senior Notes due 2003 and our Series B 10½% Senior Notes due 2003 as the "old notes," and to the indenture that governs them and its supplemental indentures as the "old indenture." We refer to our "Senior Notes due 2 as the "new notes" and to the indenture that will govern them as the "new indenture." We refer to our existing secured credit facility, as amended, as the "old credit facility" and to the new secured credit facility that we will obtain in conjunction with the exchange offer as the "new credit facility."

Our Company

We are a leading supplier of friction products and precision components for industrial, agricultural and aerospace applications. We focus on designing, manufacturing and marketing products requiring sophisticated engineering and production techniques for applications in markets in which we have achieved a significant market share. Our products include friction parts for brakes, clutches and transmissions used in construction vehicles, agricultural vehicles, trucks, motorcycles and race cars, and parts for brake systems used in commercial and general aviation. Our precision components are used in pumps, motors, transmissions, antilock brake systems and other applications for industrial equipment, lawn and garden equipment, appliances, small hand tools and trucks. Our friction and precision components are made principally from proprietary formulations and designs of metal powders and composite materials.

We benefit from a deep and diversified customer base, with approximately 2,500 total customers, none of which accounted for more than 7% of our net sales in 2001. We are a preferred supplier to many of the world's largest and well known brand name original equipment manufacturers, deriving more than 80% of our sales from products for which we are the sole source provider for specific customer applications. We offer our customers full service capabilities, from design through production, and work closely with original equipment manufacturers to improve performance and develop product innovations to generate increased sales. We also benefit from a diversified product list, with over 5,000 total products, none of which accounted for more than 5% of our net sales in 2001. We do not target the cyclical consumer automotive sector. Consequently, less than 7% of our net sales in any of the last five years was to the consumer automotive and light truck market. For the three months ended March 31, 2002, we generated net sales of \$49.8 million and income from operations plus depreciation and amortization, or EBITDA, of \$4.3 million. For the year ended December 31, 2001, we generated net sales of \$184.4 million and EBITDA of \$19.5 million. Our common stock has been publicly traded since 1998.

Through our subsidiaries, we operate primarily in four reportable segments:

• Friction Products

We believe that, based on net sales, we are one of the top worldwide manufacturers of friction products used in industrial, agricultural and aerospace applications. Our friction products segment manufactures products made from proprietary formulations of composite materials that primarily consist of metal powders and synthetic and natural fibers. Friction products are the parts used in brakes, clutches and transmissions to absorb vehicular energy and dissipate it through heat and normal mechanical wear. The principal markets served by our friction products segment include construction vehicles, agricultural vehicles, trucks, commercial aviation and general aviation. We believe we are:

• a leading domestic supplier of friction products for construction equipment, agricultural equipment and trucks,

- the only independent supplier of friction materials for braking systems for new and existing series of many commercial aircraft models, including the Boeing 737 and 757 and the MD-80, and several regional jets used by commuter airlines, including the Canadair regional jet series,
- the largest supplier of friction materials for the growing general aviation market, including numerous new and existing series of Gulfstream, Cessna, Lear and Beech aircraft, and
- a leading domestic supplier of friction products into specialty markets such as motorcycles, all terrain vehicles (ATVs) and snowmobiles.

For the three months ended March 31, 2002, our friction products segment generated net sales of \$26.0 million, representing 52% of our total net sales, and EBITDA of \$2.7 million, representing 63% of our total EBITDA. For the year ended December 31, 2001, our friction products segment generated net sales of \$104.1 million, representing 56% of our total net sales, and EBITDA of \$15.7 million, representing 80% of our total EBITDA.

• Precision Components

We are a leading supplier of powder metal components for industrial equipment, lawn and garden equipment, appliances, hand tools and trucks. We use composite metal alloys in powder form to manufacture high quality custom-engineered metal components. According to the Metal Powder Industries Federation, the powder metal market has historically grown at approximately 10% per year as original equipment manufacturers substitute precision components made from metal powders for forged, cast or stamped parts. Our precision components segment serves three specific areas of the powder metal marketplace:

- tight tolerance fluid power components, such as pump elements and gears,
- large powder metal components used primarily in construction equipment, agricultural equipment and trucks, and
- high volume parts for the lawn and garden, appliance, hand tool and other markets.

For the three months ended March 31, 2002, our precision components segment generated net sales of \$17.2 million, representing 35% of our total net sales, and EBITDA of \$1.1 million, representing 26% of our total EBITDA. For the year ended December 31, 2001, our precision components segment generated net sales of \$58.3 million, representing 32% of our total net sales, and EBITDA of \$5.2 million, representing 27% of our total EBITDA.

• Performance Automotive

We engineer, manufacture and market premium branded clutch and drive-train components for the performance automotive racing market. Through this segment, we supply parts for NASCAR, CART, IRL, SCCA and ASA race cars and other road racing and competition cars. For the three months ended March 31, 2002, our performance automotive segment generated net sales of \$3.9 million, representing 8% of our total net sales, and EBITDA of \$0.8 million, representing 19% of our total EBITDA. For the year ended December 31, 2001, our performance automotive segment generated net sales of \$13.0 million, representing 7% of our total net sales, and EBITDA of \$1.0 million, representing 5% of our total EBITDA.

Motor

We design and manufacture die-cast aluminum rotors for fractional and subfractional horsepower electric motors. These parts are used in a wide variety of motor applications, including appliances, business equipment, pumps and fans. We believe our motor segment is the largest independent U.S. manufacturer of die-cast aluminum rotors for use in fractional and subfractional horsepower electric motors. We also believe our motor segment has significant growth opportunities arising from the trend by original equipment motor manufacturers, which we estimate still produce more than half of all rotors in the U.S. fractional and subfractional horsepower motor market, to outsource their production

of rotors to independent suppliers. For the three months ended March 31, 2002, our motor segment generated net sales of \$2.7 million, representing 5% of our total net sales, and an EBITDA loss of \$0.3 million. For the year ended December 31, 2001, our motor segment generated net sales of \$9.0 million, representing 5% of our total net sales, and an EBITDA loss of \$2.4 million. Our facility in Mexico accounted for \$0.2 million of the EBITDA loss in the first quarter of 2002, and \$2.0 million of the EBITDA loss in the year 2001, as a result of start-up operating costs.

Business Strategy

Our business strategy includes the following principal elements:

- Focus on High-Margin, Specialty Applications. We focus on markets that require sophisticated engineering and production techniques and in which we have achieved a significant market share. In developing new applications, we seek to compete in markets requiring a high level of engineering expertise and technical capability, rather than in markets in which the primary competitive factor is product pricing. We believe margins for our products in these markets are higher than in other manufacturing markets that use standardized products. Our gross margins were 21.6% for the three months ended March 31, 2002, 25.7% for the three months ended March 31, 2001, 21.7% for the year 2001, and 27.1% for the year 2000.
- Introduce New Products. A key part of our strategy is the introduction of products for new applications that incorporate improved performance characteristics or reduced costs in response to customer needs. Our engineers proactively focus on developing new product solutions that enhance performance and reduce manufacturing costs, including instances where we are the incumbent supplier. We also grow by applying our existing products and technologies to new specialized applications where our products have a performance or technological advantage.
- Expand Customer Relationships. We seek to provide advanced solutions to customers, enhancing our long-term relationships. Our engineers work closely with customers to develop and design new products and improve the performance of existing products. We believe that more than 80% of our net sales are from products and materials for which we are the sole source provider for specific customer applications. Our predecessors formed, and we have continued to build, relationships with these customers, some of which date back over 50 years. Our commitment to quality, service and just-in-time delivery enables us to build and maintain strong and stable customer relationships. We believe that strong relationships with our customers provide us with significant competitive advantages in obtaining and maintaining new business opportunities.
- Capitalize on Aftermarket Opportunities. Our stable aftermarket sales enable us to minimize our exposure to adverse economic cycles. Because friction products are the consumable, or wear, component of brake, clutch and transmission systems, the use of our friction products in conjunction with a new or existing system provides us with the opportunity to supply the aftermarket for the life of the system, typically through sales to the original equipment manufacturer. For example, the ability to service the aftermarket for a particular aircraft braking system will likely provide us with a stable market for our friction products for the life of the product, which can be 30 years or more. Aftermarket sales of friction products have comprised approximately 50% of our friction product sales in recent years.
- Selectively Expand Internationally. Through our friction and motor segments, which have foreign manufacturing facilities in Italy, Canada, China and Mexico, and our friction segment's worldwide distribution network, we continue to selectively expand our international operations in established markets throughout Europe, Asia, North America and Australia. Our friction products facility in Suzhou, China, which opened in 2000, and our rotor manufacturing facility in Monterrey, Mexico, which began production in 2000, are both expected to reach full production levels in 2002. Our international net sales represented \$7.0 million, or 14.1%, of our consolidated net sales in the first quarter of 2002, and \$23.6 million, or 12.8%, of our consolidated net sales in 2001.

Summary of the Exchange Offer

Purpose of the Exchange Offer..... The old notes that are currently outstanding have an aggregate

principal amount of \$65.0 million and mature on December 1, 2003. The purpose of the exchange offer is to extend the maturity

of the old notes.

The Exchange Offer We are offering to exchange each \$1,000 of your 101/4% senior

notes due 2003 for \$ in principal amount of new in principal amount senior notes due 2 , of which \$ constitutes a consent payment that will only be made for consents received before the consent payment deadline.

You will be paid in cash the accrued and unpaid interest on old notes we acquire in the exchange.

The new notes will accrue interest in cash at the rate of annum on the principal amount, payable semi-annually on each June 1 and December 1, commencing December 1, 2002. The new notes will mature on December 1, 2

The new notes will have the same interest payment dates but a different maturity date, a different optional redemption schedule and a different interest rate than the old notes. Other terms of the new notes will be substantially the same as the old notes before giving effect to the proposed amendments to the old indenture. Our domestic subsidiaries will guarantee the payment of interest and principal under the new notes.

To validly tender your old notes, you must give a valid consent to the proposed amendments to the old indenture. You will be deemed to have given this consent when you tender your old

Outstanding old notes may be exchanged only in denominations of \$1,000 and integral multiples of \$1,000 in excess of that amount. New notes will be issued only in denominations of \$1,000 and integral multiples of \$1,000 in excess of that amount, except that we may elect to issue new notes in denominations of less than \$1,000. If under the terms of the exchange offer any tendering participant in the Depository Trust Company, or DTC, is entitled to receive, through DTC, new notes in a principal amount that is not an integral multiple of \$1,000 and we elect not to issue new notes in denominations of less than \$1,000, then we will reduce the principal amount of that DTC participant's new notes to the nearest \$1,000 and substitute a cash payment equal to the principal amount by which that DTC participant's new notes are reduced.

If the specified conditions are met or waived, then we will exchange new notes for old notes that are validly tendered and not withdrawn before the exchange offer expires. If the exchange offer is consummated, then we will exchange new notes for corresponding old notes on the third business day after the exchange offer expiration date, or as soon as practicable after that date.

Consent Solicitations; Consent

Concurrently with the exchange offer, we are soliciting consents to Payments

the proposed amendments to the old indenture from the holders of

old notes. Holders of old notes may give their consent to the proposed amendments only by tendering their old notes in the exchange offer and will be deemed to have given their consent by so tendering. We must receive consents from holders of at least a majority in aggregate principal amount outstanding of old notes to amend the old indenture and release the subsidiary guarantees as described in this prospectus and consent solicitation statement. We are offering, subject to conditions, to pay each holder who gives a valid consent, that is not revoked, on or before 5:00 p.m., New York City time, on the later to occur of the date we receive the required consents to amend the old indenture or

, 2002 (we refer to this date and time as the consent payment deadline) a consent payment, included in the principal amount of the new notes, in the amount of \$\\$ for each \$1,000 in principal amount of old notes for which the holder has given valid consent. Our obligation to complete the exchange offer and to make the consent payments is conditioned on, among other things, receipt of valid consents to effect the proposed amendments to the old indenture, although we may waive this or any other condition to the exchange offer.

Expiration Date

The exchange offer will expire at 5:00 p.m., New York City time, on , 2002, unless we, in our sole discretion, elect to extend the offer, in which case the expiration date will be the latest date and time to which we extend the offer. We will return any old note rejected for exchange for any reason, without expense to you, as promptly as practicable after the expiration or termination of the exchange offer.

Withdrawal of Tenders.....

You may withdraw tenders of old notes at any time before the time we notify the trustee for the old notes that we have received valid and unrevoked consents representing a majority in aggregate principal amount of the old notes. You may not withdraw tenders of old notes after that time unless we extend the exchange offer with changes in the terms of the exchange offer that are, in our reasonable judgment, materially adverse to the tendering holders of old notes. We will announce that we have received the required consents no later than 9:00 a.m., New York City time, on the first business day following their receipt.

A valid withdrawal of tendered old notes before the time we notify the trustee for the old notes that we have received valid and unrevoked consents will also constitute the revocation of the related consent to the proposed amendments to the old indenture. You may only revoke a consent by validly withdrawing your tender of old notes before that time.

The receipt of new notes will be a taxable transaction for U.S. federal income tax purposes, and holders of old notes validly tendered in the exchange offers will, accordingly, recognize gain or loss, as described below in "Material U.S. Federal Income Tax Consequences."

Conditions to the Exchange Offer and Consent Solicitation	The exchange offer and consent solicitation are subject to customary conditions, which we may assert or waive. See "The Exchange Offer — Conditions to the Exchange Offer." These conditions include requirements that (1) we receive valid and unrevoked tenders and consents representing at least a majority in aggregate outstanding principal amount of the old notes, and (2) we are able to refinance the old credit facility on terms satisfactory to us in our sole discretion. We reserve the right to terminate or amend the exchange offer at any time before the expiration date if any of these conditions are not satisfied.
Procedures for Tendering and Consenting	If you wish to accept the exchange offer and consent solicitation and your old notes are held by a custodial entity such as a bank, broker, dealer, trust company or other nominee, then only that custodial entity can tender your old notes. In that case, you must instruct the custodial entity to tender your old notes on your behalf pursuant to the procedures of the custodial entity.
	Custodial entities that are DTC participants must tender old notes through the Automated Tender Offer Program, known as ATOP, maintained by DTC.
	A consent and letter of transmittal need not accompany tenders effected through ATOP.
Consequences of Failure to Exchange	tenders effected through ATOP. The delivery of an agent's message through ATOP will constitute the giving of consent to the proposed amendments with respect to the old notes so tendered, and the agreement by the custodial entity and the beneficial holder to be bound by the consent and
Consequences of Failure to Exchange Exchange Agent	tenders effected through ATOP. The delivery of an agent's message through ATOP will constitute the giving of consent to the proposed amendments with respect to the old notes so tendered, and the agreement by the custodial entity and the beneficial holder to be bound by the consent and letter of transmittal. For a description of the consequences of a failure to exchange the old notes, see "Risk Factors — Consequences of a Failure to
	tenders effected through ATOP. The delivery of an agent's message through ATOP will constitute the giving of consent to the proposed amendments with respect to the old notes so tendered, and the agreement by the custodial entity and the beneficial holder to be bound by the consent and letter of transmittal. For a description of the consequences of a failure to exchange the old notes, see "Risk Factors — Consequences of a Failure to Exchange the Old Notes." HSBC Bank USA is the exchange agent for the exchange offer and consent solicitation. The address and telephone number of the exchange agent are on the back cover page of this prospectus and

for the exchange offer and consent solicitation. The address and telephone numbers of the dealer manager are on the back cover

page of this prospectus and consent solicitation statement.

Summary of the New Notes Issuer Hawk Corporation December 1, 2 Aggregate Principal Amount..... Up to \$65.0 million Interest Interest will be payable semi-annually in cash on each June 1 and December 1, commencing December 1, 2002. Interest will accrue from the settlement date of the exchange offer and consent solicitation. You will be paid accrued and unpaid interest in cash through the settlement date on old notes that we acquire in the exchange. The new notes will be fully and unconditionally guaranteed by all of our domestic subsidiaries, jointly and severally. These guarantors are Allegheny Clearfield, Inc., Friction Products Co., Hawk Brake, Inc., Hawk MIM, Inc., Hawk Motors, Inc., Hawk Precision Components Group, Inc., Helsel, Inc., Logan Metal Stampings, Inc., Net Shape Technologies LLC, Quarter Master Industries, Inc., S.K. Wellman Holdings, Inc., S.K. Wellman Corp., Sinterloy Corporation and Tex Racing Enterprises, Inc. If we cannot make interest or principal payments on the new notes when they are due, then these subsidiaries, as the guarantors of the new notes, must make them instead, subject to the rights of holders of the new credit facility and any other secured debt. The new notes and guarantees will: Ranking · be general unsecured obligations of Hawk and the subsidiary guarantors, • be effectively senior in right of payment to the old notes, any other debt of Hawk that is not guaranteed by its subsidiaries and any subordinated debt of Hawk and the subsidiary guarantors, rank equal in right of payment with all unsecured and unsubordinated debt of Hawk and the subsidiary guarantors, be effectively subordinated in right of payment to all secured debt of Hawk and the subsidiary guarantors, including any amounts Hawk borrows under the new credit • be effectively subordinated in right of payment to all existing and future debt, including trade payables, of our subsidiaries that are not guarantors of the new notes. See "Risk Factors — Risks Relating to the New Notes." The new notes are expected to be rated by Moody's Investors Service, Inc. and by Standard & Poor's Ratings Services. A rating reflects only the views of Moody's or Standard

& Poor's and is not a recommendation to buy, sell or hold the If we undergo a change of control, the new indenture will require that we offer to repurchase the new notes at a purchase price equal to 101% of their principal amount, plus accrued and unpaid interest, if any, to the date of repurchase. See "Description of the New Notes — Change of Control." Optional Redemption..... The new indenture will also permit us, at our option, to redeem any or all of the new notes for cash on or after . 2 . at % of their principal amount plus accrued and unpaid interest, if any, to the date of redemption. See "Description of the New Notes — Redemption." The new indenture will contain the same restrictive covenants, on Restrictive Covenants..... substantially the same terms, as the old indenture before giving effect to the proposed amendments, including, among other things, covenants that limit our ability to: · incur additional debt, • pay dividends and other restricted payments, · create liens, · sell assets, • engage in sale and leaseback transactions, · engage in transactions with affiliates, · cause our subsidiaries to issue capital stock, and • consolidate or merge with, or into, or transfer all or substantially all of our assets to, another person. These restrictions and requirements are subject to a number of important qualifications and exceptions. See "Description of the New Notes — Covenants.' The events that will permit acceleration of the payment of the Events of Default..... principal of and accrued interest on the new notes will be substantially the same as those under the old indenture before giving effect to the proposed amendments. For a description of these events, see "Description of the New Notes — Events of Default." Form and Denomination The new notes will be issued only in the form of a global note. See "Description of the New Notes - Book-Entry, Delivery and Form." The global note will be deposited with DTC for credit to the account of a direct or indirect participant of DTC. Investors in the global note who are participants in DTC may hold their interests in the global note directly through DTC. Investors in the global note who are not participants in DTC may hold their interests indirectly through organizations that are participants in DTC. Interests in the global note will be shown on, and transfers of the global note will be effected only through, records

maintained by DTC and its participants, including Euroclear and Clearstream

Except as set forth under "Description of the New Notes — Book-Entry; Delivery and Form," participants and indirect participants will not receive physical delivery of certificated new notes or have new notes issued and registered in their names and will not be considered the owners or holders of the new notes under the new indenture.

Interests in the new notes will be issued in denominations of \$1,000 and integral multiples of \$1,000 in excess of that amount, except that we may elect to issue new notes in denominations of less than \$1,000.

Trustee, Registrar, Book-Entry
Depository and Paying Agent HSBC Bank USA

Summary of the Proposed Amendments

The proposed amendments to the old indenture will not affect the interest rate and payment and maturity dates of the old notes. The proposed amendments will, however, reduce the protections that holders of the old notes receive under the old indenture. The amendments will eliminate all of the restrictive covenants in the old indenture. These covenants currently limit our ability to:

- incur debt,
- make investments and payments,
- incur liens,
- pay dividends;
- sell capital stock of our subsidiaries,
- enter into transactions with stockholders and affiliates,
- sell assets, and
- consolidate or merge.

The proposed amendments will also remove requirements in connection with:

- preserving material rights and franchises,
- paying taxes and other claims,
- maintaining property and insurance coverage,
- · waiving defenses to payment of the old notes,
- providing information to the trustee and holders of the old notes,
- · repurchasing old notes on a change of control or sale of assets, and
- requiring any subsidiaries we create or acquire to become guarantors.

In addition, the proposed amendments will release our subsidiaries from their guarantees of the old notes, which will relieve them of any further obligation to repay the old notes. The amendments will also remove some of the events of default under the old indenture, including but not limited to:

- a default by us or the guarantors on other debt,
- final judgments or orders not paid or discharged, and
- bankruptcy, insolvency or liquidation.

The consent of holders of at least a majority of the aggregate outstanding principal amount of the old notes is required to effect the proposed amendments to the old indenture.

If you withdraw your tender of old notes, then you will also be withdrawing your consent to the proposed amendments. You may not withdraw your consent without withdrawing your tender of old notes.

If the proposed amendments become effective and you did not tender your old notes in the exchange offer, then you will be bound by the proposed amendments to the old indenture even though you did not consent. You will continue to be entitled to receive principal and interest payments on your old notes and all other remaining rights conferred by the old indenture, as amended.

See "The Consent Solicitation — The Proposed Amendments" and Annex A to this prospectus and consent solicitation statement.

SUMMARY HISTORICAL CONSOLIDATED FINANCIAL AND OPERATING DATA

(in millions, except per share data)

You should read this data in conjunction with the more detailed information contained in the consolidated financial statements, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and other financial information included in this prospectus and consent solicitation statement.

	Three Months ended March 31.		Voor and	h 21	
	2002	2001		led Decem 2000	1999
	(Unaud		2001	2000	1999
Statement of Operations Data:	(Ullaud	inteu)			
Net sales	\$49.8	\$53.8	\$184.4	\$202.3	\$187.6
Cost of sales	39.0	40.0	144.4	147.4	138.8
Gross profit	10.8	13.8	40.0	54.9	48.8
Restructuring costs(1)			1.1	J 1 .J	
Income from operations	1.2	3.9	3.6	19.5	18.6
Interest expense	2.3	2.4	9.5	9.0	9.4
Other expense (income), net	0.2	(0.1)	0.5	0.5	(0.4)
(Loss) income before income taxes	(1.2)	1.6	(6.2)	10.1	10.0
Income tax (benefit) provision	(0.6)	0.7	(1.9)	4.4	3.7
Net (loss) income	\$ (0.6)	\$ 0.9	\$ (4.3)	\$ 5.8	\$ 6.3
(Loss) Earnings Per Share:					
Basic (loss) earnings per share	\$(.07)	\$.10	\$ (.52)	\$.66	\$.71
Diluted (loss) earnings per share	\$ (.07)	\$.10	\$ (.52)	\$.66	\$.71
Other Data:					
EBITDA(2)	\$ 4.3	\$ 7.8	\$ 19.5	\$ 34.5	\$ 32.3
EBITDA, as a percentage of net sales(2)	8.6%	14.5%	10.6%	17.1%	17.29
Depreciation	\$ 2.7	\$ 2.8	\$ 11.4	\$ 10.8	\$ 9.9
Amortization	\$ 0.4	\$ 1.1	\$ 4.5	\$ 4.2	\$ 3.8
Capital expenditures (including capital leases)	\$ 1.9	\$ 2.8	\$ 9.1	\$ 10.5	\$ 10.2
Ratio of EBITDA to interest expense(2)	1.9x	3.3x	2.1x	3.8x	3.4x
Ratio of long-term debt (including current portion) to					
EBITDA(2)(3)	5.9x	3.4x	5.0x	3.0x	3.3x
Ratio of earnings to fixed charges(4)		1.6x		2.0x	2.0x
D.L. CL. (D.)					rch 31,
Balance Sheet Data:					udited)
Cash and cash equivalents				. \$	2.4
Working capital					9.8
Property, plant and equipment, net					66.3
Total assets				. 2	210.0
Total long-term debt (including current portion)				. 1	01.0
Shareholders' equity					65.5

- (1) Reflects primarily a work force reduction charge at our domestic facilities for approximately 160 salaried and production personnel.
- (2) We define "EBITDA" as income from operations plus depreciation and amortization. We present EBITDA because it is:
 - · a widely accepted financial indicator of a company's ability to incur and service debt, and
 - the basis on which our compliance with financial covenants contained in the old indenture, new indenture, old credit facility and new credit facility is principally determined.

However, EBITDA does not purport to represent cash provided by operating activities as reflected in our consolidated statements of cash flow, is not a measure of financial performance under accounting principles generally accepted in the United States and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with accounting principles generally accepted in the United States. Also, our measure of EBITDA may not be comparable to similar measures reported by other companies. See "Management's Discussion and Analysis of Financial Condition and Results of Operations."

- (3) We determine the ratio of long-term debt to EBITDA:
 - for the years 2001, 2000 and 1999, by dividing long-term debt, including current portion, at December 31 for each of these years by EBITDA for the same years, and
 - for the first quarter of 2002 and 2001, by dividing long-term debt, including current portion, at the end of each of these quarters by the product of four times EBITDA for the same quarters.
- (4) We determine the ratio of earnings to fixed charges by dividing:
 - the sum of earnings before interest expense, amortization of deferred financing costs, taxes and a portion of rent expense representative of interest, by
 - the sum of interest expense, amortization of deferred financing costs and a portion of rent expense representative of interest.

For the three month period ended March 31, 2002 and the year ended December 31, 2001, our earnings were insufficient to cover fixed charges. The additional earnings required to cover fixed charges would have been \$1.2 million for the three month period ended March 31, 2002, and \$6.2 million for the year ended December 31, 2001.

RISK FACTORS

By exchanging your old notes in the exchange offer, you will be investing in the new notes. If you do not participate in the exchange offer, then you will continue to hold the old notes subject to the terms of the old indenture. Investing in the new notes involves risk. In addition to the other information contained in this prospectus and consent solicitation statement, you should carefully consider the following risk factors when deciding whether to exchange your old notes for new notes. Additional risks and uncertainties described in this prospectus and consent solicitation statement may also impair our financial condition, results of operations or prospects.

Risks Relating to Our Business and Financial Condition

We have incurred losses in the past and we may incur losses in the future.

We experienced a net loss of \$0.6 million in the first quarter of 2002 compared to net income of \$0.9 million in the comparable period of 2001. For the year ended December 31, 2001, we experienced a net loss of \$4.3 million compared to net income of \$5.8 million for the same period in 2000. If we continue to incur losses in the future, then our growth potential and our ability to execute our business strategy may be constrained. In addition, our ability to service our debt, including our obligations under the new notes, may be harmed because we may not generate sufficient cash flow from operations to pay principal or interest when due. These decreases were primarily attributable to volume declines in most of the end-markets served by our friction and precision components segments, including the aircraft industry following the events of September 11.

We have substantial debt, which increases our vulnerability to adverse business developments and could prevent us from meeting our obligations under our debt instruments.

We have a substantial amount of outstanding debt and will continue to have a substantial amount of debt following the exchange offer. As of March 31, 2002, our total debt, including our obligations under the old notes, was approximately \$101.0 million, and our ratio of long-term debt (including the current portion) to total capitalization was 60.7%. Our ability to service our debt following the exchange offer, including our obligations under the new notes and any old notes that remain outstanding, and to meet our other financial obligations will depend on our future operating performance, which is subject to market conditions and other factors beyond our control.

Our high level of debt and related obligations, among other things:

- · decreases the amount of cash available to us for operations and future business opportunities,
- · increases our vulnerability to adverse economic conditions and competition,
- subjects us to operational restrictions contained and expected to be contained in the new indenture, the new credit facility and other debt agreements,
- limits our ability to borrow additional funds, dispose of assets, pay dividends or distributions or make acquisitions,
- limits funds available to us for working capital, capital expenditures, acquisitions and general corporate purposes, and
- limits our operational and financial flexibility as compared to those of our competitors that operate on a less leveraged basis.

If we default under the terms of our debt agreements, then the market value of the new notes could be adversely affected.

We are in the process of determining the affect of recently issued accounting pronouncements, which could adversely affect our financial position and results of operations.

In June 2001, the Financial Accounting Standards Board issued SFAS No. 142, "Goodwill and Other Intangible Assets" (FAS 142). See "Management's Discussion and Analysis of Financial Condition and Results of Operations — Effects of Recently Issued Accounting Pronouncements." We adopted FAS 142 with respect to existing goodwill as of January 1, 2002, the first day of our 2002 fiscal year. Upon adopting FAS 142, we stopped amortizing existing goodwill. We are currently in the process of performing the steps of the prescribed transitional goodwill impairment test with respect to our existing goodwill. We have not yet determined what the effect of these tests will be on our financial position or results of operations. We must complete step 1 of the transitional goodwill impairment test by June 30, 2002, and step 2 of the test by December 31, 2002. We cannot assure you that future goodwill impairments will not occur or that they will not adversely affect our financial position and results of operations.

We may be unable to repay the principal amount of the old notes if the exchange offer is not completed.

The old notes, having an outstanding principal balance at March 31, 2002 of \$65.0 million, will mature on December 1, 2003. The primary source of funds for servicing our debt obligations and conducting our operations is cash generated from operations. Our current cash from operations is insufficient to repay the principal amount plus accrued and unpaid interest that would have to be paid upon maturity of the old notes. Our ability to repay the old notes depends on our ability to complete the exchange offer and obtain the new credit facility.

We may be unable to repay the principal amount of our old credit facility, and we may be unable to obtain the new credit facility on favorable terms.

The old credit facility, having an outstanding principal balance at March 31, 2002 of \$29.4 million, will mature on March 31, 2003. We believe that it is highly unlikely that we will be able to repay this debt with cash generated from our operations. Accordingly, we will have to refinance or extend the due date of the old credit facility. Our ability to do so will depend on, among other things, our financial condition, market conditions and other factors beyond our control. If we are unable to complete the exchange offer, then we may be unable to obtain the new credit facility. If we are able to obtain a new credit facility, then the terms of the facility may not be satisfactory or favorable to us.

The exchange offer will result in a one-time, non-cash charge.

Assuming all of the old notes are exchanged in the exchange offer, we expect to incur a one-time, non-cash charge of approximately \$0.8 million (approximately \$0.5 million after tax) at the time of the exchange offer as a result of a write-off of previously capitalized deferred financing costs necessitated by the exchange of the old notes and the termination of the old credit facility.

We may be unable to service our debt because of our corporate structure.

As a holding company, virtually all of Hawk's assets consist of investments in its subsidiaries, and its operations are conducted through its subsidiaries. Hawk has no available sources of cash with which to service its debt other than dividends and repayment of loans made by Hawk to its subsidiaries. These payments from its subsidiaries are and will continue to be subject to statutory restrictions and covenants under our debt agreements. If the subsidiaries can not or do not distribute a sufficient portion of their earnings to Hawk, then Hawk will be unable to service its debt, including its obligations under the new notes.

We operate in a highly competitive industry, which may prevent us from growing and may decrease our business.

We operate in an industry that is highly competitive and fragmented. There are many small manufacturers in our industry and only a few generate annual sales in excess of \$50.0 million. Our larger

competitors have greater financial resources to devote to manufacturing, promotion and sales, which could adversely affect our customer relationships or product mix.

We compete for new business primarily when our existing customers develop new applications or redesign existing applications, which may involve lengthy periods of development and testing. For example, developing new aircraft braking systems typically begins two to five years before full-scale production. Although we have successfully obtained this business from our customers in the past, we may be unable to obtain this business in the future, which could adversely affect our financial condition, results of operations and prospects.

Some of our competitors use different technologies, such as carbon composite friction material for braking system components. We also compete with manufacturers using more traditional forging, casting and stamping technology. Our competitors use of different technology may adversely affect our ability to compete and negatively impact our financial condition, results of operations and prospects.

We are subject to governmental regulations that may affect our ability to implement our business objectives.

Our net sales to manufacturers of aircraft braking systems represented 11.4% of our consolidated net sales in the first quarter of 2002 and 14.1% of our consolidated net sales in 2001. Every aircraft braking system, including those containing components supplied by us, must satisfy Federal Aviation Administration criteria and testing requirements. While we have met these requirements in the past, if we fail to meet these requirements or any new or changed requirements, then our results of operations may be adversely affected or we may not be able to meet our business objectives. There can be no assurance that Federal Aviation Administration review of an aircraft braking system containing components supplied by us will result in a favorable determination or that we or our customers will continue to meet Federal Aviation Administration criteria and testing requirements, which are subject to change in the discretion of the Federal Aviation Administration.

We are also subject to strict environmental regulations imposed by federal, state, local and foreign environmental and worker health and safety laws. Under some environmental laws, we may be liable for releases of hazardous or toxic materials, pollutants or contaminants on the properties that we own and operate even if the release was caused by a prior owner or operator. Compliance with environmental laws may require us to adhere to standards or procedures in connection with our operations or acquire permits or authorizations to conduct some activities. We are also subject to the federal Occupational Safety and Health Act and similar foreign and state laws. The nature of our operations, the extensive uses of our existing and former facilities, and the operations of prior owners and operators expose us to the risk of liabilities or claims concerning environmental and health and safety laws and regulations.

We may not be able to receive favorable prices for, or continued supplies of, raw materials, which may affect our ability to obtain enough supplies to conduct our business.

We primarily use copper, steel, iron powders, aluminum ingot and custom-fabricated cellulose sheet in our operations. Although we have been able to obtain the necessary amount of raw materials for our operations on acceptable terms in the past, there can be no assurance that we will be able to obtain the necessary raw materials or that the purchase terms will be satisfactory or favorable to us, which may adversely affect our financial condition, results of operations and prospects.

We are subject to risks associated with international operations.

We conduct business outside the United States, which may subject us to the risks inherent in international operations. For example, we may be harmed financially and operationally by changes in foreign economic and political conditions, exchange controls, laws, regulations, tariffs or taxes, trade barriers and management and staffing. Foreign laws and regulations may also prohibit the payment of dividends or transfer of profits to us or any of our U.S. subsidiaries. In addition, legal remedies may be difficult to pursue abroad,

if necessary. Our international net sales represented \$7.0 million, or 14.1%, of our consolidated net sales in the first quarter of 2002, and \$23.6 million, or 12.8%, of our consolidated net sales in 2001.

We depend on our key personnel.

Our performance depends on our ability to retain and motivate officers and key employees. The loss of any of our executive officers or other key employees could materially and adversely affect our financial condition, results of operations and prospects. Hawk has an employment agreement with Ronald E. Weinberg, its Chairman of the Board and Chief Executive Officer, and maintains a "key person" life insurance policy on the life of Mr. Weinberg in the face amount of \$1.0 million.

Our future success also depends on identifying, attracting, hiring, training, retaining and motivating other highly skilled technical, managerial and marketing personnel. Competition for these employees is intense, and we may be unable to successfully attract, integrate or retain sufficiently qualified personnel.

Risks Relating to the New Notes

Some of our other debt will rank ahead of the new notes. If we default on that debt, then we may not be able to pay principal or interest on the new notes.

The new notes and the guarantees of the new notes will be senior unsecured obligations. Thus, the holders of our secured debt will have a prior claim on our assets if we default. As a result, they will be paid before you receive any amounts due under the terms of the new notes and the guarantees of the new notes, but only to the extent of the value of the assets securing their debt.

Assuming we had exchanged all of the outstanding old notes for the new notes, as of March 31, 2002, Hawk's and its subsidiaries' total outstanding debt, would have been approximately \$101.0 million, including amounts outstanding under the old credit facility. As of March 31, 2002, your right of payment under the new indenture and new notes would have been:

- effectively subordinated in right of payment to all of Hawk's and the guarantors' secured debt, including the old credit facility, in the amount of \$32.4 million;
- effectively subordinated in right of payment to all debt of Hawk's direct and indirect subsidiaries that are not guarantors of the new notes in the amount of \$0.5 million; and
- equal in right of payment to all of Hawk's and the guarantors' unsecured and unsubordinated debt in the amount of \$3.1 million.

The new indenture and new notes will be effectively senior in right of payment to the old notes that remain outstanding after the completion of the exchange offer, any other debt of Hawk that is not guaranteed by its subsidiaries and all existing or future subordinated debt of Hawk and the guarantors, and will be effectively subordinated in right of payment to all trade payables of Hawk's direct and indirect subsidiaries that are not guarantors of the new notes, which at March 31, 2002 were \$3.6 million.

The new credit facility, which will be secured debt, will entitle us to borrow up to \$ million in the aggregate. Thus, with the new credit facility, there will be greater borrowing availability than at March 31, 2002, thereby permitting us to incur additional secured debt.

The new notes, new indenture and new credit facility contain covenants restricting our operations.

The new notes and the new indenture contain, and we expect the new credit facility to contain, a significant number of covenants that, among other things, will limit our ability to dispose of assets, incur additional debt, satisfy other debt, amend other debt instruments, pay dividends, make distributions, create liens on assets, enter into investments, merge with other entities, make capital expenditures and otherwise restrict our corporate activities. In addition, the new credit facility is expected to contain financial covenants that are customary for a secured asset-based credit facility.

Our ability to comply with these covenants may be affected by events beyond our control, including prevailing economic, financial and industry conditions. If we fail to comply with the covenants that are expected to be contained in the new credit facility, then the lenders under the new credit facility will have the option to declare all borrowed amounts due and payable, together with accrued and unpaid interest, and could refuse to extend additional credit to us under the facility. If we were unable to repay the lenders under the new credit facility, then they could foreclose on our assets that are securing our debt to them, which consists primarily of equipment, real estate, accounts receivable and inventory of Hawk's direct or indirect domestic subsidiaries.

Our ability to effect a change in control is limited by the terms of the new notes, new indenture and new credit facility, and we may be required to repurchase the new notes in the event of a change in control.

The terms of the new notes provide that in the event of a change in control, we will be required to repurchase all of the outstanding new notes at 101% of the principal amount, plus accrued and unpaid interest. The source of funds for any repurchase would be available cash generated from operations or other sources, including borrowings, asset sales or the infusion of cash from new equity investors. We also expect a change in control to be an event of default under the new credit facility, which would permit the lenders to accelerate the debt under the new credit facility. There can be no assurance that sufficient funds will be available at the time we sustain a change in control to make any required repurchase of any of the new notes or repay any outstanding debt due under the new credit facility.

The guarantees of the new notes by the guarantors could be held to be unenforceable or enforceable only to a limited extent.

The new notes will be Hawk's obligation and will be unconditionally guaranteed by the subsidiary guarantors. The guarantors will not be receiving any direct value or direct consideration in exchange for their guarantees. Any of the guarantors may be viewed as insolvent if, at the time of or as a result of the exchange offer, the sum of its debts is greater than the sum of its assets, or if it is not paying its debts as they become due.

Under applicable provisions of the U.S. Bankruptcy Code or comparable provisions of state fraudulent transfer laws, a court could void the guarantees by the guarantors or other debt obligations of the guarantors, or subordinate claims in respect of the guarantees or other debt obligations to all other debts of the guarantors, if, among other things, any of the guarantors, at the time it incurred the debt evidenced by the guarantees or debt obligations, incurred the debt with the intent to hinder, delay or defraud creditors or received less than reasonably equivalent value or fair consideration for the incurrence of the guarantees or debt, and:

- was insolvent,
- was rendered insolvent as a result of the incurrence,
- was engaged or about to engage in a business or transaction for which the guarantor's remaining assets constituted unreasonably small capital, or
- intended to incur, or believed it would incur, debts beyond its ability to satisfy them as they become due.

In that event, any payment by a guarantor in connection with the guarantees or debt obligations could be voided and required to be returned to the guarantor or to a fund for the benefit of the other creditors of that guarantor.

We expect a limited trading market for the new notes, which may make it difficult for you to sell the new notes.

Although we intend to list the new notes on the New York Stock Exchange, we can not assure you that an active trading market will develop for the new notes. Accordingly, you may have difficulty selling the new notes.

Consequences of a Failure to Exchange the Old Notes

Since the old notes will effectively rank junior to the new notes, in the event of a default, we will only be able to make payments to the holders of the old notes after the new notes and all of our other senior debt has been paid in full.

The old notes will effectively rank junior in right of payment to the new notes. The risk of non-payment to holders of the old notes will increase following the exchange offer because, in the event of a payment default, we will only be able to make payments to holders of the old notes after we fully satisfy our payment obligations under all of our debt ranking senior in right of payment to the old notes, including the new notes and the new credit facility.

If you do not tender your old notes and we complete the exchange offer, then your rights under the old indenture will be substantially diminished.

If you do not exchange your old notes in the exchange offer and we complete the exchange offer, then you will continue to hold your old notes subject to the terms of the old indenture after giving effect to the proposed amendments. The proposed amendments will eliminate the principal source of security for the repayment of the old notes by releasing all of the subsidiary guarantees of the old notes. In addition, the proposed amendments will remove all of the operating restrictions and some of the events of default that can be removed by majority consent of the holders consistent with the old indenture and the requirements of the Trust Indenture Act of 1939. These amendments will result in less protection for holders of old notes than the protection that is currently provided by the old indenture. As a result, if you fail to exchange your old notes, then you will be able to look only to Hawk, and not to any of the subsidiary guarantors, for payment. Hawk has no available sources of cash to pay the amounts due under the old notes other than dividends from its subsidiaries and repayments of the loans Hawk makes to its subsidiaries.

If you do not exchange your old notes in the exchange offer, then you may not be able to sell them in the secondary market.

The trading market for any old notes that are not tendered in the exchange offer is likely to be significantly more limited than it is at present. Therefore, if you do not tender your old notes in the exchange offer, then it may become more difficult for you to sell or transfer your unexchanged existing notes. This reduction in liquidity may in turn increase the volatility of the market price for the old notes. In addition, the credit rating of the old notes may not remain the same after the closing of the exchange offer. If the rating of the existing notes is lowered, then their liquidity may be further reduced.

If you did not exchange your unregistered old note for a registered Series B note in the exchange offer we made in 1997, then your unregistered old note will continue to be subject to the restrictions on transfer set forth in the old note and the old indenture. There is no public market for old notes that were not exchanged for registered Series B notes in the 1997 exchange offer.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Statements that are not historical facts, including statements about our confidence in our prospects and strategies and our expectations about the strength or growth of existing markets and our ability to expand into new markets, to identify and acquire complementary businesses and to attract new sources of financing, are forward-looking statements that involve risks and uncertainties. In addition to statements that are forward-looking by reason of context, the words "believe," "expect," "anticipate," "intend," "designed," "goal," "objective," "optimistic," "will" and other similar expressions identify forward-looking statements. Because of the risks and uncertainties inherent in all future projections, the inclusion of the forward-looking statements should not be regarded as a representation by us or any other person that our objectives or plans will be achieved. Many factors could cause our actual results to differ materially and adversely from those in the forward-looking statements, including the following:

- our ability to complete the exchange offer for the old notes and refinance the old credit facility before their maturity in 2003,
- our ability to continue to meet the terms of our debt, which contain a number of significant financial covenants and other restrictions, including the old credit facility which we had to amend twice in 2001 and once in 2002,
- the willingness of our banks to further amend the old credit facility, if necessary,
- the effect of our debt service requirements on funds available for operations and future business
 opportunities and our vulnerability to adverse general economic and industry conditions and
 competition,
- the continuing impact of the terrorist attacks that occurred on September 11, 2001 on our aircraft brake business and the impact of the decline in the aerospace market on our gross margins,
- our ability to use all of our manufacturing capacity because of continuing softness in the commercial and industrial end-markets we serve,
- our ability to begin generating profits from our facilities in Mexico and China, as well as our ability to turn a profit at the start-up operations at Hawk MIM,
- the effect of competition by manufacturers using new or different technologies,
- the effect on our international operations of unexpected changes in regulatory requirements, export restrictions, currency controls, tariffs and other trade barriers, difficulties in staffing and managing foreign operations, political and economic instability, fluctuations in currency exchange rates, difficulty in accounts receivable collection and potentially adverse tax consequences,
- our ability to negotiate new agreements, as they expire, with our unions representing some of our employees, on terms favorable to us or without experiencing work stoppages,
- the effect of any interruption in our supply of raw materials or a substantial increase in the price of any raw materials,
- the continuity of business relationships with major customers, and
- the ability of our aircraft brake products to meet stringent Federal Aviation Administration criteria and testing requirements.

You must consider these risks and others that are detailed in this prospectus and consent solicitation statement in deciding whether to participate in the exchange offer and consent solicitation.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

This prospectus and consent solicitation statement is part of a registration statement that we have filed with the SEC. You should read this prospectus and consent solicitation statement and the information incorporated by reference, including the exhibits to the registration statement.

We file annual, quarterly and special reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's web site at http://www.sec.gov. You may also read and copy any document we file at the SEC's public reference room at 450 Fifth Street, N.W., Washington, D.C. 20549. You may obtain information on the operation of the SEC's public reference room in Washington, D.C. by calling the SEC at 1-800-SEC-0330. We also file information with the New York Stock Exchange. These reports, proxy statements and other information may be read and copied at 30 Broad Street, New York, New York 10005.

Our periodic reports under the Exchange Act contain, in addition to our consolidated financial statements, a note with tabular consolidating condensed financial statements for Hawk, the guarantor subsidiaries as a group and our non-guarantor subsidiaries as a group, together with any other required disclosure. This prospectus and consent solicitation statement does not present separate financial statements and other disclosures concerning the guarantors because our management has determined they are not material to investors.

We and the guarantors agree that, whether or not required to do so by the rules and regulations of the SEC, for so long as any of the new notes remain outstanding, we will furnish to the holders of the new notes and file with the SEC (unless the SEC will reject the filing) (1) all quarterly and annual financial information that we would be required to file with the SEC on Forms 10-Q and 10-K if we and the guarantors were required to file these forms, including a "Management's Discussion and Analysis of Financial Condition and Results of Operations" and, with respect to the annual information only, a report by our certified independent accountants, (2) all reports that we would be required to file with the SEC on Form 8-K if we and the guarantors were required to file these reports and (3) any other information, documents and other reports that we and the guarantors would be required to file with the SEC if we were subject to Section 13 or 15(d) of the Exchange Act.

We have elected to incorporate by reference into this prospectus and consent solicitation statement some of the information we file with the SEC under the Securities Exchange Act of 1934. This means that we are disclosing important information to you by referring you to those filings. The information we incorporate by reference is considered a part of this prospectus and consent solicitation statement, and any subsequent information that we file with the SEC will automatically update and supercede this information. Any information that we subsequently modify or supercede will not constitute a part of this prospectus and consent solicitation statement, except as so modified or superceded. Specifically, we incorporate by reference the documents listed below and any future filings we make with the SEC (including any filings we make before the effectiveness of the registration statement) under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 until the offering is terminated:

- our Annual Report on Form 10-K for the year ended December 31, 2001,
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2002, and
- the sections captioned "Board of Directors Director Compensation," "Executive Compensation and Other Information" and "Principal Stockholders" from the proxy statement we filed on Form 14A on April 5, 2002.

You may request a copy of the information that we have incorporated by reference, at no cost, by writing or telephoning us at the following address:

Hawk Corporation 200 Public Square, Suite 30-5000 Cleveland, Ohio 44114 Attn: Vice President — Finance Telephone: (216) 861-3553

We expect the exchange offer to expire on , 2002. To obtain timely delivery of any requested information, you must request this information by , 2002 or the date that is no later than five business days before the expiration date.

You should rely only on the information contained or incorporated by reference in this prospectus and consent solicitation statement. We have not authorized any person (including any dealer, salesman or broker) to provide information or make any representations other than as provided in this prospectus and consent solicitation statement and, if given or made, you should not rely on any other information or representations as having been authorized by Hawk, any of its subsidiaries, the dealer manager or any agent or dealer. We are not making an offer of new notes in any state where the offer is not permitted. You should not assume that the information in this prospectus and consent solicitation statement is accurate as of any date other than the date on the cover page or that any information contained in any document we have incorporated by reference is accurate as of any date other than the date of the document we incorporated by reference.

USE OF PROCEEDS

The new notes issued in connection with the exchange offer are only being issued in exchange for your old notes and in payment of any consent payments. We will not receive any cash proceeds from the issuance of new notes pursuant to the exchange offer. All old notes accepted by us in the exchange offer will be cancelled

CAPITALIZATION

The following table describes our consolidated capitalization at March 31, 2002 and as adjusted to give effect to (1) the exchange offer and consent solicitation and (2) the replacement of our old credit facility with the new credit facility. The table assumes that we will exchange 100% of the old notes and that we will incur deferred financing costs of \$\sigma\$ in connection with the exchange offer and consent solicitation and the refinancing of the old credit facility. You should read this table in conjunction with our consolidated financial statements included in this prospectus and consent solicitation statement.

1 1	March 31, 2002	
	Actual (in n	As Adjusted nillions)
Cash and Cash Equivalents	\$ 2.4	
Long-term obligations (including current portion)		
Old credit facility(1)	\$ 29.4	
New credit facility(2)		
Old notes	\$ 65.0	
New notes		
Other debt(3)	\$ 6.6	·
Total long-term obligations	\$101.0	
Total shareholders' equity(4)	\$ 65.5	
Total Capitalization	\$166.5	

⁽¹⁾ The old credit facility is comprised of a \$25.0 million revolving credit component and a \$16.3 million amortizing term loan subject to a borrowing base formula. The old credit facility has a maturity date of March 31, 2003. The interest rates on the old credit facility range from 250 to 450 basis points over the Eurodollar rate, or alternatively, 125 to 325 basis points over the prime rate based on our quarterly performance. The old credit facility is collateralized by a security interest in our domestic subsidiaries' accounts receivable, inventory, equipment and real estate and other assets, and we have pledged the stock of all of our U.S. subsidiaries and the stock of some of our foreign subsidiaries as collateral. We expect to terminate the old credit facility at the closing of the exchange offer.

⁽³⁾ Includes capital leases and other obligations.

⁽⁴⁾ As a result of the exchange offer, we will incur a one-time, non-cash charge of approximately \$0.8 million (approximately \$0.5 million after tax), as a result of a write-off of previously capitalized deferred financing costs necessitated by the exchange of the old notes and the termination of the old credit facility.

THE EXCHANGE OFFER

Purpose of the Exchange Offer

We are making the exchange offer to extend the maturity of the old notes.

Terms of the Exchange Offer

We are offering to exchange \$ in principal amount of our new % senior notes due 2 , of which \$ in principal amount constitutes a consent payment that will only be made for consents received before the consent payment deadline, for each \$1,000 in principal amount of our $10^{1/4}\%$ Senior Notes due 2003 (CUSIP No. 420089AA2) and Series B $10^{1/4}\%$ Senior Notes due 2003 (CUSIP No. 420089AC8) that you tender before the expiration of the exchange offer.

To validly tender your old notes, you must give a valid consent to the proposed amendments to the old indenture. You will be deemed to have given this consent when you tender your old notes. For purposes of this section, we refer to the exchange offer and consent solicitation together as the "exchange offer." See "The Consent Solicitation — The Proposed Amendments." The consent payment will be included in the principal amount of the new notes you receive upon completion of the exchange offer. You must consent to the proposed amendments to tender your old notes, and you must tender to consent. The transmission of an agent's message through the automated tender offer program at DTC, known as ATOP, will constitute consent to the proposed amendments with respect to the old notes specified in the message.

We will issue the new notes in exchange for the old notes in the exchange offer, if consummated, on the settlement date, which will be the third business day following the expiration date of the exchange offer, or as soon as practicable after that date.

Outstanding old notes may be exchanged only in denominations of \$1,000 and integral multiples of \$1,000 in excess of that amount. New notes will be issued only in denominations of \$1,000 and integral multiples of \$1,000 in excess of that amount, except that we may elect to issue new notes in denominations of less than \$1,000. If under the terms of the exchange offer any tendering DTC participant is entitled to receive, through DTC, new notes in a principal amount that is not an integral multiple of \$1,000 and we elect not to issue new notes in denominations of less than \$1,000, then we will reduce the principal amount of that DTC participant's new notes to the nearest \$1,000 and substitute a cash payment equal to the principal amount by which that DTC participant's new notes are reduced.

We have applied to list the new notes on the New York Stock Exchange.

Conditions to the Exchange Offer

We may terminate, modify, extend or otherwise amend the exchange offer at any time. Our obligation to complete the exchange offer and to make the consent payments relating to the proposed amendments is subject to our satisfaction or waiver of the following conditions:

- (1) receipt of valid and unrevoked tenders and consents representing at least a majority in aggregate outstanding principal amount of old notes (as of March 31, 2002, \$64,725,000 in principal amount of the old notes are deemed to be outstanding and \$275,000 in old notes held by some of our affiliates are deemed not to be outstanding, for purposes of determining satisfaction of this condition);
- (2) we have successfully completed the refinancing of the old credit facility on terms satisfactory to us in our sole discretion;
 - (3) we have received the requisite consents from the lenders under the new credit facility;
 - (4) (a) there is not:
 - in our sole judgment, any actual or threatened legal impediment, including a default under an agreement, indenture or other instrument or obligation to which we are party or by which we are bound, to the consummation of the exchange offer, or

- any change or development, including a prospective change or development, that in our sole
 judgment, has or may have a material adverse effect on us or on the value of the exchange offer
 to us; and
- (b) the trustee of the old indenture has executed and delivered a supplemental indenture giving effect to the proposed amendments and has not objected in any respect to, or taken any action that could in our reasonable judgment adversely affect the consummation of:
 - the exchange offer,
 - the exchange of old notes under the exchange offer,
 - the consent solicitation, or
 - our ability to effect the proposed amendments; and
- (c) the trustee of the old indenture has not taken any action that challenges the validity or effectiveness of the procedures we use in soliciting consents, including the form of the consents, or in making the exchange offer, the exchange of the old notes under the exchange offer.

All of these conditions are for our sole benefit and may be waived by us in whole or in part. Any determination we make concerning an event, development or circumstance described or referred to above will be conclusive and binding.

If any of the foregoing conditions are not satisfied, then we may, at any time before or concurrently with the expiration date for the exchange offer:

- (1) terminate the exchange offer and return all tendered old notes to their holders;
- (2) modify, extend or otherwise amend the exchange offer and retain all tendered old notes until the expiration date, as extended, of the exchange offer, subject, however, to the withdrawal rights of holders (see "— Withdrawal of Tenders and Revocation of Consents" and "— Expiration Date; Extensions; Amendments; Termination"); or
- (3) waive the unsatisfied conditions with respect to the exchange offer and accept all old notes tendered and not previously withdrawn.

We reserve the right to purchase or offer to purchase any old notes in the open market, in privately negotiated transactions or otherwise. The terms of these purchases or offers could differ from the terms of the exchange offer. Any purchase or offer to purchase we make will be in accordance with applicable law.

Consequences to Holders of Old Notes Not Tendering in the Exchange Offer

Consummation of the exchange offer and the adoption of the proposed amendments to the old indenture may have adverse consequences to holders who elect not to tender old notes in the exchange offer. In particular, the amendments would eliminate all of the operating restrictions, including our ability to incur additional debt and debt secured by liens, and some of the events of default that may be removed by majority consent of the holders consistent with the old indenture and the requirements of the Trust Indenture Act of 1939. In addition, the amendments would eliminate the principal source of security for the repayment of the old notes by releasing all of the subsidiary guarantees of the old notes. These amendments will result in less protection for holders than the protection that is currently provided by the old indenture. See "Risk Factors — Consequences of a Failure to Exchange the Old Notes" and "The Consent Solicitation — The Proposed Amendments."

Expiration Date; Extensions; Amendments; Termination

For purposes of the exchange offer, the term "expiration date" means 5:00 p.m., New York City time, on , 2002, unless we elect to extend the offer, in which case the expiration date will be the latest date and time to which we extend the offer.

We reserve the right to:

- extend the exchange offer,
- terminate the exchange offer if a condition to our obligation to exchange new notes is not satisfied or waived at the expiration date, or
- amend the exchange offer by giving oral or written notice of the delay, extension, termination or amendment to the exchange agent.

If the exchange offer is amended in a manner that we determine constitutes a material change, then we will extend the exchange offer for a period of five to ten business days, depending upon the significance of the amendment and the manner of disclosure to the holders, if the exchange offer would otherwise have expired during this period. Any change in the consideration offered to holders of old notes pursuant to the exchange offer will be paid to all holders who have previously tendered and not withdrawn old notes.

We will promptly announce any extension, amendment or termination of the exchange offer by issuing a press release to the Dow Jones News Service. We will announce any extension of the expiration date or the consent payment deadline by no later than 9:00 a.m., New York City time, on the first business day after the previously scheduled expiration date or consent payment deadline. We have no other obligation to publish, advertise or otherwise communicate any information about any extension, amendment or termination.

Effect of Tender

Your tender (and our subsequent acceptance of your tender) of old notes will constitute a binding agreement between you and us upon the terms and subject to the conditions of the exchange offer described in this prospectus and consent solicitation statement and in the consent and letter of transmittal. The acceptance of the exchange offer by you will constitute your agreement to deliver good and marketable title to the tendered old notes, free and clear of any and all liens, restrictions, charges, pledges, security interests, encumbrances or rights of any kind of third parties. By tendering your old notes, you will also give consent to the proposed amendments of the old indenture.

Consent and Letter of Transmittal; Representations, Warranties and Covenants of Holders of Old Notes

Upon your submission of the consent and letter of transmittal, or agreement to the terms of the consent and letter of transmittal pursuant to an agent's message, you will, subject to your ability to withdraw your consent as described in "— Withdrawal of Tenders and Revocations of Consents," and subject to the terms and conditions of the exchange offer generally, be deemed, among other things, to:

- irrevocably sell, assign and transfer to or upon our order or the order of our nominee, all right, title and interest in and to, and any and all claims in respect of or arising or having arisen as a result of your status as a holder of, all old notes you tender, so that after that time you will have no contractual or other rights or claims in law or equity against us or any fiduciary, trustee, fiscal agent or other person connected with the old notes arising under, from or in connection with your old notes,
- waive any and all rights with respect to the old notes you tender (including, without limitation, any existing or past defaults and their consequences in respect of the old notes), and
- release and discharge us, the guarantors of the old notes and the trustee from any and all claims you may have, now or in the future, arising out of or related to the old notes you tender, including, without limitation, any claims that you are entitled to receive additional principal or interest payments with respect to the old notes you tender (other than as expressly provided in this prospectus and consent solicitation statement and in the consent and letter of transmittal) or to participate in any redemption or defeasance of the old notes you tender.

In addition, you will be deemed to represent, warrant and agree that:

- you have received and reviewed this prospectus and consent solicitation statement,
- you are the beneficial owner (as defined below) of, or a duly authorized representative of one or more beneficial owners of, the old notes tendered and you have full power and authority (1) to execute the consent and letter of transmittal, and (2) to consent to the proposed amendments to the old indenture as set forth under "The Consent Solicitation The Proposed Amendments" or to deliver a duly executed consent (which is included in the consent and letter of transmittal) from a person or entity having that power and authority,
- the old notes being tendered were owned, as of the date of tender, free and clear of any liens, charges, claims, encumbrances, interests and restrictions of any kind, and acknowledge that we will acquire good, indefeasible and unencumbered title to the old notes, free and clear of all liens, charges, claims, encumbrances, interests and restrictions of any kind, when we accept the same,
- you will not sell, pledge, hypothecate or otherwise encumber or transfer any old notes tendered
 from the date of the consent and letter of transmittal or agent's message and agree that any
 purported sale, pledge, hypothecation or other encumbrance or transfer will be void and of no
 effect,
- in evaluating the exchange offer and deciding to participate in the exchange offer by submitting a consent and letter of transmittal or agent's message and tendering your old notes, you have made your own independent appraisal of the matters referred to in this prospectus and consent solicitation statement and in any related communications and are not relying on any statement, representation or warranty, express or implied, made to you by us or the dealer manager other than those contained in this prospectus and consent solicitation statement (as supplemented to the expiration date).
- the execution and delivery of the consent and letter of transmittal or agent's message constitutes an undertaking to execute any further documents and give any further assurances that may be required in connection with any of the foregoing, in each case on and subject to the terms and conditions set out or referred to in this prospectus and consent solicitation statement,
- the submission of the consent and letter of transmittal or agent's message to the exchange agent will, subject to your ability to withdraw your consent, and subject to the terms and conditions of the exchange offer generally, constitute the irrevocable appointment of the exchange agent as your attorney and agent, and an irrevocable instruction to that attorney and agent to complete and execute all or any forms of transfer and other documents at the discretion of that attorney and agent in relation to the old notes you tender in favor of the company or any other person or persons that we may direct and to deliver the forms of transfer and other documents in the attorney's and agent's discretion and the certificates and other documents of title relating to the old notes' registration and to execute all other documents and to do all other acts and things that may in the opinion of that attorney or agent be necessary or expedient for the purpose of, or in connection with, the acceptance of the exchange offer, and to vest the old notes in us or our nominees.
- subject to your ability to withdraw consent, and subject to the terms and conditions of the exchange offer generally, the submission of the consent and letter of transmittal or agent's message to the exchange agent constitutes the irrevocable appointment by you of the exchange agent as proxy to approve on your behalf, and to vote in favor of, the proposed amendments to the old indenture substantially in the form described under "The Consent Solicitation The Proposed Amendments" at any duly called meeting of old note holders and at any adjournment of the meeting, or to execute on your behalf any written instrument evidencing the amendments, and
- that the terms and conditions of the exchange offer will be deemed to be incorporated in, and form a part of, the consent and letter of transmittal or agent's message, which will be read and construed accordingly.

The representations and warranties and agreements of a holder tendering old notes will be deemed to be repeated and reconfirmed on and as of the expiration date and the settlement date. For purposes of this prospectus and consent solicitation statement, the "beneficial owner" of any old notes means any holder that exercises sole investment discretion with respect to the old notes.

Absence of Dissenters' Rights

You do not have any appraisal or dissenters' rights in connection with the exchange offer under the laws of the State of Ohio, which govern the old indenture and the old notes.

Accounting Treatment of Exchange Offer

We will account for the exchange offer as an exchange of debt under accounting principles generally accepted in the United States. The new notes to be issued in the exchange offer will be recorded at the same carrying value as the old notes. Accordingly, we will recognize no gain or loss for accounting purposes upon the consummation of the exchange offer. However, we will incur a one-time, non-cash charge of approximately \$0.8 million (approximately \$0.5 million after tax) at the time of the exchange offer as a result of a write-off of previously capitalized deferred financing costs necessitated by the exchange of the old notes and the termination of the old credit facility. We will also amortize the expenses of the exchange offer over the term of the new notes issued in the exchange offer.

Acceptance of Old Notes for Exchange; Delivery of New Notes

On the settlement date, we will deliver the new notes to be issued in exchange for old notes in the exchange offer in book-entry form.

We will be deemed to have accepted validly tendered old notes and properly given consents that have not been validly withdrawn or revoked as provided in this prospectus and consent solicitation statement when, and if, we have given oral or written notice of acceptance to the exchange agent. Subject to the terms and conditions of the exchange offer, delivery of new notes through the settlement date will be made by the exchange agent on the settlement date upon receipt of that notice. The exchange agent will act as agent for tendering holders of the old notes for the purpose of receiving old notes and transmitting new notes as of the settlement date with respect to the old notes. If any tendered old notes are rejected for any reason set forth in the terms and conditions of the exchange offer, then the unaccepted old notes will be returned without expense to the tendering holder as soon as possible after the expiration or termination of the exchange offer.

Procedures for Tendering and Consenting

The procedures by which you may tender or cause to be tendered old notes will depend on the manner in which you hold the old notes.

If you wish to accept the exchange offer and give your consent and your old notes are held by a custodial entity such as a bank, broker, dealer, trust company or other nominee, then only that custodial entity can tender your old notes. In that case, you must instruct the custodial entity to tender your old notes on your behalf pursuant to the procedures of the custodial entity.

If you wish to accept the exchange offer and give your consent and your old notes are not held by a custodial entity, then you must either:

- complete, sign and date the consent and letter of transmittal according to the instructions (including guaranteeing the signatures to the consent and letter of transmittal, if required), and deliver the consent and letter of transmittal, together with the certificates representing the old notes, to the exchange agent at its address on the back cover page of this prospectus and consent solicitation statement for receipt on or before the expiration date, or
- comply with the ATOP procedures for book-entry transfer described below on or before the expiration date.

The exchange agent and DTC have confirmed that the exchange offer is eligible for ATOP. The consent and letter of transmittal (or facsimile copy), with any required signature guarantees or, in the case of bookentry transfer, an agent's message in lieu of the consent and letter of transmittal, and any other required documents, must be transmitted to and received by the exchange agent on or before the expiration date of the exchange offer at its address set forth on the back cover page of this prospectus and consent solicitation statement. Old notes will not be deemed surrendered until the exchange agent receives the consent and letter of transmittal and signature guarantees, if any, or agent's message.

The method of delivery of old notes, the consent and letter of transmittal, and all other required documents to the exchange agent is at your election and risk. Instead of delivery by mail, you should use an overnight or hand delivery service, properly insured. In all cases, you should allow sufficient time to assure delivery to and receipt by the exchange agent on or before the expiration date. Send the consent and letter of transmittal or any old notes only to the exchange agent.

All new notes will be delivered only in book-entry form through DTC. Accordingly, if you anticipate tendering other than through DTC, then you are urged to contact promptly a bank, broker or other intermediary (that has the capability to hold securities custodially through DTC) to arrange for receipt of any new notes to be delivered to you pursuant to the exchange offer and to obtain the information necessary to provide the required DTC participant with account information for the consent and letter of transmittal.

Book-Entry Delivery Procedures for Tendering Old Notes Held with DTC

If you wish to tender old notes held on your behalf by a nominee with DTC, then you must:

- inform your nominee of your interest in tendering your old notes pursuant to the exchange offer, and
- instruct your nominee to tender all old notes you wish to be tendered in the exchange offer into the exchange agent's account at DTC on or before the expiration date.

Any financial institution that is a nominee in DTC, including Euroclear and Clearstream, must tender old notes by effecting a book-entry transfer of the old notes to be tendered in the exchange offer into the account of the exchange agent at DTC by electronically transmitting its acceptance of the exchange offer through the ATOP procedures for transfer. DTC will then verify the acceptance, execute a book-entry delivery to the exchange agent's account at DTC, and send an agent's message to the exchange agent. An "agent's message" is a message, transmitted by DTC to and received by the exchange agent and forming part of a book-entry confirmation, that states that DTC has received an express acknowledgement from an organization that participates in DTC (a "participant") tendering old notes that the participant has received and agrees to be bound by the terms of the consent and letter of transmittal and that we may enforce the agreement against the participant. The proper tender by the nominee of your old notes will constitute the giving of a consent to the proposed amendments of the old indenture. You do not need to execute a consent and letter of transmittal if you tender your old notes through ATOP.

Proper Execution and Delivery of Consent and Letter of Transmittal

An eligible institution must guarantee signatures on a consent and letter of transmittal or notice of withdrawal described below (see "— Withdrawal of Tenders and Revocation of Consents"), as the case may be, unless the old notes tendered pursuant to the consent and letter of transmittal are tendered:

- by a holder who has not completed the box entitled "Special Delivery Instructions" or "Special Issuance Instructions" on the consent and letter of transmittal, or
- for the account of an eligible institution.

If signatures on a consent and letter of transmittal, or notice of withdrawal are required to be guaranteed, then the guarantee must be made by an eligible institution.

If you sign the consent and letter of transmittal, then your signature must correspond with the name as written on the face of the old notes without alteration, enlargement or any change whatsoever. If two or more holders hold any of the old notes tendered, then all of the holders must sign the consent and letter of transmittal. If any of the old notes you tender are registered in different names on different old notes, then it will be necessary for you to complete, sign and submit as many separate consents and letters of transmittal, and any accompanying documents, as there are different registrations of certificates.

If you do not tender old notes for exchange pursuant to the exchange offer and the old notes are to be returned to a person other than you, then the certificates for these old notes must be endorsed or accompanied by an appropriate instrument of transfer, signed exactly as the name of the registered owner appears on the certificates, with the signatures on the certificates or instruments of transfer guaranteed by an eligible institution.

If a person other than you signs the consent and letter of transmittal, then those old notes must be properly endorsed or accompanied by a properly completed bond power, signed by you exactly as your name appears on the old notes. If the consent and letter of transmittal or any old notes, bond powers or other instruments of transfer are signed by trustees, executors, administrators, guardians, attorneys-in-fact, officers of corporations or others acting in a fiduciary or representative capacity, then those persons should so indicate when signing, and, unless waived by us, evidence satisfactory to us of their authority to so act must be submitted with the consent and letter of transmittal.

We will reject any alternative, conditional, irregular or contingent tenders or consents. By executing the consent and letter of transmittal, you waive any right to receive any notice of the acceptance for exchange of your old notes. You should indicate in the applicable box in the consent and letter of transmittal the name and address to which payments or substitute certificates evidencing old notes for amounts not tendered or not exchanged should be issued or sent, if different from yours. If these instructions are not given, then any old notes not tendered or exchanged will be returned to you.

All questions as to the validity, form, eligibility (including time of receipt), and acceptance and withdrawal of tendered old notes will be determined by us in our absolute discretion, which determination will be final and binding. We reserve the absolute right to reject any and all tendered old notes determined by us not to be in proper form or not to be properly tendered or any tendered old notes our acceptance of which would, in the opinion of our counsel, be unlawful. We also reserve the right to waive, in our absolute discretion, any defects, irregularities or conditions of tender as to particular old notes, whether or not waived in the case of other old notes. Our interpretation of the terms and conditions of the exchange offer (including the instructions in the consent and letter of transmittal) will be final and binding on all parties. Unless waived, you must cure any defects or irregularities in connection with tenders of old notes within the time that we shall determine.

Although we intend to notify you of defects or irregularities with respect to tenders of old notes, neither we, the exchange agent, the information agent, the dealer manager nor any other person will be under any duty to give this notification or will incur any liability for failure to give this notification. Tenders of old notes will not be deemed to have been made until any defects or irregularities have been cured or waived.

If your old notes have been mutilated, lost, stolen or destroyed, it will be your responsibility to obtain replacement securities or to arrange for indemnification with the trustee of the old notes. You may contact the information agent for assistance with these matters.

Withdrawal of Tenders and Revocation of Consents

The valid withdrawal of tendered old notes will be deemed to be a revocation of your consent to the proposed amendments, and the revocation of your consent will be deemed a withdrawal of your tendered old notes. You may withdraw tenders of old notes at any time before the time we notify the trustee of the old notes that we have received valid and unrevoked consents representing a majority in aggregate principal amount of old notes. You may not withdraw your consents of old notes after that time. We will announce that

we have received the required consents by no later than 9:00 a.m., New York City time, on the first business day following their receipt.

Beneficial owners desiring to withdraw old notes previously tendered should contact the DTC participant that holds their old notes. To withdraw old notes previously tendered, a DTC participant may, before the date that we have received valid and unrevoked consents representing a majority in aggregate principal amount of old notes, withdraw its instruction previously transmitted through ATOP by:

- · withdrawing its acceptance through ATOP, or
- delivering to the exchange agent by mail, hand delivery or facsimile transmission, notice of withdrawal of the instruction.

The notice of withdrawal must contain the name and number of the DTC participant. Withdrawal of a prior instruction will be effective upon receipt of the notice of withdrawal by the exchange agent. All signatures on a notice of withdrawal must be guaranteed by a recognized participant in the Securities Transfer Agents Medallion Program, the NYSE Medallion Signature Program or the Stock Exchange Medallion Program, except that signatures on the notice of withdrawal must be guaranteed if the old notes being withdrawn are held for the account of an eligible institution. A withdrawal of an instruction must be executed by a DTC participant in the same manner as the DTC participant's name appears on its transmission through ATOP to which the withdrawal relates. A DTC participant may withdraw a tender only if the withdrawal complies with the provisions described in this paragraph.

Withdrawal of tenders of old notes may not be rescinded, and any old notes properly withdrawn will be deemed not validly tendered for purposes of the exchange offer. Properly withdrawn old notes may, however, be retendered by again following one of the procedures described in "— Procedures for Tendering and Consenting" before the expiration date of the exchange offer.

Exchange Agent

We have appointed HSBC Bank USA as the exchange agent for the exchange offer. You should send or deliver consents and letters of transmittal and all correspondence in connection with the exchange offer to the exchange agent at the address and telephone number set forth on the back cover page of this prospectus and consent solicitation statement. We will pay the exchange agent reasonable and customary fees for its services and will reimburse it for its reasonable, out-of-pocket expenses in connection with the exchange offer.

Information Agent

We have appointed D.F. King & Co., Inc. as the information agent for the exchange offer and will pay customary compensation for its services. You should direct questions concerning tender procedures and requests for additional copies of this prospectus and consent solicitation statement or the consent and letter of transmittal to the information agent at the address and telephone numbers set forth on the back cover page of this prospectus and consent solicitation statement. You may also contact your commercial banks, brokers, dealers, trust companies or other nominees for assistance concerning the exchange offer and consent solicitation.

Dealer Manager

We have retained Banc of America Securities LLC to act as exclusive dealer manager in connection with the exchange offer. We will pay the dealer manager a fee for soliciting acceptances of the exchange offer. The fee is based on the aggregate principal amount of the old notes exchanged and will be payable on the date the new notes are issued in the exchange offer. We will also reimburse the dealer manager for its reasonable out-of-pocket expenses. The obligations of the dealer manager to perform this function are subject to conditions. We have agreed to indemnify the dealer manager against some kinds of liability, including some liabilities under the federal securities laws. Questions regarding the terms of the exchange offer may be directed to the dealer manager at the address and telephone number set forth on the back cover page of this prospectus and consent solicitation statement.

The dealer manager has provided us, and expects to provide us in the future, with financial advisory, investment banking and general banking services, for which it has received and expects to receive customary fees and commissions.

At any given time, the dealer manager may trade the old notes, new notes and other of our securities for its own account or for the accounts of its customers, and accordingly, may hold a long or short position in the old notes, new notes or our other securities.

Other Fees and Expenses

We will bear the expenses of soliciting tenders of the old notes and consents to the proposed amendments to the old indenture. We are making the principal solicitation by mail. However, the dealer manager and the information agent, as well as our officers and other employees and those of our affiliates, may make additional solicitations by telegraph, facsimile transmission, telephone or in person.

If you tender your old notes, then you will not be required to pay any fee or commission to the dealer manager. If, however, you handle the transaction through your broker, dealer, commercial bank, trust company or other institution, then you may be required to pay brokerage fees or commissions.

THE CONSENT SOLICITATION

In connection with the exchange offer, we are soliciting consents to the proposed amendments to the old indenture. It is a condition of the exchange offer, which we may choose to waive in our sole discretion, that as of the expiration of the exchange offer we receive valid and unrevoked tenders of old notes and consents to the proposed amendments representing at least a majority in aggregate outstanding principal amount of old notes. The proper completion, execution, and delivery of a consent and letter of transmittal (or the delivery of an agent's message) tendering old notes pursuant to the exchange offer will constitute the consent of the tendering holder to the proposed amendments. Holders may not provide consents without tendering their old notes in the exchange offer and may not tender their old notes without consenting to the proposed amendments.

Consent Payments

If you give a valid consent, that is not revoked, on or before the consent payment deadline, we will make a consent payment to you consisting of \$\\$ in principal amount of new notes for each \$1,000 principal amount of old notes with respect to which you give consent. This consent payment will be included in the \$\\$ per \$1,000 principal amount of the new notes you receive upon completion of the exchange offer. If you do not give a valid consent, or revoke your consent, on or before the consent payment deadline, you will only receive \$\\$ in principal amount of new notes for each \$1,000 principal amount of old notes that you tender before the expiration of the exchange offer, and you will not receive a consent payment.

For purposes of the exchange offer and consent solicitation, the term "consent payment deadline" means 5:00 p.m., New York City time, on the later to occur of the date we receive the required consents to effect the proposed amendments or , 2002. If we change the consent payment deadline, we will announce the new consent payment deadline no later than 9:00 a.m., New York City time, on the first business day after we make the change.

Required Consents

We must receive consents from holders of at least a majority in aggregate outstanding principal amount of old notes to amend the old indenture in the manner contemplated by the proposed amendments. It is also a condition of the exchange offer, which we may choose to waive in our sole discretion, that as of the expiration of the exchange offer we receive valid and unrevoked tenders and consents representing at least a majority in aggregate outstanding principal amount of old notes.

Some of our affiliates are holders of approximately 0.4% of the outstanding aggregate principal amount of old notes. Although these affiliates intend to tender their notes and consent to the proposed amendments, the old indenture prohibits us from counting their tenders and consents toward the satisfaction of the condition to the exchange offer that we receive valid and unrevoked tenders and consents representing at least a majority in aggregate outstanding principal amount of old notes. See "Certain Transactions."

If the required consents are received and the exchange offer is consummated, we and the trustee for the old indenture will execute a supplemental indenture to the old indenture setting forth the proposed amendments, and the old indenture, as so supplemented, will become operative immediately after the expiration date of the exchange offer. Each non-exchanging holder of old notes will be bound by the supplemental indenture, even if the holder did not give its consent. The old indenture, without giving effect to the proposed amendments, will remain in effect until the proposed amendments become operative. If the exchange offer is terminated or withdrawn, then the proposed amendments will not become operative.

The Proposed Amendments

The proposed amendments to the old indenture will not affect the interest rate and payment and maturity dates of the old notes. The proposed amendments will, however, reduce the protections afforded holders of the old notes under the current form of the old notes.

The proposed amendments will eliminate all of the restrictive covenants in the old indenture. These covenants currently limit our ability to:

- incur debt,
- make some kinds of investments and payments,
- incur liens,
- · pay dividends,
- sell capital stock of our subsidiaries,
- enter into transactions with stockholders and affiliates,
- · sell assets, and
- · consolidate or merge.

The proposed amendments will also remove requirements in connection with:

- preserving material rights and franchises,
- paying taxes and other claims,
- maintaining property and insurance coverage,
- waiving some of the defenses to payment of the old notes,
- providing SEC reports to the trustee and holders of the old notes,
- · repurchasing old notes on a change of control or sale of assets, and
- requiring any subsidiaries we create or acquire to become guarantors.

In addition, the proposed amendments will release our subsidiaries from their guarantees of the old notes, which will relieve them of any further obligation to repay the old notes. The amendments will also remove some of the events of default under the old indenture, including but not limited to:

- a default by us or the guarantors on other debt,
- final judgments or orders not paid or discharged, and
- bankruptcy, insolvency or liquidation.

We and the trustee intend to sign the supplemental indenture giving effect to the proposed amendments on the date we receive consents from holders of a majority in aggregate outstanding principal amount of old notes. However, the proposed amendments will only become effective on the closing of the exchange offer.

See "Risk Factors — Consequences of a Failure to Exchange the Old Notes." Also see "Summary Comparison of the Key Differences between the Old Indenture, as Amended, and New Indenture" below and Annex A to this prospectus and consent solicitation statement for further details concerning the effect of the proposed amendments.

Withdrawal of Consents

You may not revoke your consents except by the valid withdrawal of your tender of old notes in accordance with the instructions for withdrawal. See "The Exchange Offer — Withdrawal of Tenders and Revocation of Consents."

A valid withdrawal of tendered old notes before the time we notify the trustee for the old notes that we have received valid and unrevoked consents representing a majority in aggregate principal amount of old notes will also constitute the revocation of the related consent to the proposed amendments to the old indenture. You may only revoke your consent to the proposed amendments by validly withdrawing your tender of old notes before that time.

BUSINESS

We are a leading supplier of friction products and precision components for industrial, agricultural and aerospace applications. We focus on designing, manufacturing and marketing products requiring sophisticated engineering and production techniques for applications in markets in which we have achieved a significant market share. Our products include friction parts for brakes, clutches and transmissions used in construction vehicles, agricultural vehicles, trucks, motorcycles and race cars, and parts for brake systems used in commercial and general aviation. Our precision components are used in pumps, motors, transmissions, antilock brake systems and other applications for industrial equipment, lawn and garden equipment, appliances, small hand tools and trucks. Our friction and precision components are made principally from proprietary formulations and designs of metal powders and composite materials.

We benefit from a deep and diversified customer base, with approximately 2,500 total customers, none of which accounted for more than 7% of our net sales in 2001. We are a preferred supplier to many of the world's largest and well known brand name original equipment manufacturers, deriving more than 80% of our sales from products for which we are the sole source provider for specific customer applications. We offer our customers full service capabilities, from design through production, and work closely with original equipment manufacturers to improve performance and develop product innovations to generate increased sales. We also benefit from a diversified product list, with over 5,000 total products, none of which accounted for more than 5% of our net sales in 2001. We do not target the cyclical consumer automotive sector. Consequently, less than 7% of our net sales in any of the last five years was to the consumer automotive and light truck market. For the three months ended March 31, 2002, we generated net sales of \$49.8 million and EBITDA of \$4.3 million. For the year ended December 31, 2001, we generated net sales of \$184.4 million and EBITDA of \$19.5 million. Our common stock has been publicly traded since 1998.

Through our subsidiaries, we operate primarily in four reportable segments:

• Friction Products

We believe that, based on net sales, we are one of the top worldwide manufacturers of friction products used in industrial, agricultural and aerospace applications. Our friction products segment manufactures products made from proprietary formulations of composite materials that primarily consist of metal powders and synthetic and natural fibers. Friction products are the parts used in brakes, clutches and transmissions to absorb vehicular energy and dissipate it through heat and normal mechanical wear. The principal markets served by our friction products segment include construction vehicles, agricultural vehicles, trucks, commercial aviation and general aviation. We believe we are:

- a leading domestic supplier of friction products for construction equipment, agricultural equipment and trucks,
- the only independent supplier of friction materials for braking systems for new and existing series of many commercial aircraft models, including the Boeing 737 and 757 and the MD-80, and several regional jets used by commuter airlines, including the Canadair regional jet series,
- the largest supplier of friction materials for the growing general aviation market, including numerous new and existing series of Gulfstream, Cessna, Lear and Beech aircraft, and
- a leading domestic supplier of friction products into specialty markets such as motorcycles, all terrain vehicles (ATVs) and snowmobiles.

For the three months ended March 31, 2002, our friction products segment generated net sales of \$26.0 million, representing 52% of our total net sales, and EBITDA of \$2.7 million, representing 63% of our total EBITDA. For the year ended December 31, 2001, our friction products segment generated net sales of \$104.1 million, representing 56% of our total net sales, and EBITDA of \$15.7 million, representing 80% of our total EBITDA.

• Precision Components

We are a leading supplier of powder metal components for industrial equipment, lawn and garden equipment, appliances, hand tools and trucks. We use composite metal alloys in powder form to manufacture high quality custom-engineered metal components. The market for this segment is growing at approximately 10% per year as original equipment manufacturers substitute precision components made from metal powders for forged, cast or stamped parts. Our precision components segment serves three specific areas of the powder metal marketplace:

- tight tolerance fluid power components, such as pump elements and gears,
- large powder metal components used primarily in construction equipment, agricultural equipment and trucks, and
- high volume parts for the lawn and garden, appliance, hand tool and other markets.

For the three months ended March 31, 2002, our precision components segment generated net sales of \$17.2 million, representing 35% of our total net sales, and EBITDA of \$1.1 million, representing 26% of our total EBITDA. For the year ended December 31, 2001, our precision components segment generated net sales of \$58.3 million, representing 32% of our total net sales, and EBITDA of \$5.2 million, representing 27% of our total EBITDA.

• Performance Automotive

We engineer, manufacture and market premium branded clutch and drive-train components for the performance automotive racing market. Through this segment, we supply parts for NASCAR, CART, IRL, SCCA and ASA race cars and other road racing and competition cars. For the three months ended March 31, 2002, our performance automotive segment generated net sales of \$3.9 million, representing 8% of our total net sales, and EBITDA of \$0.8 million, representing 19% of our total EBITDA. For the year ended December 31, 2001, our performance automotive segment generated net sales of \$13.0 million, representing 7% of our total net sales, and EBITDA of \$1.0 million, representing 5% of our total EBITDA.

Motor

We design and manufacture die-cast aluminum rotors for fractional and subfractional horsepower electric motors. These parts are used in a wide variety of motor applications, including appliances, business equipment, pumps and fans. We believe our motor segment is the largest independent U.S. manufacturer of die-cast aluminum rotors for use in fractional and subfractional horsepower electric motors. We also believe our motor segment has significant growth opportunities arising from the trend by original equipment motor manufacturers, which we estimate still produce more than half of all rotors in the U.S. fractional and subfractional horsepower motor market, to outsource their production of rotors to independent suppliers. For the three months ended March 31, 2002, our motor segment generated net sales of \$2.7 million, representing 5% of our total net sales, and an EBITDA loss of \$0.3 million. For the year ended December 31, 2001, our motor segment generated net sales of \$9.0 million, representing 5% of our total net sales, and an EBITDA loss of \$2.4 million. Our facility in Mexico accounted for \$0.2 million of the EBITDA loss in the first quarter of 2002, and \$2.0 million of the EBITDA loss in the year 2001, as a result of start-up operating costs.

Business Strategy

Our business strategy includes the following principal elements:

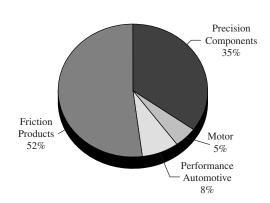
• Focus on High-Margin, Specialty Applications. We focus on markets that require sophisticated engineering and production techniques and in which we have achieved a significant market share. In developing new applications, we seek to compete in markets requiring a high level of engineering expertise and technical capability, rather than in markets in which the primary competitive factor is product pricing. We believe margins for our products in these markets are higher than in other

- manufacturing markets that use standardized products. Our gross margins were 21.6% for the three months ended March 31, 2002, 25.7% for the three months ended March 31, 2001, 21.7% for the year 2001, and 27.1% for the year 2000.
- Introduce New Products. A key part of our strategy is the introduction of products for new applications that incorporate improved performance characteristics or reduced costs in response to customer needs. Our engineers proactively focus on developing new product solutions that enhance performance and reduce manufacturing costs, including instances where we are the incumbent supplier. We also grow by applying our existing products and technologies to new specialized applications where our products have a performance or technological advantage.
- Expand Customer Relationships. We seek to provide advanced solutions to customers, enhancing our long-term relationships. Our engineers work closely with customers to develop and design new products and improve the performance of existing products. We believe that more than 80% of our net sales are from products and materials for which we are the sole source provider for specific customer applications. Our predecessors formed, and we have continued to build, relationships with these customers, some of which date back over 50 years. Our commitment to quality, service and just-in-time delivery enables us to build and maintain strong and stable customer relationships. We believe that strong relationships with our customers provide us with significant competitive advantages in obtaining and maintaining new business opportunities.
- Capitalize on Aftermarket Opportunities. Our stable aftermarket sales enable us to minimize our exposure to adverse economic cycles. Because friction products are the consumable, or wear, component of brake, clutch and transmission systems, the use of our friction products in conjunction with a new or existing system provides us with the opportunity to supply the aftermarket for the life of the system, typically through sales to the original equipment manufacturer. For example, the ability to service the aftermarket for a particular aircraft braking system will likely provide us with a stable market for our friction products for the life of the product, which can be 30 years or more. Aftermarket sales of friction products have comprised approximately 50% of our friction product sales in recent years.
- Selectively Expand Internationally. Through our friction and motor segments, which have foreign manufacturing facilities in Italy, Canada, China and Mexico, and our friction segment's worldwide distribution network, we continue to selectively expand our international operations in established markets throughout Europe, Asia, North America and Australia. Our friction products facility in Suzhou, China, which opened in 2000, and our rotor manufacturing facility in Monterrey, Mexico, which began production in 2000, are both expected to reach full production levels in 2002. Our international net sales represented \$7.0 million, or 14.1%, of our consolidated net sales in the first quarter of 2002, and \$23.6 million, or 12.8%, of our consolidated net sales in 2001.

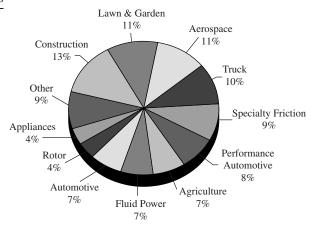
Our Principal Markets and Products

We focus on supplying the industrial, agricultural, aerospace, performance automotive and motor markets with components that require sophisticated engineering and production techniques for applications where we have achieved a significant market share. We have diversified our end markets through acquisitions and product line expansions. We believe that diversification has reduced our economic exposure to the cyclical effects of any particular industry. At March 31, 2002, our sales by segments and principal markets were:

Segments



Principal Markets



Friction Products

Friction products are the replacement elements used in brakes, clutches and transmissions to absorb vehicular energy and dissipate it through heat and normal mechanical wear. For example, the friction components in construction vehicles enable their braking systems to slow and stop the vehicles and enable their clutches and transmissions to perform their part in controlling the motion of the vehicles. Our friction products also include friction components for use in automatic and power shift transmissions, clutch facings that serve as the main contact point between an engine and a transmission, and brake components for use in many truck, construction, agriculture, aircraft and specialty vehicle braking systems. Our friction products segment manufactures products made from proprietary formulations of composite materials that primarily consist of metal powders and synthetic and natural fibers.

Our friction products are custom-designed to meet the performance requirements of a specific application and must meet temperature, pressure, component life and noise level criteria. The engineering required in designing a friction material for a specific application dictates a balance between the component life cycle and the performance application of the friction material in, for example, stopping or starting movement. Friction products are consumed through customary use in a brake, clutch or transmission system and require regular replacement. Because the friction material is the consumable, or wear, component of these systems,

new friction product introduction in conjunction with a new system provides us with the opportunity to supply the aftermarket with that friction product for the life of the system.

The principal markets served by our friction segment include manufacturers of truck clutches, heavy-duty construction and agricultural vehicle brakes, aircraft brakes, motorcycle and snowmobile brakes and transmissions. Based on net sales, we believe that we are among the top worldwide manufacturers of friction products used in industrial and aerospace applications. We estimate that aftermarket sales of friction products have comprised approximately 50% of our net friction product sales in recent years. We believe that our stable aftermarket sales component enables us to minimize our exposure to adverse economic cycles.

Construction/Agriculture/Trucks/Specialty. We supply a variety of friction products for use in brakes, clutches and transmissions on construction and agriculture equipment, trucks and specialty vehicles. These components are designed to precise tolerances and permit brakes to stop or slow a moving vehicle and the clutch or transmission systems to engage or disengage. We believe we are a leading supplier to original equipment manufacturers and to the aftermarket. We also believe that our trademarks, including Velvetouch® and Sheepbridge®, are well known in the aftermarket for these components. The use of our friction products in conjunction with a new or existing brake, clutch or transmission system provides us with the opportunity to supply the aftermarket with the friction product for the life of the system.

- Construction Equipment. We supply friction products such as transmission discs, clutch facings and brake components to manufacturers of construction equipment, including Caterpillar. We believe we are the second largest domestic supplier of these types of friction products. Replacement components for construction equipment are sold through original equipment manufacturers as well as various aftermarket distributors.
- Agriculture Equipment. We supply friction products such as clutch facings, transmission discs and brake components to manufacturers of agriculture equipment, including John Deere and CNH (formerly Case New Holland). We believe we are the second largest domestic supplier of these friction products. Replacement components for agricultural equipment are sold through original equipment manufacturers as well as various aftermarket distributors.
- *Medium and Heavy Trucks*. We supply friction products for clutch facings used in medium and heavy trucks to original equipment manufacturers, such as Eaton. We believe we are the leading domestic supplier of replacement friction products used in these applications. Replacement components are sold through original equipment manufacturers and various aftermarket distributors.
- Specialty Friction. We supply friction products for use in specialty applications, such as brake pads for Harley-Davidson motorcycles, General Motors' Hummer and Bombardier, Polaris and Arctic Cat snowmobiles. We believe that these markets are experiencing significant growth, and that we have increased our market share with our combination of superior quality and product performance. Replacement components are sold through original equipment manufacturers and various aftermarket distributors.

Aerospace. We believe we are the only independent supplier of friction materials to the manufacturers of braking systems for the Boeing 727, 737 and 757, the DC-9, DC-10, MD-80 and Bombardier's Canadair regional jet series used by commuter airlines. We believe we are also the largest supplier of friction materials to the general aviation (non-commercial airline, non-military) market, supplying friction materials for aircraft manufacturers such as Cessna, Lear, Gulfstream and Beech.

Each aircraft braking system, including the friction materials supplied by us, must meet stringent Federal Aviation Administration criteria and certification requirements. New model development and Federal Aviation Administration testing for our aircraft braking system customers generally begins two to five years before full scale production of new braking systems. If we and our aircraft brake system manufacturing partner are successful in obtaining the rights to supply a particular model of aircraft, we will typically supply our friction products for that model's aircraft braking system for as long as the model continues to fly because it is generally not economically feasible to redesign a braking system once it is certified by the Federal Aviation Administration. Moreover, Federal Aviation Administration maintenance requirements mandate that brake

components be changed after a specified number of take-offs and landings, which we expect to result in a continued and steady market for our aerospace friction products.

As a result of the terrorist attacks on September 11, 2001, the aerospace markets we serve suffered an immediate downturn. Air travel schedule curtailments by the airlines were significant as a result of the steep declines in customer traffic. Based on recent trends, however, we expect air travel growth to gradually return as 2002 progresses. However, any sustained decline in airline traffic, such as the decline that occurred after the tragic events of September 11, 2001, will have a negative impact on our aerospace business.

Our friction products for commercial aerospace applications are primarily used on "single-aisle" aircraft that are flown on shorter routes, resulting in more takeoffs and landings than those experienced by "wide-body" aircraft. We believe our friction products provide an attractive combination of performance and cost effectiveness in these applications. According to Boeing's 2001 Current Market Outlook, which was published before September 11, 2001, approximately 74% of the 14,548 airplanes in the world fleet are single-aisle commercial aircraft. The report also forecasts single-aisle aircraft to increase by approximately 9,497 to 24,045 by the end of 2020. The Boeing report also states that world airline passenger traffic is projected to increase 4.7% per year through 2020. We expect that long-term growth in world airline traffic, combined with the increasing number of single-aisle aircraft, will cause long-term demand for our aerospace friction products to be strong, although this market is expected to remain soft for the remainder of 2002.

Precision Components

Our precision components segment is a leading supplier of powder metal components consisting primarily of pump, motor and transmission elements, gears, pistons and other component parts for applications ranging from lawn and garden tractors to industrial equipment. Since we were founded, we have participated in the growing powder metal products industry with a focus on the North American industrial market. The Metal Powder Industries Federation, an industry trade group, estimates that the powder metal market for automotive and non-automotive applications had sales of over \$5.0 billion in 2001.

Applications. We manufacture a variety of components made from powder metals for use in (1) fluid power applications, such as pumps and other hydraulic mechanisms, (2) transmissions, other drive mechanisms and anti-lock braking systems used in trucks and off-road and lawn and garden equipment, (3) gears and other components for use in home appliances, small hand tools and office equipment and (4) components used in automotive applications. Powder metal components can often be produced at a lower cost per unit than products manufactured with forging, casting or stamping technologies due to the elimination of, or substantial reduction in, secondary machining and the virtual elimination of raw material waste. In addition, we expect advances in our core powder metal technology to permit production of powder metal components with improved strength, hardness and durability for demanding applications and with greater design flexibility. As a result, we believe that the current trend of substituting powder metal components for forged, cast or stamped components in industrial applications will continue for the foreseeable future, providing us with increased product and market opportunities.

Our precision component segment proactively targets four specific niches in the market place:

- *High Precision*. Our pressing and finishing capabilities enable us to specialize in tight tolerance fluid power components such as pump elements and gears. In addition, we believe that our machining capabilities provide us with a competitive advantage by giving us the ability to supply a completed part to our customers, typically without any subcontracted precision machining. We expect that our growth in this niche will be driven by existing customers' new design requirements and new product applications primarily for pumps, motors and transmissions.
- Large Size Capability. We have the capability to make powder metal components that are among the largest used in North America. For example, we make reactor plates having diameters up to 19 inches for use in transmissions in construction equipment. We expect our sales of large powder metal components to continue to grow as we create new designs for existing customers and benefit from market growth, primarily in current construction, agricultural and truck applications.

- *High Volume*. We also target smaller, high volume parts where we can use efficient pressing and sintering capabilities to our best advantage. In this niche, our primary markets have been powder metal components for the lawn and garden, home appliance, power hand tool, truck, automotive and business equipment markets. We believe that our high volume capabilities will provide us with opportunities to cross-sell numerous of our other precision components. Several of our leading original equipment customers have a variety of applications that we supply from both our friction and precision components segments.
- *Metal Injection Molding*. We also manufacture small, complex metal injection molded parts for a variety of industries, such as small hand tools and telecommunications. We believe that many of our traditional powder metal customers may also be attractive prospects for metal injected molded parts. For instance, we were able to provide one of our powder metal customers with a hydraulic valve component with a precisely controlled flow path because of the fine details achievable in metal injected molded parts as compared to standard powder metal components.

Performance Automotive

We supply premium clutch and drive-train components under our Quarter Master and Tex Racing brands. These products are used by leading teams in the National Association for Stock Car Auto Racing (NASCAR), Championship Auto Racing Teams (CART) and Indy Racing League (IRL) racing series and by weekend enthusiasts in the Sports Car Club of America (SCCA) and American Speed Association (ASA) racing clubs, as well as in other road racing and oval track competition cars. We supply the official brake pad of the SCCA and are a participating manufacturer sponsor of the SCCA, ASA and several other racing series.

Motor

We believe our motor segment is the largest independent U.S. manufacturer of die-cast aluminum rotors for use in fractional and subfractional horsepower electric motors. These motors are used in a wide variety of applications such as small household appliances, business equipment, pumps and fans. We believe our motor segment has significant growth opportunities arising from the trend by original equipment motor manufacturers, which we estimate still produce more than half of all rotors in the U.S. fractional and subfractional horsepower motor market, to outsource their production of rotors to independent suppliers. In 2000, we commenced production at our rotor manufacturing factory in Monterrey, Mexico, a city where a large portion of fractional and subfractional motors are manufactured. Output at our Monterrey facility is expected to reach full production levels during 2002. We also design and produce integral horsepower custom motors and generators through a manufacturing and sales relationship with Potencia Industrial, located in Mexico City, Mexico.

Information About Our Business Segments

The following table sets forth comparative operating results and total assets (in millions) by each of our operating segments:

Three Months ended

	March 31,				Year ended December 31,								
	20	002	20	001	2001			00	199	1999			
		(Unaud	lited)										
Net sales to external customers:													
Friction products*	\$26.0	52.2%	\$29.6	55.0%	\$104.1	56.5%	\$116.3	57.5%	\$117.4	62.6%			
Precision components	17.2	34.6%	17.8	33.1%	58.3	31.6%	72.0	35.6%	61.1	32.6%			
Performance automotive*	3.9	7.8%	4.2	7.8%	13.0	7.0%	5.6	2.8%	0.5	0.2%			
Motor	2.7	5.4%	2.2	4.1%	9.0	4.9%	8.4	4.1%	8.6	4.6%			
Consolidated	\$49.8	100.0%	\$53.8	100.0%	\$184.4	100.0%	\$202.3	100.0%	\$187.6	100.0%			
Gross profit (loss):													
Friction products*	\$ 6.1	56.5%	\$ 7.8	56.5%	\$ 24.9	62.3%	\$ 30.9	56.3%	\$ 28.5	58.4%			
Precision components	3.1	28.7%	4.4	31.9%	11.5	28.8%	19.4	35.3%	17.8	36.5%			
Performance automotive*	1.4	13.0%	1.4	10.1%	3.9	9.7%	2.8	5.1%	0.2	0.4%			
Motor	0.2	1.8%	0.2	1.5%	(0.3)	(0.8)%	1.8	3.3%	2.3	4.7%			
Consolidated	\$10.8	100.0%	\$13.8	100.0%	\$ 40.0	100.0%	\$ 54.9	100.0%	\$ 48.8	100.0%			
Operating income (loss):													
Friction products*	\$ 0.8	66.7%	\$ 2.8	71.8%	\$ 6.4	177.8%	\$ 11.5	59.0%	\$ 10.2	54.8%			
Precision components	0.1	8.3%	1.1	28.2%	0.3	8.3%	8.4	43.1%	8.7	46.8%			
Performance automotive*	0.8	66.7%	0.4	10.3%	0.3	8.3%	0.9	4.6%	_	%			
Motor	(0.5)	(41.7)%	(0.4)	(10.3)%	(3.4)	(94.4)%	(1.3)	(6.7)%	(0.3)	(1.6)%			
Consolidated	\$ 1.2	100.0%	\$ 3.9	100.0%	\$ 3.6	100.0%	\$ 19.5	100.0%	\$ 18.6	100.0%			
							_	Tarch 31, 2002 (naudited)	Decen 2001	nber 31, 2000			
Total assets:													
Friction products*								\$106.6	\$104.1	\$113.1			
Precision components								70.6	69.0	72.6			
Performance automotive*								15.6	14.6	14.4			
Motor								17.2	16.4	15.3			
Consolidated								\$210.0	\$204.1	\$215.4			

^{*} As of January 1, 2002, we reclassified an operating unit formerly associated with our performance automotive segment to our friction products segment as a result of changes in the internal operating responsibility of that unit. We have reclassified all prior periods discussed in this prospectus and consent solicitation statement to reflect this change.

Our Customers

We seek to provide advanced solutions to customers, enhancing our long-term relationships. Our engineers work closely with our customers to develop and design new products and improve the performance of existing products. We believe that more than 80% of our sales are from products and materials for which we are the sole source provider for specific customer applications. Our predecessors formed, and we have continued to build, relationships with these customers, some of which date back over 50 years. Our commitment to quality, service and just-in-time delivery enables us to build and maintain strong and stable customer relationships. We believe that strong relationships with our customers provide us with significant competitive advantages in obtaining and maintaining new business opportunities.

Through various acquisitions since our formation, we have broadened our product lines, increased our technological capabilities, further enhanced our customer relationships and further expanded our preferred supplier status. As a result of our commitment to customer service and satisfaction, we are a preferred supplier to many of the world's leading original equipment manufacturers, including Aircraft Braking Systems, Goodrich, Caterpillar, Eaton, Deere, CNH, Hydro-Gear, Sauer-Danfos, Parker Hannifin, Electrolux, Haldex, AO Smith, Emerson and FASCO.

Our top five customers accounted for 20.8% of our consolidated net sales in the first quarter of 2002, 24.4% of our consolidated net sales in 2001 and 24.8% of our consolidated net sales in 2000.

The following table describes some of our key customers in each of our business segments for the three months ended March 31, 2002, the approximate number of years they have been our customers, the principal products we sell to them and selected applications for those products:

Business Segment	Selected Key Customers (and Years as a Customer)	Principal Products Sold	Selected Applications
Friction Products Construction	Caterpillar (54 years) Allison Transmission (54 years) Dana Clark Hurth (35 years)	Brake Linings Transmission Discs	Tractors, Motor Graders and Wheel Loaders Lift Trucks and Mining Trucks
Agriculture	John Deere (44 years) CNH (40 years) AGCO (35 years)	Brake Linings Transmission Discs	Tractors
Truck	Eaton (30 years) ZF Meritor (1 year)	Clutch Buttons Transmission Discs	On-highway Trucks
Aerospace	Aircraft Braking Systems (35 years) BFGoodrich (35 years) Parker Hannifin (21 years) Bombardier (8 years)	Brake Linings	Commercial Airliners Commuter Planes Military Helicopters
Specialty and Other	Hayes Brake (21 years) Bombardier (15 years) TRW (8 years)	Brake Linings	Harley-Davidson Motorcycles Snowmobiles General Motors Hummer
Precision Components	Eaton (27 years) Electrolux Home Products (19 years) Parker Hannifin (18 years) MTD (17 years) Haldex Barnes (16 years) Hydro-Gear (13 years) Sauer-Danfos (14 years) Honda (6 years)	Powder Metal Gears Rotors Transmission Components Hubs, Bearings, Spacers and Structural Components	Hydrostatic Transmissions Fluid Power Controls Construction Equipment Industrial Pumps Gasoline Pumps Truck Transmissions Lawn and Garden Equipment Washing Machines
Performance Automotive	Petty Enterprises (21 years) Richard Childress Racing (25 years) Robert Yates Racing (17 years) Hendrick Motorsports (18 years)	Gears Transmission Components Clutch and Drive-train Components	Race Cars
Motor	Jakel (30 years) Emerson (2 years) FASCO (7 years) AO Smith (2 years)	Die-cast Rotors Integral Horsepower Motors	Home Appliances Business Equipment Pumps and Fans

Our Manufacturing Processes

The manufacturing processes for most of our friction products, performance automotive brake products and powder metal precision components are similar. In general, all use composite metal alloys in powder

form to make high quality powder metal components. The basic manufacturing steps of blending/compounding, molding/compacting, sintering (or bonding) and secondary machining/treatment are as follows:

- *Blending/compounding:* Composite metal alloys in powder form are blended with lubricants and other additives according to scientific formulas, many of which are proprietary. The formulas are designed to produce precise performance characteristics necessary for a customer's particular application. We often work together with our customers to develop new formulas that will produce materials with greater energy absorption characteristics, durability and strength.
- *Molding/compacting:* At room temperature, a specific amount of a powder alloy is compacted under pressure into a desired shape. Our molding presses are capable of producing pressures of up to 3,000 tons. We believe that we have some of the largest presses in the powder metal industry, enabling us to produce large, complex components. We can create complex shapes not obtainable with conventional powder metal presses with our metal injection molding equipment.
- *Sintering:* After compacting, molded parts are heated in furnaces to specific temperatures slightly below their melting point, enabling metal powders to metallurgically bond, harden and strengthen while permitting the molded parts to retain their desired shape. For friction materials, the friction composite part is also bonded directly to a steel plate or core, creating a strong continuous metallic part.
- Secondary machining/treatment: If required by customer specifications, a sintered part undergoes additional processing. This processing is generally necessary to attain increased hardness or strength, tighter dimensional tolerances or corrosion resistance. To achieve these specifications, parts are heat or steam treated, precision coined or flattened, ground, machined or treated with a corrosion resistant coating.

Some of our friction products, including those used in oil-cooled brakes and power shift transmissions, do not require all of the foregoing steps. For example, composite friction materials are molded under high temperatures and cured in electronically-controlled ovens and then bonded to a steel plate or core with a resin-based polymer.

Our die-cast aluminum rotors are produced in a three-step process. Steel stamped disks forming the laminations of the rotors are first skewed (stacked) and then loaded into dies into which molten aluminum is injected to create the rotors. The rotor castings created in the dies are then machined to produce finished rotors. We manufacture these rotors in a variety of sizes and shapes to customers' design specifications.

Our Quality Control Procedures

Throughout our design and manufacturing process, we focus on quality control. For product design, each manufacturing facility uses state-of-the-art testing equipment to replicate virtually any application required by our customers. This equipment is essential to our ability to manufacture components that meet stringent customer specifications. To ensure that tolerances have been met and that the requisite quality is inherent in our finished products, we use statistical process controls, a variety of electronic measuring equipment and computer-controlled testing machinery. We have also established programs within each of our facilities to detect and prevent potential quality problems.

In 2001, we launched a Six Sigma initiative focused on creating a culture of continuous improvement. Six Sigma is a discipline that aims to eliminate costly process variation in a company's operations and bring more value to its customers. To achieve this, Six Sigma managers use data and statistical analysis to locate process errors. We have trained approximately 200 managers to date and currently have over 50 Six Sigma projects in process throughout our business segments. Many of these projects involve direct customer participation.

Our Company History

Since 1989, when our company was formed, we have pursued a strategic growth plan by making complementary acquisitions and broadening our customer base:

Acquired Subsidiary	Effective Date of Acquisition	Primary Business	Year Founded
Friction Products and Logan Metal Stampings	March 1989	Friction products for brakes, clutches and transmissions used in aerospace, industrial and specialty applications and large powder metal components, primarily used in construction, agriculture and truck applications	1961
Helsel	June 1994	High precision powder metal components used in fluid power applications	1974
S.K. Wellman	June 1995	Friction products for industrial applications	1924
Hawk Motors	January 1997	Die-cast aluminum rotors for small electric motors used in appliances and business equipment, and integral horsepower custom motors and generators	1947
Sinterloy	August 1997	Powder metal components for business equipment and automotive applications	1969
Clearfield Powdered Metals	June 1998	Powder metal components for appliance, truck, lawn and garden, and automotive applications	1984
Allegheny Powder Metallurgy	March 1999	Powder metal components for lawn and garden, appliance, automotive and power hand tool applications	1981
Quarter Master Industries	November 1999	Precision-engineered clutch and drive-train components for motorsports and performance automotive applications	1960
Tex Racing Enterprises	November 2000	Precision-engineered transmission components for motorsports and performance automotive applications	1975
Hawk MIM	December 2000	High precision powder metal injection molded components for telecommunications and industrial applications	1999

Our Technology

We believe we are an industry leader in the development of systems, processes and technologies that enable the manufacturing of friction products with numerous performance advantages, such as greater wear resistance, increased stopping power, lower noise and smoother engagement. Our expertise is evidenced by our aircraft brake components, which are currently being installed on many of the braking systems of the Boeing 737-600, -700, -800 and -900 commercial airliners and Bombardier's Canadair regional jet series of commuter aircraft, as well as new series of industrial equipment from various original equipment manufacturers, such as a new friction material being used by ZF Meritor for truck clutches.

We maintain an extensive library of proprietary friction product formulas that serve as starting points for new product development. Each formula has a specific set of ingredients and processes to generate repeatability in production. A slight change in a mixture can produce significantly different performance characteristics. We use a variety of technologies and materials in developing and producing our products, such as graphitic and cellulose composites. We believe our expertise in the development and production of products using these different technologies and materials gives us a competitive advantage over other friction product manufacturers, which typically have expertise in only one or two types of friction material.

We also believe that our precision components business is able to produce a wide range of products from small precise components to large parts. We have presses that produce some of the largest powder metal parts in the world, and our powder metal technology permits the manufacture of complex components with specific performance characteristics and close dimensional tolerances that would be impractical to produce using conventional metalworking processes such as forging, casting or stamping. With our metal injection molding technology, we are able to create complex shapes previously not available using conventional powder metal technology.

Our motor business is able to produce a wide range of rotors for the fractional and subfractional motor industries. We have developed customized manufacturing processes for rotors and created specialty rotor die construction techniques. We have also designed highly automated machines necessary for the production of our rotors.

How We Market and Sell Our Products

We market our products globally through 20 product managers and direct sales professionals, who operate primarily from our facilities in the United States, Italy, China and Canada. Our product managers and sales force work directly with our engineers who provide the technical expertise necessary for the development and design of new products and for the improvement of the performance of existing products. Our friction products are sold both directly to original equipment manufacturers and to the aftermarket through our original equipment customers and a network of distributors and representatives throughout the world. We also sell our precision components and motor components to original equipment manufacturers through independent sales representatives. Sales to customers in our performance automotive segment are sold directly to race teams and distributors throughout the United States.

Our Competition

The principal segments in which we operate are competitive and fragmented, with many small manufacturers and only a few manufacturers that generate annual sales in excess of \$50 million. Our larger competitors may have financial and other resources substantially greater than ours. We compete for new business principally at the beginning of the development of new applications and at the redesign of existing applications by our customers. For example, new model development for our aircraft braking system customers generally begins two to five years before full-scale production of new braking systems. Initiatives by customers to upgrade existing products typically involve long lead times as well. We also compete with manufacturers using different technologies, such as carbon composite ("carbon-carbon") friction materials for braking systems components. Carbon-carbon braking systems are significantly lighter than the metallic aircraft braking systems that we supply friction materials for, but are generally more expensive. The carbon-carbon brakes are typically used on wide-body aircraft, such as the Boeing 747, and on military aircraft, where the advantages in reduced weight may justify the additional expense.

In addition, as powder metal components are increasingly substituted for wrought steel or iron components due to advances in powder metal technology, we increasingly compete with companies using forging, casting or stamping technologies to produce precision components. Powder metal components can often be produced at a lower cost per unit than products manufactured with forging, casting or stamping technologies due to the elimination of, or substantial reduction in, secondary machining and the virtual elimination of raw material waste.

The Suppliers and Prices of the Raw Materials We Use

The principal raw materials that we use are copper, steel and iron powders, aluminum ingot and custom-fabricated cellulose sheet. We have generally been able to obtain sufficient supplies of raw materials for our operations, and changes in prices of our supplies over the past few years have not had a significant effect on our operations.

Our Properties

Our operations are conducted through the following facilities, which are owned by us except as otherwise indicated:

Location	Approximate Square Footage	Principal Functions
Medina, Ohio	176,000	Manufacturing of friction products and powder metal components, sales and marketing, product engineering, customer service and support, and administration
Brook Park, Ohio	113,000	Manufacturing of friction products, domestic and international sales and marketing, product engineering, customer service and support, and administration
Falls Creek, Pennsylvania	85,000	Manufacturing of powder metal components, sales and marketing, research and development, product engineering, customer service and support, and administration
Orzinuovi, Italy	70,000	Manufacturing of friction products, international sales and marketing, and administration
Akron, Ohio	71,000	Manufacturing of metal stampings
Campbellsburg, Indiana	60,000	Manufacturing of powder metal components, sales and marketing, product engineering, customer service and support, and administration
Solon, Ohio(1)	58,000	Research and development
Clearfield, Pennsylvania	50,000	Manufacturing of powder metal components, sales and marketing, product engineering, customer service and support, and administration
Spring Grove, Illinois(1)	42,000	Manufacturing of powder metal components, sales and marketing, customer service and support, and administration
Alton, Illinois	41,000	Manufacturing of die-cast aluminum rotors, sales and marketing, product engineering, customer service and support, and administration
Solon, Ohio(1)	27,000	Manufacturing of powder metal injection molded components, sales and marketing, product engineering, customer service and support, and administration
Lake Zurich, Illinois(1)	25,000	Manufacturing of automotive clutches and drive-train components, sales and marketing, product engineering, customer service and support, and administration
Ether, North Carolina(1)	23,000	Manufacturing of transmissions and drive-train components, sales and marketing, product engineering, customer service and support, and administration
Monterrey, Mexico(1)	23,000	Manufacturing of die-cast aluminum rotors, sales and marketing, customer service and support, and administration
Concord, Ontario, Canada(1)	15,000	Manufacturing of friction products, distribution and warehousing, and administration
Suzhou, China(1)	35,000	Manufacturing of friction products, sales and marketing, customer service and support, and administration
Cleveland, Ohio(1)(2)	6,200	Principal executive offices

⁽¹⁾ Leased.

⁽²⁾ We are a party to an expense sharing arrangement under which we share the expenses of our Cleveland, Ohio headquarters with Weinberg Capital Corporation, of which Ronald E. Weinberg is President and sole shareholder.

We believe that substantially all of our property and equipment is maintained in good condition, adequately insured and suitable for its present and intended use.

Our Intellectual Property

Our federally registered trademarks include Hawk®, Wellman Friction Products®, Velvetouch®, Fibertuff®, Feramic®, Velvetouch Feramic®, Velvetouch Organik®, Velvetouch Metalik®, Hawk Brake® and Hawk Performance®. Velvetouch®is our principal trademark for use in the friction products aftermarket segment and is registered in 26 countries. We have applied for the registration of the Hawk Motors, Hawk Precision Components Group, Hawk Rotors, Mega V, Pro V, Quarter Master, Trilite, Tex Racing and Wellman Products Group trademarks. Although we maintain patents related to our business, we do not believe that our competitive position is dependent on patent protection or that our operations are dependent on any individual patent. We have applied for U.S. patents relating to a method and equipment for high velocity powder metal injection molding, and we expect to commercialize this technology by licensing these patents to manufacturers of powder metal injection molding equipment. To protect our intellectual property, we rely on a combination of internal procedures, confidentiality agreements, patents, trademarks, trade secrets law and common law, including the law of unfair competition.

Our Foreign Operations

Our foreign operations are subject to the usual risks of operating in foreign jurisdictions. They include, but are not limited to, exchange controls, currency restrictions and fluctuations, changes in local economic and political conditions, changes in laws, regulations, tariffs or taxes, the establishment of trade barriers and difficulties in management and staffing. For financial information regarding our international operations, see "Note M—Business Segments" and "Note N—Supplemental Guarantor Information" to the accompanying consolidated financial statements beginning on page F-21 of this prospectus and consent solicitation statement.

Personnel

At March 31, 2002, we had approximately 1,190 domestic employees and 360 international employees. Approximately 180 employees at our Brook Park, Ohio plant are covered under a collective bargaining agreement with the Paper, Allied Industrial, Chemical and Energy Workers International Union (PACE) expiring in October 2004; approximately 55 employees at our Akron, Ohio facility are covered under a collective bargaining agreement with the United Automobile Workers expiring in July 2003; approximately 190 employees at our Orzinuovi, Italy plant are represented by a national mechanics union under an agreement that expires in December 2002 and by a local union under an agreement that expires in December 2004; and approximately 60 hourly employees at our Alton, Illinois facility are covered under a collective bargaining agreement with the International Association of Machinists and Aerospace Workers expiring in June 2004. We have experienced no strikes and believe we have good relations with our employees and their unions.

Government Regulation of Our Businesses

Our sales to manufacturers of aircraft braking systems represented 11.4% of our consolidated net sales in the first quarter of 2002 and 14.1% of our consolidated net sales in 2001. Each aircraft braking system, including the friction products supplied by us, must meet stringent Federal Aviation Administration criteria and testing requirements. We have been able to meet these requirements in the past and we continuously review Federal Aviation Administration compliance procedures to help ensure our continued and future compliance.

Environmental, Health and Safety Matters

We are subject to stringent environmental standards imposed by federal, state, local and foreign environmental laws and regulations, including those related to air emissions, wastewater discharges, chemical

and hazardous waste management and disposal. Some of these environmental laws hold owners or operators of land or businesses liable for their own and for previous owners' or operators' releases of hazardous or toxic substances, materials or wastes, pollutants or contaminants. Our compliance with environmental laws also may require the acquisition of permits or other authorizations for some kinds of activities and compliance with various standards or procedural requirements. We are also subject to the federal Occupational Safety and Health Act and similar foreign and state laws. The nature of our operations, the long history of industrial uses at some of our current or former facilities, and the operations of predecessor owners or operators of some of the businesses expose us to risk of liabilities or claims with respect to environmental and worker health and safety matters. We review our procedures and policies for compliance with environmental and health and safety laws and regulations and believe that we are in substantial compliance with all material laws and regulations applicable to our operations. Our costs of complying with environmental, health and safety requirements have not been material.

Legal Proceedings

We are involved in various lawsuits arising in the ordinary course of our business. In our opinion, the outcome of these matters will not have a material adverse effect on our financial condition, liquidity or results of operations.

SELECTED CONSOLIDATED FINANCIAL AND OTHER DATA

(in millions, except per share data)

We have derived the selected consolidated financial and other data presented below under the captions "Statement of Operations Data," "(Loss) Earnings per Share," "Other Data" and "Balance Sheet Data" as of and for each of the years ended December 31, 2001, 2000, 1999, 1998 and 1997 from our audited consolidated financial statements. We have derived the selected consolidated financial and other data for the three months ended March 31, 2002 and 2001 from our unaudited consolidated financial statements, which management has prepared on the same basis as our audited consolidated financial statements and, in the opinion of management, reflect all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of that data for those periods and as of those dates. Our operating results for the three months ended March 31, 2002 and 2001, are not necessarily indicative of the results that may be expected for any other quarterly period or for the full year. We acquired our Net Shape subsidiary in December 2000, our Tex Racing subsidiary in November 2000, our Quarter Master subsidiary in November 1999, our Allegheny subsidiary in March 1999, our Clearfield subsidiary in June 1998 (Allegheny and Clearfield are now operated together as Allegheny Clearfield), our Sinterloy subsidiary in August 1997 and our Hutchinson subsidiary (now known as Hawk Motors) in January 1997. You should read this data in conjunction with the more detailed information contained in the consolidated financial statements, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and other financial information included in this prospectus and consent solicitation statement.

		Montl ded ch 31,			Year end	ded Dece	mber 31,	
	2002	200	1	2001	2000	1999	1998	1997
	(Una	ıdited)					·
Statement of Operations Data:								
Net sales	\$ 49.8	\$ 53	3.8	\$184.4	\$202.3	\$187.6	\$182.3	\$160.7
Cost of sales	39.0	40	0.0	144.4	147.4	138.8	124.6	114.8
Gross profit	10.8	13	3.8	40.0	54.9	48.8	57.7	45.9
Restructuring costs(1)	_		_	1.1	_	_	_	_
Income from operations	1.2	3	3.9	3.6	19.5	18.6	32.8	22.1
Interest expense	2.3	2	2.4	9.5	9.0	9.4	11.9	15.3
(Loss) income before income taxes and extraordinary								
charge	(1.2)	1	1.6	(6.2)	10.1	10.0	21.9	6.6
Income tax (benefit) provision	(0.6)	().7	(1.9)	4.4	3.7	9.7	3.7
Extraordinary charge(2)	_		—	_	_	_	3.1	_
Net (loss) income	\$ (0.6)	\$ 0).9	\$ (4.3)	\$ 5.8	\$ 6.3	\$ 9.1	\$ 2.9
(Loss) Earnings per Share:								
Basic (loss) earnings before extraordinary								
charge	\$ (.07)	\$.	10	\$ (.52)	\$.66	\$.71	\$ 1.59	\$.55
Extraordinary charge(2)			_				(.41)	
Basic (loss) basic earnings per share	\$ (.07)	\$.	10	\$ (.52)	\$.66	\$.71	\$ 1.18	\$.55
Diluted (loss) earnings before extraordinary charge	\$ (.07)	\$.	10	\$ (.52)	\$.66	\$.71	\$ 1.51	\$.45
Extraordinary charge(2)			_				(.39)	
Diluted (loss) earnings per share	\$ (.07)	\$.	10	\$ (.52)	\$.66	\$.71	\$ 1.12	\$.45

		hree M end Marc	led		_		Yea	ar end	ed	Decei	nb	er 31,		
	20	002	2	2001 2		2001		2000		1999		1998		997
	(Unau	dit	ed)										
Other Data:														
EBITDA(3)	\$	4.3	\$	7.8	\$	19.5	\$	34.5	\$	32.3	\$	44.3	\$	32.6
EBITDA, as a percentage of net sales(3)		8.6%	Ó	14.5%	,)	10.6%	0	17.1%)	17.2%	ò	24.3%	ó	20.3%
Depreciation	\$	2.7	\$	2.8	\$	11.4	\$	10.8	\$	9.9	\$	8.0	\$	7.1
Amortization	\$	0.4	\$	1.1	\$	4.5	\$	4.2	\$	3.8	\$	3.5	\$	3.4
Capital expenditures (including capital leases)	\$	1.9	\$	2.8	\$	9.1	\$	10.5	\$	10.2	\$	15.2	\$	9.6
Ratio of EBITDA to interest expense(3)		1.9x		3.3x		2.1x		3.8x		3.4x		3.7x		2.1x
Ratio of long-term debt (including current portion) to EBITDA(3)(4)		5.9x		3.4x		5.0x		3.0x		3.3x		2.3x		4.1x
Ratio of earnings to fixed charges(5)		_		1.6x		_		2.0x		2.0x		2.7x		1.4x
		Marc	h 3	31,				De	cei	nber 3	31,			
	20	002	2	001	2	2001	2	2000	_1	999	_1	998	_1	997
	(Unau	dit	ed)										
Balance Sheet Data:														
Cash and cash equivalents	\$	2.4	\$	3.2	\$	3.1	\$	4.0	\$	4.0	\$	14.3	\$	4.4
Working capital		9.8		38.6		31.5		36.5		33.5		39.9		28.8
Property plant and equipment, net		66.3		70.1		67.4		70.4		70.2		64.3		52.5
Total assets	2	10.0	2	218.4	2	204.1	2	215.4	2	209.6	2	203.4		173.1
Total long-term debt (including current portion)	1	01.0	1	04.6		97.8	1	103.9	1	105.4	1	102.5		132.1
Shareholders' equity		65.5		72.0		66.4		71.7		66.5		64.4		(2.2)

- (1) Reflects primarily a work force reduction at our domestic facilities for approximately 160 salaried and production personnel.
- (2) Reflects premium paid on a partial redemption of old notes and a write-off of deferred financing costs in conjunction with our initial public offering, net of \$2.3 million in income taxes.
- (3) We define "EBITDA" as income from operations plus depreciation and amortization. We present EBITDA because it is:
 - a widely accepted financial indicator of a company's ability to incur and service debt, and
 - the basis on which our compliance with financial covenants contained in the old indenture, new indenture, old credit facility and new credit facility is principally determined.

However, EBITDA does not purport to represent cash provided by operating activities as reflected in our consolidated statements of cash flow, is not a measure of financial performance under accounting principles generally accepted in the United States and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with accounting principles generally accepted in the United States. Also, our measure of EBITDA may not be comparable to similar measures reported by other companies. See "Management's Discussion and Analysis of Financial Condition and Results of Operations."

- (4) We determine the ratio of long-term debt to EBITDA:
 - for the years 2001, 2000, 1999, 1998 and 1997 by dividing long-term debt, including current portion, at December 31 for each of these years by EBITDA for the same years, and
 - for the first quarter of 2002 and 2001, by dividing long-term debt, including current portion, at the end of each of these quarters by the product of four times EBITDA for the same quarters.
- (5) We determine the ratio of earnings to fixed charges by dividing:
 - the sum of earnings before extraordinary charge, interest expense, amortization of deferred financing costs, taxes and a portion of rent expense representative of interest, by
 - the sum of interest expense, amortization of deferred financing costs and a portion of rent expense representative of interest.

For the three month period ended March 31, 2002 and the year ended December 31, 2001, our earnings were insufficient to cover fixed charges. The additional earnings required to cover fixed charges would have been \$1.2 million for the three month period ended March 31, 2002, and \$6.2 million for the year ended December 31, 2001.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read this discussion in conjunction with the consolidated financial statements, notes and tables included in this prospectus and consent solicitation statement. Management's discussion and analysis may contain forward-looking statements that are provided to assist in the understanding of anticipated future financial performance. However, this performance involves risks and uncertainties that may cause actual results to differ materially from those expressed in the forward-looking statements.

Results of Operations

Through our subsidiaries, we operate primarily in four reportable segments: friction products, precision components, performance automotive and motors. Our results of operations are affected by a variety of factors, including but not limited to, general economic conditions, customer demand for our products, competition, raw material pricing and availability, labor relations with our personnel and political conditions in the countries in which we operate. We sell a wide range of products that have a corresponding range of gross margins. Our consolidated gross margin is affected by product mix, selling prices, material and labor costs as well as our ability to absorb overhead costs resulting from fluctuations in demand for our products.

We experienced a net loss of \$0.6 million in the first quarter of 2002 compared to net income of \$0.9 million in the comparable period of 2001. For the year ended December 31, 2001, we experienced a net loss of \$4.3 million compared to net income of \$5.8 million for the same period in 2000. These decreases were primarily attributable to volume declines in most of the end-markets served by our friction and precision component segments, including the aircraft industry following the events of September 11. In addition, our effective tax rate decreased to a benefit of 50% for the three month period ended March 31, 2002 from a tax expense of 46% for the same period in 2001, and decreased to a benefit of 30% in 2001 from a tax expense of 43% in 2000, primarily due to our losses in 2001.

We expect that 2002 will be a challenging year in most of the markets we serve. We expect continuing softness in the first half of the year with more favorable market conditions developing during the second half of 2002. As the effects of September 11 continue to be felt, we expect the aerospace market, which is served by our friction products segment, to experience a soft operating environment for the full year of 2002. We expect sales in our aerospace market to improve as airline traffic increases throughout the year, but for the entire year 2002 to remain approximately 10% to 20% below 2001 levels. In response to the weak global business environment, and the anticipated delay in recovery of our end-markets until later in 2002, we are continuing to seek additional opportunities to reduce costs across our operating segments. Additionally, we expect to benefit from new product introductions throughout our operating segments and the achievement of operating production levels at our start-up Mexican and Chinese facilities during 2002. As a result of expected improvement in the economic conditions as well as the continued impact of our cost cutting efforts, we expect our income from operations plus depreciation and amortization, or EBITDA, in 2002 to be approximately 20% higher than the EBITDA reported in 2001.

Significant Accounting Policies

Our discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which we have prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to bad debts, inventories, intangible assets, income taxes, financing operations, pensions and contingencies and litigation. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may

differ from these estimates under different assumptions or conditions. Our significant accounting policies include the following:

- Revenue Recognition and Credit Risk. Our revenue recognition policy is to recognize revenues when products are shipped and title has transferred. We maintain an allowance for trade accounts receivable for which collection on specific customer accounts is doubtful. In determining collectibility, our management reviews available customer financial statement information, credit rating reports as well as other external documents and public filings. When we deem it probable that a particular customer account is uncollectible, that balance is included in the reserve calculation. Actual results could differ from our estimates.
- Foreign Currency Translation and Transactions. We translate assets and liabilities of our foreign operations using period-end exchange rates, and we translate revenues and expenses using exchange rates as determined throughout the period. We include gains or losses resulting from translation in a separate component of our shareholder's equity. We translate gains or losses resulting from foreign currency transactions to local currency at the rates of exchange prevailing on the dates of the transactions. We translate accounts receivable or payable in foreign currencies, other than the subsidiary's local currency, at the rates of exchange prevailing at the balance sheet date. We include the effect of the transaction's gain or loss in other income (expense) in our statement of operations.

Three Months Ended March 31, 2002 Compared to Three Months Ended March 31, 2001

Net Sales. Our consolidated net sales for the first quarter of 2002 were \$49.8 million, a decrease of \$4.0 million or 7% from the comparable period in 2001. The decline in net sales was primarily the result of the continuing weakness in the industrial markets we serve.

- Friction Segment. Our net sales in the friction segment during the first quarter of 2002, were \$26.0 million, a decrease of 12% compared to 2001. The major markets served by this segment all experienced weak operating conditions during the quarter when compared to the first quarter of 2001. Net sales to the aerospace market declined 27% during the first quarter of 2002 compared to the same period in 2001, primarily as a result of the events of September 11. We also experienced declines in heavy truck, agriculture, construction and specialty friction as a result of the soft operating conditions in the United States and Europe. We continue to expect that most of the markets served by this segment will remain soft in 2002. Volumes in the aerospace market for all of 2002 are expected to decline approximately 10% to 20% compared to 2001, as a result of the decline in air travel following September 11.
- *Precision Components Segment*. Our net sales in the precision components segment for the first quarter of 2002 were \$17.2 million, a decrease of \$0.6 million, or 3% compared to 2001. The decrease in net sales was primarily attributable to decreased sales to customers in the lawn and garden, truck and business equipment markets, as a result of the continuing softness in the general industrial segments of the domestic economy.
- *Performance Automotive Segment.* Net sales in our performance automotive segment during the first quarter of 2002 were \$3.9 million, a decrease of 7% compared to net sales of \$4.2 million in 2001. The decrease in net sales was primarily attributable to the decline in purchases as a result of reduced inventory commitments by race teams primarily in the NASCAR and CART racing series, our primary customer base.
- *Motor Segment*. Net sales in our motor segment during the first quarter of 2002 were \$2.7 million, an increase of \$0.5 million, or 23% from the same period in 2001. All of the sales growth in the motor segment came from our new rotor manufacturing facility in Monterrey, Mexico. Net sales from our Alton, Illinois facility were down slightly during the first quarter of 2002.

Gross Profit. Our gross profit decreased \$3.0 million to \$10.8 million during the first quarter of 2002, a 22% decrease compared to gross profit of \$13.8 million in the comparable period of 2001. The gross profit margin decreased to 22% of net sales in the first quarter of 2002 from 26% of net sales in the comparable

period in 2001. Each of our segments, with the exception of the performance automotive segment, experienced decreased margins primarily as a result of lower sales volumes and changes in product mix, especially as a result of the reduction in sales to the aerospace market during the quarter.

- Friction Segment. Our friction segment reported gross profit of \$6.0 million or 23% of net sales in the first quarter of 2002 compared to \$7.8 million or 26% of net sales in the first quarter of 2001. The decline in our gross profit margin was the result of lower sales volumes, product mix and our inability to absorb all of the fixed costs of our manufacturing facilities. We also continued to support our start-up facility in China during the first quarter of 2002. Although the facility is shipping product, it experienced negative operating margins during the quarter as it was unable to absorb all of the costs incurred to bring the facility into production status.
- *Precision Components Segment*. Our gross profit in the precision components segment during the first quarter of 2002 was \$3.1 million or 18% of net sales in the first quarter of 2002 compared to \$4.4 million or 25% of net sales in 2001. The decline in this segment's margins was primarily the result of volume declines in the end markets served by this segment and our inability to completely absorb all of the fixed manufacturing costs associated with this segment.
- *Performance Automotive Segment*. Our performance automotive segment reported gross profit of \$1.4 million or 36% of net sales in the first quarter of 2002 compared to \$1.4 million or 33% of net sales in 2001. The increase in gross profit margin was primarily the result of manufacturing efficiencies and cost reductions implemented by the segment.
- *Motor Segment*. Our motor segment reported a gross margin of \$0.2 million or 7% of net sales during the first quarter of 2002 compared to \$0.2 million or 9% of net sales in 2001. The decline in gross margin was primarily the result of our continued support of our start-up rotor manufacturing facility in Mexico. Additionally, as a result of continuing softness in the domestic motor business in the first quarter of 2002, our domestic margin declined in the first quarter of 2002 as we were unable to absorb all of our fixed manufacturing costs.

Selling, Technical and Administrative Expenses. Our selling, technical and administrative ("ST&A") expenses increased \$0.4 million, or 5%, to \$9.2 million in the first quarter of 2002 from \$8.8 million in the comparable period of 2001. The increase in ST&A expenses is primarily attributable to legal expenses related to litigation involving a former employee in our performance automotive segment and personnel costs associated with our long-term sales and growth initiatives. The litigation was settled in the fourth quarter of 2001. Additionally, during the first quarter of 2001, we benefited from income received as a result of the termination of insurance policies.

Amortization of Intangibles. Amortization of intangibles decreased by \$0.8 million during the first quarter of 2002 as a result of our implementation of FAS 142 on January 1, 2002. Upon adoption of FAS 142, we stopped amortizing existing goodwill.

Income from Operations. Income from operations decreased \$2.7 million or 69% to \$1.2 million in the first quarter of 2002 from \$3.9 million in 2001. Income from operations as a percentage of net sales decreased to 2% in 2002 from 7% in 2001. The decline was primarily the result of the sales volume declines due to the economic slowdown that continued to impact our markets.

As a result of the items discussed above, results from operations at our segments were as follows:

- The friction segment's income from operations decreased \$2.1 million or 72% to \$0.8 million in the first quarter of 2002 from \$2.9 million in the comparable period in 2001.
- Income from operations in the precision components segment was \$0.1 million in the first quarter of 2002, a decrease of \$1.0 million or 91% compared to \$1.1 million in the comparable period in 2001.

- Income from operations at the performance automotive segment was \$0.8 million in the first quarter of 2002, an increase of \$0.4 million or 100% compared to \$0.4 million in the comparable period in 2001
- The loss from operations in the motor segment increased to \$0.5 million in the first quarter of 2002 from \$0.4 million in the comparable period in 2001.

Interest Expense. Interest expense decreased \$0.1 million, or 4%, to \$2.3 million in the first quarter of 2002 from \$2.4 million in 2001. The decrease is primarily attributable to lower borrowing costs partially offset by our increased borrowing levels during the quarter.

Other (Expense) Income. Other expense was \$0.2 million in the first quarter of 2002. The expense in the first quarter of 2002 consisted primarily of fees we paid to effect the amendment of the old credit facility, partially offset by income recorded from a mark to market adjustment from our swap agreement.

Income Taxes. We recorded a credit for income taxes in the first quarter of 2002 as a result of losses incurred during the quarter.

Net (Loss) Income. As a result of the factors noted above, we reported a net loss of \$0.6 million in the first quarter of 2002, compared to net income of \$0.8 million in 2001.

Year Ended December 31, 2001 Compared to Year Ended December 31, 2000

Net Sales. Our consolidated net sales for 2001 were \$184.4 million, a decrease of \$17.9 million or 9% from the same period in 2000. The decline in net sales, primarily a result of the prolonged weakness in the markets we serve, resulted in a difficult operating environment in most of our reporting segments. The terrorist attacks on September 11, 2001, in particular, had a significant negative impact on our aircraft friction business.

- Friction Segment. Net sales in the friction segment were \$104.1 million in 2001, a decrease of 10% compared to 2000. The major markets served by this segment all experienced weak operating conditions in 2001. We experienced declines in heavy truck, agriculture, construction and specialty friction for the full year 2001 as a result of the soft operating conditions in the United States and Europe. Net sales in the aerospace market showed a decline for the year, most notably in the fourth quarter of 2001, as a result of the events of September 11. Although we expect most of the markets served by this division to remain soft in 2002, we expect the aerospace market will experience volume declines of approximately 10 to 20% compared to 2001, as a result of the decline in air travel.
- *Precision Components Segment.* Net sales in the precision components segment were \$58.3 million, a decrease of 19% compared to 2000. The decrease was primarily attributable to continuing softness in the general industrial segments of the domestic economy. We experienced sales weakness in nearly all of the markets served by this segment, including heavy truck, lawn and garden, pump and motor, appliance and office equipment. While net sales in the segment were down as a result of the general softness of economic operating environment, we feel the sales declines were further exacerbated by negative inventory realignments by our customers in the last half of 2001.
- *Performance Automotive Segment.* Net sales in our performance automotive segment were \$13.0 million, an increase of 132% compared to net sales of \$5.6 million in 2000. The increase in revenues was primarily attributable to the acquisition of our Tex Racing subsidiary in November 2000. Additionally, net sales in this segment benefited from the continued popularity of racing, particularly in the NASCAR and CART racing series, both served by us.
- *Motor Segment*. Net sales in our motor segment were \$9.0 million, an increase of 7% from the same period in 2000. The sales growth in the motor segment came from our new rotor manufacturing facility in Monterrey, Mexico, which began shipments in 2001. This facility is expected to service the growing motor manufacturing base in that region. Net sales from our Alton, Illinois facility were flat in 2001 as a result of the soft economic conditions experienced in the United States.

Gross Profit. Gross profit decreased \$14.9 million to \$40.0 million during 2001, a 27% decrease compared to gross profit of \$54.9 million in 2000. The gross profit margin decreased to 22% of net sales in 2001 from 27% of net sales in the comparable period in 2000. Each of our segments experienced decreased margins primarily as a result of the deteriorating economic conditions experienced in 2001.

- Friction Segment. Our friction segment reported gross profit of \$24.9 million or 24% of net sales in 2001 compared to \$30.9 million or 27% of net sales in 2000. The decline in our gross profit margin was the result of lower sales volumes, product mix and our inability to absorb all of the fixed costs of our manufacturing facilities as a result of the deteriorated economic conditions experienced in 2001, especially the impact of the reduction in sales to the aircraft market in the fourth quarter as a result of the events of September 11. We also continued to support our start-up facility in China during 2001. Although the facility began shipments in 2001, it operated at negative margins for the entire year.
- *Precision Components Segment.* Gross profit in the precision components segment was \$11.5 million or 20% of net sales in 2001 compared to \$19.4 million or 27% of net sales in 2000. The sharp decline in this segment's margins was primarily the result of the severe economic downturn and the resulting volume declines and our inability to cover all of the unabsorbed fixed charges generated by the segment. We also provided operating support to our start-up metal injection molding company, Net Shape, which was acquired in December 2000. We anticipate that start-up costs will continue into 2002, although at reduced levels from 2001.
- *Performance Automotive Segment.* Our performance automotive segment reported gross profit of \$3.9 million or 30% of net sales in 2001 compared to \$2.8 million or 50% of net sales in 2000. The decline in gross profit was primarily the result of manufacturing inefficiencies and inventory realignments at our performance clutch manufacturing facility.
- *Motor Segment*. We reported a gross margin loss in the motor segment for 2001. The loss was \$0.3 million compared to a gross profit of \$1.8 million in 2000. The negative gross margin was primarily the result of our continued support of our start-up rotor manufacturing facility in Mexico during 2001. We expect to continue supporting this facility in 2002. However, as the facility moves to full production, this support is expected to decline in the latter half of 2002. Additionally, as a result of softness in the domestic motor business in 2001, our domestic margin declined in 2001, since we were unable to absorb all of the fixed costs.

Selling, Technical and Administrative Expenses. Selling, technical and administrative ("ST&A") expenses decreased \$0.5 million, or 2%, to \$30.8 million in 2001 from \$31.3 million during 2000. As a percentage of net sales, ST&A increased to 17% in 2001 from 15% in 2000. The increase in ST&A expenses as a percentage of net sales resulted primarily from sales volume reductions, continuing start-up expenditures incurred at our Mexican rotor manufacturing and Chinese friction material facilities, personnel costs associated with our long-term sales and growth initiatives and charges to settle litigation in our friction segment. We spent \$3.9 million, or 2% of our net sales on product research and development compared to \$3.5 million in 2000.

Restructuring Costs. In June 2001, we announced a restructuring program to adjust our near-term business plan to reflect the current economic slowdown. This restructuring initiative included a workforce reduction at our domestic facilities and other charges. As a result of the restructuring initiative, we recorded an expense of \$1.1 million in 2001. The restructuring program included a reduction of approximately 160 employees, including salary and production personnel, primarily at our domestic locations.

Income from Operations. Income from operations decreased \$15.9 million or 82% to \$3.6 million in 2001 from \$19.5 million in 2000. Income from operations as a percentage of net sales decreased to 2% in 2001 from 10% in 2000. The decline was primarily the result of the sales volume declines due to the economic slowdown affecting our markets, continuing support of our start-up operations, charges to settle litigation in our performance automotive segment, increased depreciation expense and the restructuring charge we took in the second quarter of 2001.

As a result of the items discussed above, results from operations at our segments were as follows:

- the friction segment's income from operations decreased \$5.1 million or 44% to \$6.4 million in 2001 from \$11.5 million in 2000,
- income from operations at the precision components segment was \$0.3 million in 2001, a decrease of \$8.1 million or 96% compared to \$8.4 million in 2000,
- the performance automotive segment reported income from operations of \$0.3 million, a decrease of \$0.6 million in 2001 compared to 2000, and
- the loss from operations in the motor segment increased to \$3.4 million in 2001 from \$1.3 million in 2000.

Other (Expense) Income. Other expense was \$0.5 million in 2001, the same as reported in 2000. The expense in 2001 primarily reflected the fair value of our interest rate swap agreement and foreign currency transaction losses we incurred primarily through our Italian facility. Additional information regarding our interest rate swap agreement is contained in "Note B — Significant Accounting Policies" in the accompanying consolidated financial statements on page F-10 of this prospectus and consent solicitation statement.

Interest Expense. Interest expense increased \$0.5 million, or 6%, to \$9.5 million in 2001 from \$9.0 million in 2000. The increase is primarily attributable to increased borrowings by us during the year partially offset by lower interest rates.

Income Taxes. The provision for income taxes decreased \$6.2 million to a benefit of \$1.8 million in 2001 from a tax expense of \$4.4 million in 2000 primarily because of the losses incurred in 2001. Our effective tax benefit for the year ended is 30% compared to a tax provision of 43% in 2000. The primary factors affecting our effective tax rate in 2001 are nondeductible goodwill amortization and required state and local tax provisions. An analysis of changes in income taxes and our effective tax rate is contained in "Note J — Income Taxes" in the accompanying consolidated financial statements on page F-17 of this prospectus and consent solicitation statement.

Net (Loss) Income. As a result of the factors noted above, we reported a net loss of \$4.3 million in 2001, compared to net income of \$5.8 million in 2000.

Year Ended December 31, 2000 Compared to Year Ended December 31, 1999

Net Sales. Consolidated net sales for 2000 were \$202.3 million, an increase of \$14.7 million or 8% over 1999. The increase in net sales came primarily from our precision components and performance automotive segments. The net sales increase was attributable to the acquisition of our Allegheny subsidiary in March 1999, our Quarter Master subsidiary in November 1999 and our Tex Racing subsidiary in November 2000. Net sales in 2000 from these acquisitions represented \$9.4 million, or 64%, of the total net sales increase reported during 2000. Net sales in the friction segment were \$116.3 million in 2000, a decrease of 0.1% compared to 1999. Net sales increases in the construction and specialty markets served by the friction segment were offset by declines in the truck, non-performance automotive and agriculture markets, and to a lesser extent, the aerospace market. In our precision components segment, net sales increased to \$72.0 million, or 18%, from 1999. The increase was the result of the acquisition of Allegheny and strength in the fluid power, appliance and lawn and garden markets that we serve. This increase was offset by the continued reduction in volumes from a customer that moved its production offshore.

Gross Profit. Gross profit increased \$6.2 million to \$54.9 million during 2000, a 13% increase compared to gross profit of \$48.8 million in 1999. The gross profit margin increased to 27% in 2000 from 26% in the comparable period in 1999. The increase in margins was led by the friction segment, primarily as a result of product mix benefits and cost reduction programs initiated in 1999. In the precision components segment, while we benefited from volume increases from the acquisition of our Allegheny subsidiary, the softness in the agriculture and heavy truck markets served by this segment, the loss of a customer and changes in the product-mix caused a reduction in margins achieved during 1999. Gross profit margins in our

performance automotive segment increased 10% in 2000 as compared to 1999, while the gross profit margin in our motor segment declined in 2000 primarily as a result of the startup costs associated with our Mexican facility.

Selling, Technical and Administrative Expenses. ST&A expenses increased \$4.9 million, or 19%, from \$26.4 million during 1999 to \$31.3 million in 2000. As a percentage of net sales, ST&A increased to 16% in 2000 from 14% in 1999. The increase in ST&A expenses as a percentage of net sales, resulted primarily from expenditures incurred by our entry into Mexico and China, personnel costs associated with our growth initiatives and increased depreciation expenses. We spent \$3.5 million, or 2% of our net sales on product research and development compared to \$3.2 million in 1999.

Income from Operations. Income from operations increased \$0.9 million, or 5%, from \$18.6 million in 1999 to \$19.5 million in 2000. Income from operations as a percentage of net sales decreased to 10% in 2000 from 10% in 1999.

Other (Expense) Income. Other expense was \$0.5 million in 2000, an increase of \$0.9 million, from income of \$0.4 million reported in 1999. The expense reported in 2000 was primarily the result of foreign currency transaction losses that we incurred at our Italian facility. In addition, we reported income in 1999 as the result of the receipt of a contingent receivable.

Interest Expense. Interest expense decreased \$0.4 million, or 4%, to \$9.0 million in 2000 from \$9.4 million in 1999. The decrease is attributable to lower debt levels during 2000 compared with 1999.

Income Taxes. The provision for income taxes increased \$0.7 million to \$4.4 million in 2000 from \$3.7 million in 1999 primarily because of the increase in our effective tax rate during 2000 as a result of higher tax rates at our foreign operations. In 1999, we benefited from state investment and job creation tax credits. The increase in the state and local effective tax rate and the impact of foreign taxes is outlined in "Note J — Income Taxes" in the accompanying consolidated financial statements starting on page F-17 of this prospectus and consent solicitation statement, on the lines captioned "State and local tax, net of federal tax benefit" and "Adjustment to worldwide tax accrual and other, net."

Net Income. As a result of the factors noted above, net income was \$5.8 million in 2000, a decrease of 8%, compared to net income of \$6.3 million reported in 1999.

Liquidity and Capital Resources

Our primary financing requirements are (1) for capital expenditures for maintenance, replacement and acquisitions of equipment, expansion of capacity, productivity improvements and product development, (2) for funding our day-to-day working capital requirements and (3) to pay interest on, and to repay principal of, our debt. Our primary source of funds for conducting business activities and servicing our debt has been cash generated from operations and borrowings under our old credit facility.

The old notes, with an outstanding principal balance of \$65.0 million at March 31, 2002, bear interest at 10.25% per annum and mature December 1, 2003. The old notes are general unsecured senior obligations and are fully and unconditionally guaranteed, on a joint and several basis, by all of our domestic wholly-owned subsidiaries. We have the option to redeem the old notes in whole or in part during the twelve months beginning December 1, 2001 at 102.563%, and beginning December 1, 2002 at 100.0% together with any interest accrued and unpaid to the redemption date. Upon a change of control as defined in the old indenture, each holder of the old notes will have the right to require us to repurchase all or any part of that holder's old notes at a purchase price equal to 101% of the aggregate principal amount of the old notes, plus accrued and unpaid interest to the date of purchase.

The old indenture permits us and our subsidiaries to incur additional debt without limitation, so long as we meet a cash flow coverage ratio at the time of incurrence. As of March 31, 2002, we did not meet the prescribed ratio. Our failure to meet the ratio does not constitute a default under the old indenture. Rather, the old indenture continues to permit some other types of debt, subject to limitations. Our old credit facility, which is secured by liens on all of our assets and the assets of our subsidiaries, is permitted. We do not

believe that our operations will be materially impacted by the limitation on debt arising under the old indenture

The old indenture prohibits the payment of cash dividends on our Class A Common Stock. The old indenture also contains other covenants limiting our ability and the ability of our subsidiaries to, among other things, make other kinds of restricted payments, make some kinds of investments, permit liens, incur dividend and other payment restrictions affecting our subsidiaries, enter into consolidation, merger, conveyance, lease or transfer transactions, make asset sales, enter into transactions with affiliates or engage in unrelated lines of business. These covenants are subject to exceptions and qualifications. The old indenture considers non-compliance with the limitations to be events of default. In addition to non-payment of interest and principal amounts, the old indenture also considers default with respect to other debt in excess of \$5.0 million to be an event of default. In the event of a default, the principal and interest could be accelerated upon written notice by 25% or more of the holders of the old notes. As of March 31, 2002, we were in compliance with these covenants.

In addition, we have available the old credit facility which may be used for general corporate purposes. At March 31, 2002, the old credit facility was comprised of a \$25.0 million revolving credit component and a \$16.3 million amortizing term loan subject to a borrowing base formula. The term loan has quarterly maturities of \$1.25 million and the facility has a maturity date of March 31, 2003. As of March 31, 2002, we had \$13.1 million outstanding under the revolving credit component of the facility. The old credit facility is collateralized by a security interest in our accounts receivable, inventory, equipment and real estate and other assets, and we have pledged the stock of all of our U.S. subsidiaries and the stock of some of our foreign subsidiaries as collateral. Restrictive terms of the old credit facility require that we maintain specified financial ratios including leverage, interest coverage and fixed charge ratios, and comply with other loan covenants. We were in compliance with the financial covenants as of March 31, 2002. As of March 31, 2002, we had approximately \$8.2 million available for future borrowing as determined by the borrowing base under the old credit facility.

Net cash provided by operating activities was \$14.5 million in 2001 compared to \$21.6 million in 2000. Cash provided by operations in 2001 was primarily attributable to non-cash charges of depreciation and amortization partially offset by the loss experienced in 2001. Cash provided by operations in 2000 was the result of net income and the non-cash charges of depreciation and amortization. Net working capital was \$31.5 million at year-end 2001 compared to \$36.5 million at year-end 2000.

Net cash used in operating activities was \$1.9 million for the quarterly period ended March 31, 2002. Net cash provided by operating activities was \$1.2 million for the comparable quarterly period of 2001. The decline in cash from operations was caused primarily by the net loss for the period, reduction in amortization expense and an increase in working capital assets during the quarter. The increase in working capital was caused primarily by the increase in accounts receivables due to our increased net sales during the quarter compared to the fourth quarter of 2001 as well as customary extended payment term programs to the lawn and garden markets in our precision component segment. Customer payments under these programs are due during the second quarter.

Net cash used in investing activities was \$9.1 million in 2001 and \$16.9 million in 2000. The cash used in investing activities in 2001 consisted of purchases of property, plant and equipment. The cash used in investing activities in 2000 consisted primarily of \$6.5 million for the acquisitions of our Tex Racing and Hawk MIM subsidiaries and \$10.5 million for the purchase of property, plant and equipment. Net cash used in investing activities was \$1.9 million for the quarterly period ended March 31, 2002 and \$2.8 million for the comparable period in 2001. The cash used in investing activities during the quarterly periods ended March 31, 2002 and 2001, was for the purchase of property, plant and equipment. To achieve long-term growth prospects and enhance product quality, we planned for our capital spending program in 2002 to be approximately \$12.0 million.

Net cash used in financing activities was \$6.2 million in 2001 and \$4.6 million in 2000, both primarily for the payment of long-term debt. Net cash provided by financing activities was \$3.2 million for the quarterly period ended March 31, 2002 and \$0.9 million for the comparable period in 2001 as a result of our

increased borrowings. The increase in borrowings during the three month period ended March 31, 2002 was used primarily to support the increase in our working capital assets.

We believe that if we are able to improve our working capital, through the active management of our working capital assets, along with our available cash, anticipated cash flow from operations, and availability under the old credit facility, we will be able to fund our operations for at least the next twelve months. However, should we not achieve our working capital initiatives, our operations and our capital expenditures program may be adversely impacted, including the ability to borrow under the old credit facility. We believe we are taking appropriate steps, including the reduction of operating expenses which are not critical to meeting our business objectives, to ensure that we have adequate sources of cash to meet our working capital needs for at least the next twelve months. In addition, we are pursuing strategic financing alternatives, including modification, extension or refinancing of the old notes and old credit facility, both of which are due during 2003. We cannot assure you that we will be able to modify, extend or refinance the old notes and old credit facility. We also cannot assure you that if we are able to modify, extend or refinance the old notes and old credit facility that the new terms will be as favorable to us as our existing facilities. If we are unable to modify, extend or refinance the old notes and old credit facility, then our financial position will be materially and adversely affected.

Net Operating Loss Carrybacks

As of December 31, 2001, we had U.S. net operating loss carrybacks of approximately \$2.4 million available for refund.

Effects of Recently Issued Accounting Pronouncements

Effective January 1, 2001, we adopted Statement of Financial Accounting Standards (SFAS) No. 133, "Accounting for Derivative Instruments and Hedging Activities" (FAS 133), as amended by SFAS No. 138 (FAS 138). As amended, FAS 133 requires that an entity recognize all derivatives as either assets or liabilities in the statement of financial position, measure those instruments at fair value and recognize changes in the fair value of derivatives in earnings in the period of change unless the derivative qualifies as an effective hedge that offsets some types of exposure.

We periodically enter into interest-rate swap agreements to moderate exposure to interest-rate changes and to lower the overall cost of borrowing. During the quarter ended March 31, 2001, we entered into an interest-rate swap agreement that effectively converts a portion of our floating rate debt to a fixed rate of 5.34% on \$10.0 million notional amount on our variable-rate debt maturing in 2003. Although this financial instrument did not meet the hedge accounting criteria of FAS 133, it continues to be effective in achieving the risk management objectives for which it was intended. The change in the fair value of the interest rate swap did not have a material impact on our financial position or results of operations for the first quarter of 2002

In June 2001, the Financial Accounting Standards Board issued SFAS No. 141, "Business Combinations" (FAS 141), and SFAS No. 142, "Goodwill and Other Intangible Assets" (FAS 142). These statements eliminate the pooling of interest method of accounting for business combinations after June 30, 2001 and eliminate the amortization of goodwill for all fiscal years beginning after December 15, 2001. We adopted FAS 141 and FAS 142 with respect to new goodwill as of July 1, 2001 and adopted FAS 142 with respect to existing goodwill as of January 1, 2002, the first day of our 2002 fiscal year. The adoption of FAS 141 has not impacted our financial condition or results of operations. In accordance with FAS 142, we amortized existing goodwill through fiscal 2001.

We are currently in the process of performing the first step of the prescribed transitional goodwill impairment test with respect to existing goodwill. The first step of the transitional goodwill impairment test involves a comparison of the fair value of a reporting unit, as defined under FAS 142, with its carrying amount. If the carrying amount exceeds the fair value of any reporting unit, we will perform the second step of the transitional goodwill impairment test, which will be used to measure the amount of any impairment loss. We have not yet determined what the effect of these tests will be on our financial position or results of

operations. As of March 31, 2002, we have recognized no impairment of goodwill. We are required to complete step 1 of the transitional goodwill impairment test by June 30, 2002, and step 2 of the test by December 31, 2002. We cannot assure you that future goodwill impairments will not occur. The unaudited pro forma effect of applying the non-amortization provisions of FAS 142 to the quarter ended March 31, 2001 and the years ended December 31, 2001, 2000 and 1999 would have been to decrease amortization expense by approximately \$0.8 million, \$3.2 million, \$2.8 million and \$2.1 million, respectively, resulting in unaudited pro forma basic and diluted earnings (loss) per share of \$0.15, \$(0.30), \$0.86 and \$0.86, respectively.

In June 2001, the Financial Accounting Standards Board issued SFAS No. 143, "Accounting for Asset Retirement Obligations" (FAS 143). FAS 143 addresses financial accounting and reporting for obligations associated with the retirement of tangible long-lived assets and the associated asset retirement costs. It applies to legal obligations associated with the retirement of long-lived assets that result from the acquisition, construction, development and/or normal operation of a long-lived asset, except for some particular obligations of lessees. FAS 143 is effective for financial statements issued for fiscal years beginning after June 15, 2002. FAS 143 will have no effect on our consolidated financial condition or results of operations.

In October 2001, the Financial Accounting Standards Board issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" (FAS 144). FAS 144 supersedes FASB No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of" (FAS 121), but it retains the fundamental provisions of that statement related to the recognition and measurement of the impairment of long-lived assets to be "held and used." In addition, FAS 144 provides more guidance on estimating cash flows when performing a recoverability test, requires that a long-lived asset (group) to be disposed of other than by sale (e.g., abandoned) be classified as "held and used" until it is disposed of, and establishes more restrictive criteria to classify an asset (group) as "held for sale." FAS 144 is effective for fiscal years beginning after December 15, 2001. The adoption of FAS 144 did not have a material impact on our consolidated financial condition or results of operations.

Quantitative and Qualitative Disclosures about Market Risk

Market Risk Disclosures. The following discussion about our market risk disclosures involves forward-looking statements. Actual results could differ materially from those projected in the forward-looking statements. We are exposed to market risk related to changes in interest rates and foreign currency exchange rates. We do not use derivative financial instruments for speculative or trading purposes.

Interest Rate Sensitivity. At March 31, 2002, approximately 33.0%, or \$32.2 million, of our debt obligations bore interest at a variable rate. To mitigate the risk associated with interest rate fluctuations, in January 2001, we entered into an interest rate swap essentially converting \$10.0 million notional amount of our variable rate debt to a fixed base rate of 5.34%. The notional amount is used to calculate the contractual cash flow to be exchanged and does not represent exposure to credit loss. Although this financial instrument did not meet the hedge accounting criteria of SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities," it continues to be effective in achieving the risk management objectives for which it was intended. The carrying value and the fair value of the interest rate swap at March 31, 2002 was \$0.3 million (liability). The change in the fair value is reflected in the Consolidated Statement of Operations in other (expense) income, net. Our primary interest rate risk exposure results from floating rate debt. If interest rates were to increase by 100 basis points (1.0%) from March 31, 2002 rates, and assuming no changes in debt from March 31, 2002 levels, then our additional annual interest expense would be approximately \$0.2 million. We do not engage in activities using complex or highly leveraged instruments.

Commitments. The following table presents our total contractual obligations and other commercial commitments as of March 31, 2002 (in millions):

	Total	April 1, 2002– December 31, 2002	2003	2004– 2006	2007 and beyond
Contractual Cash Obligations					
Revolver	\$ 13.1	_	\$13.1		_
Term Loan	16.3	\$3.8	12.5		_
Old notes	65.0	_	65.0		
Capital lease and other obligations	6.6	1.4	2.6	\$2.1	\$0.5
Operating leases	6.4	1.4	1.6	3.0	0.4
Total Contractual Cash Obligations	\$107.4	\$6.6	\$94.8	\$5.1	\$0.9
Other Commercial Commitments Stand-by letters of credit	\$ 1.3	\$1.3	_	_	_

Foreign Currency Exchange Risk. The majority of our receipts and expenditures are contracted in U.S. dollars, and we do not consider the market risk exposure relating to currency exchange to be material at this time. We currently do not hedge our foreign currency exposure and, therefore, have not entered into any forward foreign exchange contracts to hedge foreign currency transactions. We have operations outside the United States with foreign-currency denominated assets and liabilities, primarily denominated in Italian lira, Canadian dollars, Mexican pesos and Chinese renminbi. Because we have foreign-currency denominated assets and liabilities, financial exposure may result, primarily from the timing of transactions and the movement of exchange rates. Our unhedged foreign currency balance sheet exposures as of March 31, 2002 are not expected to result in a significant impact on our earnings or cash flows.

MANAGEMENT

Directors and Executive Officers

Name	Age	Position
Ronald E. Weinberg	60	Chairman of the Board, Chief Executive Officer and Director
Norman C. Harbert	68	Senior Chairman of the Board, Founder and Director
Jeffrey H. Berlin	40	President, Chief Operating Officer and Director
Thomas A. Gilbride	48	Vice President – Finance and Treasurer
Joseph J. Levanduski	40	Vice President – Controller
Steven J. Campbell	48	President — Friction Products Co. and S.K. Wellman Corp.
W. Michael Corkran	48	President — Hawk Precision Components Group, Inc.
Paul R. Bishop	59	Director
Jack Kemp	66	Director
Byron S. Krantz	66	Secretary and Director
Dan T. Moore, III	62	Director

Ronald E. Weinberg is our Chairman of the Board and Chief Executive Officer and has served as a Director since March 1989. He has also served us in various other capacities since 1989. Mr. Weinberg has over 28 years of experience in the ownership and management of operating companies, including businesses in manufacturing, publishing and retailing. Since December 1997, Mr. Weinberg has been the Chairman of the Board of New Channel Communications Corp., a company specializing in direct marketing and the providing of computer software solutions. Mr. Weinberg was the Chairman and Chief Executive Officer of SunMedia Corp., a communications company that published weekly suburban newspapers, until it was sold in 1997, and the Chairman of New West Eyeworks, Inc., a chain of retail optical stores, which was sold in 1998.

Norman C. Harbert is our Senior Chairman of the Board and Founder and has served as a Director since March 1989. He has also served us in various other capacities since 1989. Mr. Harbert has over 40 years of manufacturing experience. From 1987 to 1988, Mr. Harbert was Chairman, President and CEO of Maverick Tube Corporation, an oil drilling equipment manufacturer, and from 1981 to 1986, he served as President and CEO of Ajax Magnethermic Corporation, an international manufacturer of induction heating and melting equipment. Before that time, Mr. Harbert served at Reliance Electric Company for 22 years where, in 1980, his last position was as General Manager, Rotating Products Group, with primary responsibility for a division with annual sales of \$250 million. Mr. Harbert is a director of Second Bancorp Inc., a bank holding company. Mr. Harbert was a former director of Caliber Systems, Inc., a transportation company formerly known as Roadway Services, Inc., until October 1997.

Jeffrey H. Berlin has served as a Director since May 2001 and as our President and Chief Operating Officer since May 1999. From May 1997 to May 1999, he served as our Executive Vice President. Between July 1994 and May 1997, Mr. Berlin served as our Vice President of Marketing and Corporate Development. From August 1991 to July 1994, Mr. Berlin served as our Director of Corporate Development.

Thomas A. Gilbride has served as our Vice President – Finance since January 1993. Between March 1989 and January 1993, Mr. Gilbride was employed by us in various financial and administrative functions.

Joseph J. Levanduski has served as our Controller since April 1997 and was named Vice President – Controller in May 2000. From August 1995 until April 1997, he was Controller of our subsidiary Friction Products, and from March 1996 until April 1997, he was also Group Controller coordinating the accounting functions of both Friction Products Company and another subsidiary of ours, S.K. Wellman Corp.

Steven J. Campbell has served as President of Friction Products Co. and S.K. Wellman Corp., two of our wholly owned subsidiaries, since 2001. From 1999 through 2000, Mr. Campbell served as Chief Financial Officer and Project Director for a division of Cooper Industries in connection with its expansion into Mexico. From 1997 through 1999, Mr. Campbell was the President of Unarco LLC, a national manufacturer of retail products, and from 1995 through 1997, he served as Vice President – International Operations for Cooper Industries' Hand Tool Division.

W. Michael Corkran has been President of Hawk Precision Components Group, Inc., one of our wholly owned subsidiaries, since 2001. Before becoming President of Hawk Precision Components Group, Inc., Mr. Corkran served as President of the North American and Asian Pacific divisions of Reltec Corporation, a telecommunications equipment manufacturer, from 1999 through 2000. From 1977 until he joined Reltec Corporation, Mr. Corkran was employed by Reliance Electric.

Paul R. Bishop has served as a Director since May 1993. Mr. Bishop has served as Chairman, President and Chief Executive Officer of H-P Products, Inc., a manufacturer of central vacuum systems and fabricated tubing and fittings, since 1977.

Jack Kemp has served as a Director since September 1999. Mr. Kemp is a co-director of Empower America, a public policy and advocacy organization he co-founded in 1993. In 1996, Mr. Kemp received the Republican Party's nomination for Vice President of the United States. Before co-founding Empower America, Mr. Kemp served for four years as Secretary of Housing and Urban Development. Before his appointment to the Cabinet, Mr. Kemp represented New York for eighteen years in the United States House of Representatives. Mr. Kemp is also a director of Oracle Corporation, a computer software company, Speedway Motorsports, Inc., a promoter, marketer and sponsor of motor sports activities, Sideware Systems Inc., a producer of internet training video, SVT Inc., a provider of IT related professional services to businesses and Velocity Express Corporation, a large same-day delivery company.

Byron S. Krantz has been the Secretary and a Director since March 1989. Mr. Krantz has been a partner in the law firm of Kohrman Jackson & Krantz P.L.L. since its formation in 1984.

Dan T. Moore, III has served as a Director since March 1989. Mr. Moore has been the founder and owner of Dan T. Moore Company, Inc. since 1969 and the principal owner and Chairman of Flow Polymers since 1985, Soundwich, Inc. since 1988, Advanced Ceramics Corporation since 1993, and Team Wendy, LLC

since 1998, all of which are manufacturing companies. He has been a director of Invacare Corporation, a manufacturer of health care equipment, since 1979, and a director of USEC Inc., a global energy company, since 1998. Mr. Moore is also a Trustee of the Cleveland Clinic Foundation and Chairman of Cleveland Clinic Home Care.

CERTAIN TRANSACTIONS

Mr. Harbert holds \$250,000 in principal amount of old notes and Mr. Berlin holds \$25,000 in principal amount of old notes, totalling approximately 0.4% of the outstanding aggregate principal amount of old notes. Although these affiliates intend to tender their notes and consent to the proposed amendments, the old indenture prohibits us from counting their tenders and consents toward the satisfaction of the condition to the exchange offer that we receive valid and unrevoked tenders and consents representing at least a majority in aggregate outstanding principal amount of old notes.

Mr. Weinberg and Mr. Harbert each issued notes to Hawk to repay debt incurred by them with respect to the acquisition of Helsel, Inc. in June 1995. The original principal amount of each note was \$802,000. The notes are due and payable on July 1, 2005 and bear interest at the prime rate. In May 1998, each of Messrs. Weinberg and Harbert repaid \$302,000 of their notes. The remaining outstanding principal amount of each note is \$500,000.

We are a party to an expense sharing arrangement under which we share the expenses of our Cleveland, Ohio headquarters with Weinberg Capital Corporation, of which Mr. Weinberg is President and sole shareholder. Pursuant to a formula based on full-time equivalent personnel, we pay approximately 98.3% of the overhead costs of the headquarters, including rent, utilities and copying, telephone and other expenses. The aggregate amounts of our payments for the shared headquarters were \$98,299 in the first quarter of 2002, \$417,518 in 2001, \$354,365 in 2000 and \$366,000 in 1999.

Byron S. Krantz, a director and our Secretary, is a partner of the law firm of Kohrman Jackson & Krantz P.L.L., which provides legal services to us. We paid legal fees to Kohrman Jackson & Krantz P.L.L. of \$179,796 in the first quarter of 2002, \$384,287 in 2001, \$462,704 in 2000 and \$452,000 in 1999 for legal services in connection with a variety of legal matters.

We believe that the terms of the transactions and the agreements described above are on terms at least as favorable as those which we could otherwise have obtained from unrelated parties. On-going and future transactions with related parties will be on terms at least as favorable as those that we would be able to obtain from unrelated parties, for bona fide business purposes, and approved by a majority of the disinterested and non-employee directors.

DESCRIPTION OF OTHER INDEBTEDNESS

New Credit Facility

Concurrently with the closing of the exchange offer, we expect to enter into the new credit facility, which we expect to be an amount that will permit us to pay off the old credit facility in full as well as provide for our future working capital needs. We expect the new credit facility to have a maximum commitment of \$\\$ million and a maturity date of . In addition, we expect the interest rates on the new credit facility to range from to basis points over the Eurodollar rate, or alternatively, to basis points over the prime rate. We also expect the new credit facility to be collateralized by a security interest in our domestic subsidiaries' accounts receivable, inventory, equipment, real estate and other assets. Restrictive terms of the new credit facility will require that we maintain specified financial ratios, including leverage, interest coverage and fixed charge ratios, and comply with other loan covenants.

The exchange offer and consent solicitation are subject to our ability to replace the old credit facility with the new credit facility on terms satisfactory to us in our sole discretion. See "The Exchange Offer—

Conditions to the Exchange Offer." We cannot assure you that we will be able to refinance the old credit facility by the expiration date of the exchange offer or any extension of that date.

Old Credit Facility

At March 31, 2002, the old credit facility was comprised of a \$25.0 million revolving credit component and a \$16.3 million amortizing term loan subject to a borrowing base formula. The term loan has quarterly maturities of \$1.25 million and the facility has a maturity date of March 31, 2003. As of March 31, 2002, we had \$13.1 million outstanding under the revolving credit component of the facility and \$1.3 million outstanding under standby letters of credit. The interest rates on the old credit facility range from 250 to 450 basis points over the Eurodollar rate, or alternatively, 125 to 325 basis points over the prime rate based on specified quarterly performance criteria. The old credit facility is collateralized by a security interest in our domestic subsidiaries' accounts receivable, inventory, equipment and real estate and other assets, and we have pledged the stock of all of our U.S. subsidiaries and the stock of some of our foreign subsidiaries as collateral. Restrictive terms of the old credit facility require that we maintain specified financial ratios, including leverage, interest coverage and fixed charge ratios, and comply with other loan covenants. As of March 31, 2002, we were in compliance with the financial covenants set forth in the old credit facility, and we had approximately \$8.2 million available for future borrowings under the old credit facility.

Old Notes

In November 1996, we issued \$100.0 million in principal amount of old notes, of which \$65.0 million in principal amount was outstanding at March 31, 2002. The old notes bear interest at 10.25% per annum and mature December 31, 2003. The old notes are general unsecured senior obligations and are fully and unconditionally guaranteed, on a joint and several basis, by all of our domestic wholly-owned subsidiaries. We have the option to redeem the old notes in whole or in part during the twelve months beginning December 1, 2001 at 102.563%, and beginning December 1, 2002 at 100.0% together with any interest accrued and unpaid to the redemption date. Upon a change of control as defined in the old indenture, each holder of the old notes will have the right to require us to repurchase all or any part of that holder's old notes at a purchase price equal to 101% of the aggregate principal amount of the old notes, plus accrued and unpaid interest to the date of purchase.

The old indenture permits us and our subsidiaries to incur additional debt without limitation, so long as we meet a cash flow coverage ratio at the time of occurrence. As of March 31, 2002, we did not meet the prescribed ratio. Our failure to meet the ratio does not constitute a default under the old indenture. Rather, the old indenture continues to permit some other types of debt, subject to limitations. The old credit facility, which is secured by liens on all of our assets and the assets of our the subsidiaries, is permitted. We do not believe our operations will be materially impacted by the limitations on debt arising under the old indenture.

The old indenture prohibits the payment of cash dividends on our common stock. The old indenture also contains other covenants limiting our and our subsidiaries' ability to, among other things, make some other kinds of restricted payments, make some kinds of investments, permit liens, incur dividend and other payment restrictions affecting subsidiaries, enter into consolidation, merger, conveyance, lease or transfer transactions, make asset sales, enter into transactions with affiliates or engage in unrelated lines of business. These covenants are subject to exceptions and qualifications. The old indenture considers non-compliance with these limitations to be events of default. In addition to non-payment of interest and principal amounts, the old indenture also considers a default with respect to other debt in excess of \$5.0 million to be an event of default. In the event of a default, the principal and interest could be accelerated upon written notice by 25% or more of the holders of the old notes. As of March 31, 2002, we were in compliance with these covenants.

In March 1997, we offered to exchange the initial unregistered series of old notes for a new series of old notes registered with the SEC and listed on the New York Stock Exchange.

Other Debt

In addition to the old credit facility and old notes, as of March 31, 2002, we had approximately \$6.6 million in outstanding debt under various loans and capital leases.

SUMMARY COMPARISON OF THE KEY DIFFERENCES BETWEEN THE OLD INDENTURE, AS AMENDED, AND THE NEW INDENTURE

The following table summarizes the key differences between the provisions of the new indenture as compared to the old indenture after giving effect to the proposed amendments. The definitions of some of the terms used in the following summary are set forth below under "Description of the New Notes — Definitions." In this description, the word "Hawk" means only Hawk Corporation and not any of its subsidiaries. You should read the old indenture and the new indenture to determine the full extent of the differences. This summary is qualified in its entirety by reference to both indentures.

Old Indenture, as amended

Interest Rate: 10¹/₄% per annum Maturity Date: December 1, 2003

Guarantees: None

Ranking: The old notes will be unsecured and will be:

- effectively subordinated to the new notes and all of Hawk's and the guarantors' secured debt, including any amounts we borrow under the new credit facility,
- effectively subordinated to all debt, including trade payables, of all of Hawk's direct or indirect subsidiaries,
- equal to all of Hawk's unsecured, unguaranteed and unsubordinated debt, and
- senior to all subordinated debt, if any, of Hawk.

Optional Redemption: We have the option to redeem the old notes in whole or in part during the twelve months beginning December 1, 2001 at 102.563%, and beginning December 1, 2002 and thereafter at 100.000% together with any interest accrued and unpaid to the redemption date.

Restrictive Covenants: None

New Indenture

Interest Rate: % per annum Maturity Date: December 1, 2

Guarantees: The new notes will be fully and unconditionally guaranteed, on a joint and several basis, by our domestic wholly-owned subsidiaries. Ranking: The new notes will be unsecured and will

Ranking: The new notes will be unsecured and will be:

- effectively senior to the old notes, any other debt of Hawk that is not guaranteed by its subsidiaries and all subordinated debt, if any, of Hawk and the guarantors,
- equal to all of Hawk's and the guarantors' unsecured and unsubordinated debt,
- effectively subordinated to all of Hawk's and the guarantors' secured debt, including any amounts we borrow under the new credit facility, and
- effectively subordinated to all debt, including trade payables, of Hawk's direct or indirect subsidiaries that are not guarantors of the new notes

Optional Redemption: We will not be able to redeem the new notes before , 2 . Thereafter, we will have the option to redeem the new notes in whole or in part at % of their principal amount together with any interest accrued and unpaid to the redemption date.

Restrictive Covenants: The new indenture will contain all of the covenants relating to the old notes before giving effect to the amendments of the old indenture and on substantially the same terms. See "Description of the New Notes — Covenants" for more details.

Old Indenture, as amended

Defaults: The following will no longer constitute events of default:

- $\bullet\,$ a default by us or the guarantors on other debt,
- final judgments or orders not paid or discharged,
- bankruptcy, insolvency or liquidation, and
- a default under any Guarantee.

New Indenture

Defaults: The new indenture will contain all of the events of default that were in the old indenture before giving effect to the proposed amendments, and on the same terms. See "Description of the New Notes — Events of Default" for more details.

See "The Consent Solicitation — The Proposed Amendments" and Annex A to this prospectus and consent solicitation statement for the reprinted text of the provisions of the old indenture that will be deleted by the proposed amendments.

DESCRIPTION OF THE NEW NOTES

In this section, the words "company," "we," "us" and "our" refer to Hawk and not to any of its subsidiaries. In addition, we use defined terms in this section to simplify the description of the new notes. The definitions can be found under "— Definitions" beginning on page 84. Other terms are defined in the new indenture.

We will issue the new notes under an indenture by and between Hawk, the guarantors and HSBC Bank USA, as trustee, which we refer to as the new indenture in this prospectus and consent solicitation statement. The terms of the new notes include those stated in the new indenture and those made part of the new indenture by reference to the Trust Indenture Act of 1939.

The following description is a summary of selected provisions of the new indenture and the new notes. We have not restated the new indenture in its entirety. We urge you to read the new indenture because it, and not this description, will control your rights as a holder of the new notes. A copy of the new indenture may be obtained as described under "Where You Can Find Additional Information" or from the information agent.

General

The new notes will:

- be general unsecured obligations of the company,
- be unconditionally guaranteed by the guarantors, jointly and severally,
- be effectively senior in right of payment to the old notes, any other Indebtedness of the company that is not guaranteed by its Subsidiaries and any Subordinated Indebtedness of the company and the guarantors,
- rank equal in right of payment with all unsecured and unsubordinated Indebtedness of the company and the guarantors, which totalled \$3.1 million at March 31, 2002,
- be effectively subordinated in right of payment to all secured Indebtedness of the company and the guarantors, which totalled \$32.4 million at March 31, 2002, and would include any amounts we borrow under the new credit facility,
- be effectively subordinated in right of payment to all existing and future Indebtedness of the company's Subsidiaries that are not guarantors, which totalled \$0.5 million at March 31, 2002, and
- be effectively subordinated in right of payment to all trade payables of the company's direct and indirect Subsidiaries that are not guarantors, which totalled \$3.6 million at March 31, 2002.

See "Risks Factors — Risks Relating to the New Notes — Some of our other debt will rank ahead of the new notes."

Principal, Maturity and Interest

The new notes will be limited to \$ million in aggregate principal amount, and we will issue new notes of up to \$65.0 million in the exchange offer. We may, without notice to or the consent of any holder, issue additional notes of this series from time to time. Any additional new notes will form a single series with the new notes issued in the exchange offer. The issuance of additional new notes is subject to the limitations set forth below under "— Covenants — Limitation on Incurrence of Indebtedness."

The new notes will mature on December 1, 2 . Interest on the new notes will accrue at the rate of % per annum and will be payable semi-annually in arrears on June 1 and December 1 in each year, commencing on December 1, 2002. We will make each interest payment to the holders of record of the new notes on the immediately preceding May 15 and November 15. Interest on the new notes will accrue from the date of issuance and from the most recent date thereafter. Interest will be computed on the basis of a 360-day year consisting of twelve 30-day months.

We will pay principal of, premium, if any, and interest on, the new notes at the office or agency of the company maintained for that purpose in the City of New York or, at our option, pay interest by mailing checks to the holders of the new notes at their respective addresses as set forth in the register of holders of new notes. Until we designate otherwise, our office or agency in the City of New York will be the office of the trustee maintained for that purpose. We will issue the new notes in fully registered form, without coupons, and in denominations of \$1,000 and integral multiples of that amount, except that we may, in our sole discretion, elect to issue new notes in denominations of less than \$1,000. We will not assess a service charge for any transfer, exchange or redemption of new notes except for any applicable taxes or other governmental charges.

The Guarantees

The guarantors will jointly and severally guarantee (each, a "Guarantee") our obligations under the new notes and the new indenture. The guarantors are all of our direct or indirect domestic Subsidiaries. If we create or acquire a new domestic subsidiary that is not already a guarantor, then that Subsidiary will become a guarantor under the new notes and the new indenture. We are not restricted from selling or otherwise disposing of any of the guarantors except as provided below in "— Covenants — Limitation on Asset Sales" and "— Covenants — Merger, Consolidation and Sale of Assets."

Each guarantor will irrevocably and unconditionally guarantee, jointly and severally, the punctual payment of all of our obligations under the new notes. Although there can be no assurance that a court would not hold otherwise, each Guarantee will contain provisions intended to prevent the Guarantee from constituting a fraudulent conveyance under applicable law.

Each Guarantee will:

- be a general, unsecured obligation of the guarantor,
- be effectively senior in right of payment to the old notes, any other Indebtedness of the company that is not guaranteed by its subsidiaries and any Subordinated Indebtedness of the company and the guarantor.
- rank equal in right of payment with all existing and future unsecured and unsubordinated Indebtedness of the guarantor and the company,
- be effectively subordinated in right of payment to all secured Indebtedness of the guarantor and the company, including any amounts we borrow under the new credit facility, and
- be effectively subordinated in right of payment to all existing and future Indebtedness, including trade payables, of the company's Subsidiaries that are not guarantors of the new notes.

Pursuant to the Guarantees, if we default in payment of any amount owing in respect of any new notes, each guarantor will be obligated to duly and punctually pay the same. Pursuant to the terms of the new indenture, each of the guarantors has agreed that its obligations under its Guarantee will be unconditional, irrespective of the validity, regularity or enforceability of the new notes or the new indenture, the absence of any action to enforce the same or any other circumstance that might otherwise constitute a legal or equitable discharge or defense of a guarantor.

Concurrently with the creation or acquisition by the company of any Subsidiary (other than a Foreign Subsidiary and other than an Unrestricted Subsidiary), the company, the Subsidiary and the trustee will execute and deliver a supplement to the new indenture providing that the Subsidiary will be a guarantor thereunder.

If no Default exists or would exist under the new indenture, concurrently with any sale or disposition (by merger or otherwise) of any guarantor (other than a transaction subject to the provisions described under "— Covenants — Merger, Consolidation and Sale of Assets") by the company or a Restricted Subsidiary to any person that is not an Affiliate of the company or any of the Restricted Subsidiaries that is in compliance

with the terms of the new indenture, then the guarantor and each Subsidiary of the guarantor that is also a guarantor will automatically and unconditionally be released from all obligations under its Guarantee.

The obligations of each guarantor will be limited to the maximum amount as will, after giving effect to all other contingent and fixed liabilities of the guarantor, result in the obligations of the guarantor under the Guarantee not constituting a fraudulent conveyance or fraudulent transfer under federal or state law.

Redemption

Mandatory Redemption. We will not be required to make any mandatory sinking fund payments with respect to the new notes before their maturity.

Optional Redemption. We may at our option redeem all or any part of the new notes at any time on or after December 1, 2 , at the redemption prices (expressed as percentages of the principal amount of the new notes) set forth below, plus in each case accrued and unpaid interest, if any, to the date of redemption, if redeemed during the twelve-month period beginning on December 1 of the years indicated below:

Year Percentage

If we elect to redeem less than all of the new notes at any time, then the trustee will select the new notes to be redeemed in compliance with the requirements of the principal national securities exchange, if any, on which the new notes are listed or, if the new notes are not listed on a securities exchange, on a pro rata basis or by lot or any other method the trustee deems fair and appropriate, except that partially redeemed new notes will only be redeemed in integral multiples of \$1,000. We will mail notices of any redemption by first class mail at least 30 but not more than 60 days before the redemption date to each holder of new notes to be redeemed at the holder's registered address. If any new note is to be redeemed in part only, then the notice of redemption that relates to the new note will state the portion of the principal amount of the new note to be redeemed, and the trustee will authenticate and mail to the holder of the original new note a replacement new note in principal amount equal to the unredeemed portion of the original new note promptly after the original new note has been canceled. On and after the redemption date, interest will cease to accrue on the new notes called for redemption.

Change of Control

In the event of a Change of Control, each holder of new notes will have the right, unless we have given a notice of redemption, subject to the terms and conditions of the new indenture, to require us to offer to purchase all or any portion of the holder's new notes at a purchase price in cash equal to 101% of the aggregate principal amount of the new notes plus accrued and unpaid interest, if any, to the date of purchase (a "Change of Control Offer").

We expect the new credit facility to restrict our ability to purchase new notes pursuant to a Change of Control Offer. Any additional credit agreements or other agreements relating to unsubordinated debt to which we become a party may contain similar restrictions. Moreover, we expect the new credit facility to contain a "change of control" provision that is similar to the provision in the new indenture relating to a Change of Control, in which event the occurrence of a "change of control" would constitute a default under the new credit facility.

If we are unable to obtain the requisite consents or repay all debt that restricts our ability to repurchase the new notes upon the occurrence of a Change of Control, then we may not be able to commence a Change of Control Offer to purchase the new notes within 30 days of the occurrence of the Change of Control. This failure would constitute an Event of Default under the new indenture. Any failure to commence a Change of Control Offer is also expected to constitute an event of default under the new credit facility that would permit the lenders thereunder to accelerate all of our debt under the new credit facility. If a Change of Control were to occur, we cannot assure you that the company would have sufficient assets to first satisfy its obligations

under the new credit facility or other agreements relating to debt, if accelerated, and then to purchase all of the new notes that might be delivered by holders seeking to accept a Change of Control Offer.

On or before the 30th day following the occurrence of any Change of Control, we will mail to each holder of new notes, at the holder's registered address, a notice stating:

- that a Change of Control has occurred and that the holder has the right to require us to purchase all or a portion (equal to \$1,000 or an integral multiple of that amount) of the holder's new notes at a purchase price in cash equal to 101% of the aggregate principal amount of the new notes, plus accrued and unpaid interest, if any, to the date of purchase (the "Change of Control Purchase Date"), which must be a business day, specified in the notice, that is not earlier than 30 days or later than 60 days from the date the notice is mailed,
- the amount of accrued and unpaid interest, if any, as of the Change of Control Purchase Date,
- that any new note not tendered will continue to accrue interest,
- that, unless we default in the payment of the purchase price for the new notes payable pursuant to the Change of Control Offer, any new notes accepted for payment pursuant to the Change of Control Offer will cease to accrue interest on the Change of Control Purchase Date,
- the procedures, consistent with the Indenture, to be followed by a holder of new notes to accept a Change of Control Offer or to withdraw the acceptance, and
- any other information required by the new indenture and applicable laws and regulations.

On the Change of Control Purchase Date, we will:

- accept for payment all new notes tendered pursuant to the Change of Control Offer,
- deposit with the Paying Agent the aggregate purchase price of all new notes accepted for payment, and
- deliver or cause to be delivered to the trustee all new notes tendered pursuant to the Change of Control Offer.

The Paying Agent will promptly mail to each holder of new notes accepted for payment an amount equal to the purchase price for the new notes plus accrued and unpaid interest, if any, due under the new notes, and the trustee will promptly authenticate and mail to each holder of new notes accepted for payment in part a replacement new note equal in principal amount to any unpurchased portion of the new notes, and any new note rejected for payment in whole or in part will be promptly returned to the holder of the new note. On and after a Change of Control Purchase Date, interest will cease to accrue on the new notes accepted for payment, unless we default in the payment of the purchase price. We will publicly announce the results of the Change of Control Offer on or as soon as practicable after the Change of Control Purchase Date.

We will comply with the applicable tender offer rules, including the requirements of Section 14(e) and Rule 14e-1 under the Exchange Act of 1934, and all other applicable securities laws and regulations in connection with any Change of Control Offer and will be deemed not to be in violation of any of the covenants under the new indenture to the extent that compliance is in conflict with those covenants.

Covenants

Limitation on Incurrence of Indebtedness. The new indenture provides that we will not, and will not permit any Restricted Subsidiary to, create, incur, assume or directly or indirectly guarantee or in any other manner become directly or indirectly liable for ("incur") any Indebtedness (including Acquired Debt), except that we may incur Indebtedness (including Acquired Debt) if, at the time of, and immediately after giving pro forma effect to, the incurrence of Indebtedness, the Consolidated Cash Flow Coverage Ratio of the company for the most recently ended four fiscal quarters would be at least 2.25 to 1.0.

The foregoing limitations do not apply to the incurrence of any of the following (collectively, "Permitted Indebtedness"), each of which will be given independent effect:

- Indebtedness arising under the new credit facility in an aggregate principal amount not to exceed at any time outstanding, the sum of:
 - the greater of (1) \$ million, less any permanent reduction in revolving commitments under the new credit facility that result from the application of Excess Proceeds from an Asset Sale as provided below in "— Covenants Limitation on Asset Sales," or (2) the sum, at that time, of (a) 85% of the consolidated book value of net accounts receivable of the company and the Restricted Subsidiaries and (b) 60% of the consolidated book value of inventory of the company and the Restricted Subsidiaries, plus
 - the aggregate principal amount of term loans outstanding on the Issue Date.
- Indebtedness represented by the new notes and the Guarantees,
- other Indebtedness that is outstanding on the Issue Date ("Existing Indebtedness"),
- Indebtedness owed by any Restricted Subsidiary to the company or to another Restricted Subsidiary, or owed by us to any Restricted Subsidiary that, if owed to a Restricted Subsidiary that is not a guarantor, is unsecured and subordinated in right of payment to the payment and performance of our obligations under the new indenture and the new notes, except that this Indebtedness must at all times be held by a Person that is either the company or a Restricted Subsidiary, and except that upon either (1) the transfer or other disposition of any of the Indebtedness to a Person other than the company or another Restricted Subsidiary or (2) the sale, lease, transfer or other disposition of shares of Capital Stock (including by consolidation or merger) of that Restricted Subsidiary to a Person other than the company or another Restricted Subsidiary, the incurrence of the Indebtedness will be deemed to be an incurrence of Indebtedness that is not permitted by this exception,
- Indebtedness arising with respect to Interest Rate Agreement Obligations and Currency Agreement
 Obligations we incur for the purpose of fixing or hedging interest rate risk or currency risk with
 respect to any fixed or floating rate Indebtedness that the terms of the new indenture permit to be
 outstanding or with respect to any receivable or liability the payment of which is determined by
 reference to a foreign currency,
- Indebtedness represented by performance, completion, guarantee, surety and similar bonds provided by the company or any Restricted Subsidiary in the ordinary course of business consistent with past practice,
- Any Indebtedness incurred in connection with or given in exchange for the renewal, extension, substitution, refunding, defeasance, refinancing or replacement (a "refinancing") of any Indebtedness of the company or a Restricted Subsidiary incurred as permitted under the first paragraph of the description of this covenant or any Indebtedness described in this exception or the first exception of this paragraph ("Refinancing Indebtedness"), except that:
 - the principal amount of the Refinancing Indebtedness may not exceed the principal amount (or
 accreted amount, if less) of the Indebtedness so refinanced (plus the premiums and reasonable
 expenses to be paid in connection with the Refinancing Indebtedness, that, with respect to
 those premiums, may not exceed the stated amount of any premium or other payment required
 to be paid in connection with a refinancing pursuant to the terms of the Indebtedness being
 refinanced),
 - the maturity of the Refinancing Indebtedness may not be shorter than the maturity of the Indebtedness being refinanced,
 - the Refinancing Indebtedness must have a Weighted Average Life to Maturity equal to or greater than the Weighted Average Life to Maturity of the Indebtedness being refinanced, and

- the Refinancing Indebtedness must be at least as subordinated in right of payment to the new notes as the Indebtedness being refinanced,
- Indebtedness of the company or any Restricted Subsidiary (1) representing Capitalized Lease Obligations and any refinancings of Capitalized Lease Obligations or (2) in respect of Purchase Money Obligations for property acquired, constructed or improved in the ordinary course of business and any refinancings of Capitalized Lease Obligations, that taken together do not exceed \$5.0 million in the aggregate at any time outstanding,
- Commodity agreements entered into in the ordinary course of business to protect against fluctuations in the prices of raw materials and not for speculative purposes,
- Indebtedness constituting reimbursement obligations with respect to letters of credit issued in the ordinary course of business, including, without limitation, letters of credit in respect of workers' compensation claims or self-insurance, or other Indebtedness with respect to reimbursement type obligations regarding workers' compensation claims or self-insurance,
- guarantees by the company of Indebtedness of a Restricted Subsidiary that the new indenture permits to be incurred and guarantees by the guarantors of Indebtedness of the company or a Restricted Subsidiary that the new indenture otherwise permits to be incurred,
- Indebtedness arising from agreements providing for indemnification, adjustment of purchase price or similar obligations, in each case incurred or assumed in connection with the disposition of any business, assets or a Subsidiary, other than guarantees of Indebtedness incurred by any Person acquiring all or any portion of the business, assets or a Subsidiary for the purpose of financing the acquisition, so long as the maximum liability in respect of the Indebtedness does not exceed the gross proceeds actually received by the company and its Restricted Subsidiaries in connection with the disposition, and
- Indebtedness in addition to that described in the exceptions in this paragraph, and any renewals, extensions, substitutions, refinancings or replacements of that Indebtedness, so long as the aggregate principal amount of all the Indebtedness incurred pursuant to this exception does not exceed \$5.0 million at any one time outstanding.

For purposes of determining any particular amount of Indebtedness under this covenant, if an item of Indebtedness meets the criteria of more than one of the categories of Permitted Indebtedness described in the foregoing exceptions or is entitled to be incurred pursuant to the Consolidated Cash Flow Coverage Ratio provision, then we will classify or later reclassify that item of Indebtedness in any manner that complies with this covenant. In addition, guarantees, Liens or obligations with respect to letters of credit supporting Indebtedness otherwise included in the determination of the particular amount will not be included for purposes of determining any particular amount of Indebtedness under this covenant.

Accrual of interest, accretion or amortization of original issue discount, the payment of interest on Indebtedness in the form of additional Indebtedness with the same terms and the payment of dividends on Disqualified Stock in the form of additional shares of the same class of Disqualified Stock will not be deemed to be an incurrence of additional Indebtedness or an issuance of Disqualified Stock for purposes of this coverant

Indebtedness of any Person that is outstanding at the time that Person becomes a Restricted Subsidiary or is merged with or into or consolidated with us or a Restricted Subsidiary will be deemed to have been incurred at the time the Person becomes a Restricted Subsidiary or is merged with or into or consolidated with us or a Restricted Subsidiary, and Indebtedness that is assumed at the time of the acquisition of any asset will be deemed to have been incurred at the time of the acquisition.

Limitation on Restricted Payments. The new indenture provides that we will not, and will not permit any Restricted Subsidiary to, directly or indirectly, make any Restricted Payment, unless at the time of and

immediately after giving effect to the proposed Restricted Payment (with the value of that Restricted Payment, if other than cash, to be determined reasonably and in good faith by our Board of Directors):

- no Default or Event of Default has occurred and is continuing or would occur as a consequence of making the Restricted Payment,
- we could incur at least \$1.00 of additional Indebtedness (other than Permitted Indebtedness) pursuant to the covenant described under "— Covenants — Limitation on Incurrence of Indebtedness," and
- the aggregate amount of all Restricted Payments made after the Issue Date does not exceed the sum of:
 - an amount equal to 50% of our aggregate cumulative Consolidated Net Income accrued on a cumulative basis during the period (treated as one accounting period) beginning on November 27, 1996 and ending on the date of the proposed Restricted Payment (or, if our aggregate cumulative Consolidated Net Income for that period is a deficit, minus 100% of the deficit), plus
 - the aggregate amount of all net cash proceeds we received after November 27, 1996 from the issuance and sale (other than to a Restricted Subsidiary) of, or equity contribution with respect to, Capital Stock (other than Disqualified Stock) and the principal amount of Indebtedness of the company or any Restricted Subsidiary that has been converted into or exchanged for Capital Stock (other than Disqualified Stock), in each case to the extent that the proceeds are not used to (1) redeem, repurchase, retire or otherwise acquire Capital Stock or any Indebtedness of the company or any Restricted Subsidiary pursuant to the second bullet point of the next paragraph on Permitted Payments or (2) make any Restricted Investment pursuant to the fourth bullet point of the next paragraph on Permitted Payments, plus
 - the amount of the net reduction in Investments in Unrestricted Subsidiaries resulting from (1) the payment of dividends or the repayment in cash of the principal of loans or the cash return on any Investment, in each case to the extent received by us or any Restricted Subsidiary from Unrestricted Subsidiaries, (2) the release or extinguishment of any guarantee of Indebtedness of any Unrestricted Subsidiary and (3) the redesignation of Unrestricted Subsidiaries as Restricted Subsidiaries (valued as provided in the definition of "Investment"), and the aggregate amount of the net reduction in Investments does not exceed in the case of any Unrestricted Subsidiary the amount of Restricted Investments previously made by us or any Restricted Subsidiary in the Unrestricted Subsidiary, which amount was included in the calculation of the amount of Restricted Payments; plus
 - to the extent that any Restricted Investment we made after November 27, 1996 is sold for cash or otherwise liquidated or repaid for cash, the amount of cash proceeds received with respect to that Restricted Investment, net of taxes and the cost of disposition, which amount may not exceed the amount of Restricted Investments made after November 27, 1996.

The foregoing provisions will not prohibit us from taking any of the following actions (collectively, "Permitted Payments"):

- paying any dividend within 60 days after the date of its declaration, if at the declaration date the new indenture would have permitted the payment (which payment will be deemed to have been paid on the date of declaration for purposes of the third bullet point of the preceding paragraph),
- redeeming, repurchasing, retiring or otherwise acquiring any Capital Stock or any Subordinated Indebtedness of the company or any Restricted Subsidiary in exchange for, or out of the proceeds of, the substantially concurrent sale (other than to a Restricted Subsidiary) of, or equity contribution with respect to, our Capital Stock (other than any Disqualified Stock),

- purchasing or defeasing Subordinated Indebtedness to the extent made with permitted Refinancing Indebtedness or required upon a change of control or asset sale by the agreement or instrument pursuant to which the Subordinated Indebtedness was issued, but only if we (1) in the case of a Change of Control, have complied with our obligations under the provisions described under "— Change of Control" or (2) in the case of an Asset Sale, have applied the Net Proceeds from the Asset Sale in accordance with the provisions described under "— Covenants Limitation on Asset Sales,"
- making any Restricted Investment with the proceeds of the substantially concurrent sale (other than to a Restricted Subsidiary) of, or equity contribution with respect to, our Capital Stock (other than any Disqualified Stock),
- making loans or advances to our or our Subsidiaries' employees to the extent they exist on the Issue Date or are made after the Issue Date to pay reasonable relocation expenses,
- making Restricted Investments to the extent the sum of the aggregate amount of Restricted Investments made pursuant to this exception after the Issue Date does not exceed \$5.0 million at any time, and
- paying any dividend on, or redeeming any or all of, our redeemable 9.8% cumulative preferred stock, par value, \$0.01 per share, Series D, outstanding on the Issue Date,

so long as, in the case of the third and sixth bullet points above, no Default or Event of Default has occurred and is continuing.

For purposes of the third bullet point of the first paragraph of the description of this covenant, the Permitted Payments referred to in the first and sixth bullet points describing Permitted Payments above will be included in the aggregate amount of Restricted Payments made since the Issue Date, and any other Permitted Payments described above will be excluded.

Limitation on Asset Sales. The new indenture provides that we will not, and will not permit any Restricted Subsidiary to, make any Asset Sale unless (1) we or the Restricted Subsidiary, as the case may be, receive consideration at the time of the Asset Sale at least equal to the fair market value (as evidenced by a resolution of our Board of Directors set forth in an Officers' Certificate we deliver to the trustee) of the assets or other property sold or disposed of in the Asset Sale and (2) at least 75% of the consideration consists of either cash or Cash Equivalents.

For purposes of this covenant, "cash" will include (1) the amount of any Indebtedness (other than any Indebtedness that is by its terms subordinated to the new notes) of the company or the Restricted Subsidiary as shown on the most recent balance sheet of the company or the Restricted Subsidiary or in the notes thereto that is assumed by the transferee of any of those assets or other property in the Asset Sale (and excluding any liabilities that are incurred in connection with or in anticipation of the Asset Sale), but only to the extent that the assumption is effected so that there is no further recourse to the company or any of the Restricted Subsidiaries with respect to those liabilities and (2) any notes, obligations or securities received by the company or the Restricted Subsidiary from the transferee that we or the Restricted Subsidiary converts into cash within 60 days (to the extent of the cash received).

Within 365 days after any Asset Sale, we may elect to apply the Net Proceeds from the Asset Sale to (1) permanently reduce any of our Senior Debt or (2) make an investment in, or acquire assets and properties that will be used in, the business of the company and the Restricted Subsidiaries existing on the Issue Date or in businesses reasonably related thereto. Pending the final application of any of the Net Proceeds, the company or any Restricted Subsidiary may temporarily reduce the Indebtedness under the new credit facility or temporarily invest the Net Proceeds in any Investments described under the first three bullet points of the description of Permitted Investments above. Any Net Proceeds from an Asset Sale not applied or invested as provided in the first sentence of this paragraph within 365 days of the Asset Sale will be deemed to constitute "Excess Proceeds."

Each date that the aggregate amount of Excess Proceeds in respect of which an Asset Sale Offer (as defined below) has not been made exceeds \$5.0 million will be deemed an "Asset Sale Offer Trigger Date." As soon as practicable, but in no event later than 20 business days after each Asset Sale Offer Trigger Date, we will commence an offer (an "Asset Sale Offer") to purchase the maximum principal amount of new notes that may be purchased out of the Excess Proceeds. We will purchase any new notes to be purchased pursuant to an Asset Sale Offer pro rata based on the aggregate principal amount of new notes outstanding, and will purchase all new notes at an offer price in cash in an amount equal to 100% of their principal amount, plus accrued and unpaid interest, if any, to the date of purchase. To the extent that any Excess Proceeds remain after completion of an Asset Sale Offer, we may use the remaining amount for general corporate purposes otherwise permitted by the new indenture. If we are prohibited under the terms of any agreement governing our outstanding Senior Debt from repurchasing new notes with Excess Proceeds pursuant to an Asset Sale Offer as set forth in the first sentence of this paragraph, then we will promptly use all Excess Proceeds to permanently reduce our outstanding Senior Debt. Upon consummation of any Asset Sale Offer, the amount of Excess Proceeds will be deemed to be reset to zero.

We will mail notice of an Asset Sale Offer not later than the 20th business day after the related Asset Sale Offer Trigger Date to each holder of new notes, at the holder's registered address, stating:

- that an Asset Sale Offer Trigger Date has occurred and that we are offering to purchase the maximum principal amount of new notes that may be purchased out of the Excess Proceeds (to the extent provided in the preceding paragraph), at an offer price in cash in an amount equal to 100% of their principal amount, plus accrued and unpaid interest, if any, to the date of the purchase (the "Asset Sale Offer Purchase Date"), which must be a business day, specified in the notice, that is not earlier than 30 days or later than 60 days from the date the notice is mailed,
- the amount of accrued and unpaid interest, if any, as of the Asset Sale Offer Purchase Date,
- that any new note not tendered will continue to accrue interest,
- that, unless we default in the payment of the purchase price for the new notes payable pursuant to the Asset Sale Offer, any new notes we accept for payment pursuant to the Asset Sale Offer will cease to accrue interest after the Asset Sale Offer Purchase Date,
- the procedures, consistent with the new indenture, that a holder of new notes must follow to accept an Asset Sale Offer or to withdraw its acceptance, and
- any other information required by the new indenture and applicable laws and regulations.

On the Asset Sale Offer Purchase Date, we will:

- accept for payment the maximum principal amount of new notes tendered pursuant to the Asset Sale Offer that we can purchase out of the Excess Proceeds from the Asset Sale that are to be applied to the Asset Sale Offer,
- deposit with the Paying Agent the aggregate purchase price of all new notes accepted for payment,
 and
- deliver to the trustee all new notes tendered pursuant to the Asset Sale Offer.

If we accept less than all new notes tendered pursuant to the Asset Sale Offer for payment for any reason consistent with the new indenture, then the selection of the new notes we will purchase will be in compliance with the requirements of the principal national securities exchange, if any, on which the new notes are then listed or, if the new notes are not so listed, on a pro rata basis or by lot, except that any new notes we accept for payment in part will only be purchased in integral multiples of \$1,000. The Paying Agent will promptly mail to each holder of new notes accepted for payment an amount equal to the purchase price for the new notes plus accrued and unpaid interest, if any, and the trustee will promptly authenticate and mail to the holder of new notes accepted for payment in part a replacement new note equal in principal amount to any unpurchased portion of the new notes, and will promptly return any new note we do reject for payment in whole or in part to the holder of the new note. On and after an Asset Sale Offer Purchase Date, interest will

cease to accrue on the new notes accepted for payment, unless we default in the payment of the purchase price. We will publicly announce the results of the Asset Sale Offer on or as soon as practicable after the Asset Sale Offer Purchase Date.

The foregoing provisions will not apply to any transaction we consummate in compliance with the provisions of the new indenture described under "— Covenants — Merger, Consolidation and Sale of Assets" below

We will comply with the applicable tender offer rules, including the requirements of Section 14(e) and Rule 14e-1 under the Exchange Act, and all other applicable securities laws and regulations in connection with any Asset Sale Offer and we will be deemed not to be in violation of any of the covenants under the new indenture to the extent that compliance is in conflict with those covenants.

Limitation on Liens. The new indenture provides that we will not, and will not permit any Restricted Subsidiary to, directly or indirectly, create, incur, assume or suffer to exist any Lien securing Indebtedness (other than Permitted Liens) on any asset now owned or hereafter acquired, or any income or profits from that asset, or assign or convey any right to receive income from that asset to secure that Indebtedness, except that (1) if the Lien secures Indebtedness that is equal in right of payment with the new notes, then the new notes must be secured on an equal and ratable basis with the obligations so secured until the obligation is no longer secured by a Lien or (2) if the Lien secures Indebtedness that is subordinated to the new notes, then the Lien must be subordinated to a Lien granted to the holders of the new notes in the same collateral as that securing the Lien to the same extent as the subordinated Indebtedness is subordinated to the new notes.

Limitation on Dividends and Other Payment Restrictions Affecting Restricted Subsidiaries. The new indenture provides that we will not, and will not permit any Restricted Subsidiary to, directly or indirectly, create or otherwise cause to become effective any consensual encumbrance or consensual restriction on the ability of any Restricted Subsidiary to:

- pay dividends or make any other distributions to the company or any other Restricted Subsidiary on its Capital Stock or with respect to any other interest or participation in, or measured by, its profits, or pay any Indebtedness owed to the company or any other Restricted Subsidiary,
- make loans or advances to, or issue guarantees for the benefit of, the company or any other Restricted Subsidiary, or transfer any of its properties or assets to the company or any other Restricted Subsidiary, except for any encumbrances or restrictions existing under or by reason of:
 - the new credit facility,
 - applicable law,
 - any instrument governing Indebtedness or Capital Stock of an Acquired Person acquired by the company or any of its Restricted Subsidiaries as in effect at the time of the acquisition (except to the extent the Indebtedness was incurred in connection with or in contemplation of the acquisition), so long as the encumbrance or restriction is not applicable to any Person, or the properties or assets of any Person, other than the Acquired Person,
 - by reason of customary non-assignment, subletting or net worth provisions in leases or other agreements entered into in the ordinary course of business and consistent with past practices,
 - Purchase Money Indebtedness for property acquired in the ordinary course of business that impose restrictions only on the property so acquired,
 - an agreement for the sale or disposition of assets or the Capital Stock of the Restricted Subsidiary, so long as the restriction or encumbrance is only applicable to the Restricted Subsidiary or assets, as applicable, and the sale or disposition otherwise is permitted by the provisions described under "— Covenants Limitation on Asset Sales," and so long as the restriction or encumbrance is effective only for a period from the execution and delivery of the agreement through a termination date not later than 180 days after its execution and delivery,

- Refinancing Indebtedness permitted under the new indenture,
- the new indenture, the new notes and the Guarantees,
- other Indebtedness permitted to be incurred after the Issue Date pursuant to the provisions of the covenant described under "— Covenants Limitation on Incurrence of Indebtedness," so long as the restrictions are ordinary and customary with respect to the type of Indebtedness being incurred,
- encumbrances and restrictions imposed by Liens incurred in accordance with the covenant described in "— Covenants Limitation on Liens,"
- · customary provisions in joint venture agreements and other similar agreements, and
- encumbrances and restrictions imposed by amendments, restatements, renewals, replacements or refinancings of the contracts, instruments or obligations referred to in the foregoing exceptions, so long as the encumbrances and restrictions are, in the good faith judgment of our Board of Directors, no more restrictive, in any material respect, than those contained in the contracts, instruments or obligations immediately before the amendment, restatement, renewal, replacement or refinancing.

Limitation on Transactions with Affiliates. We will not, and will not permit any Restricted Subsidiary to, directly or indirectly, enter into, renew or extend any transaction or series of related transactions (including the sale, purchase, exchange or lease of assets, property or services) with any of our Affiliates unless (1) the transaction or series of transactions is on terms that are no less favorable to the company or the Restricted Subsidiary, as the case may be, than those that could reasonably be obtainable at that time in a comparable transaction in arm's-length dealings with an unrelated third party and (2) we deliver to the trustee:

- with respect to any transaction or series of transactions involving aggregate payments in excess of \$500,000 annually, an Officers' Certificate certifying that the transaction or series of related transactions complies with clause (1) above, and
- with respect to any transaction or series of transactions involving aggregate payments in excess of \$2.0 million annually, an Officers' Certificate certifying that the transaction or series of related transactions has been approved by a majority of the members of our Board of Directors (and approved by a majority of the Independent Directors or, in the event there is only one Independent Director, by the Independent Director), and
- with respect to any transaction or series of transactions involving aggregate payments in excess of \$5.0 million annually, an opinion as to the fairness to the company from a financial point of view issued by an investment banking firm of national standing.

However, this covenant will not apply to:

- employment agreements or compensation or employee benefit arrangements with any officer, director or employee of the company or any of its Restricted Subsidiaries entered into in the ordinary course of business (including customary benefits thereunder and including reimbursement or advancement of out-of-pocket expenses, and director's and officer's liability insurance),
- the expense sharing arrangement between the company and Weinberg Capital Corporation regarding the expenses incurred with respect to our Cleveland, Ohio headquarters,
- any transaction entered into by or among the company or any of its Restricted Subsidiaries with one or more of its Restricted Subsidiaries,
- any transaction permitted under the second paragraph of "— Covenants Limitation on Restricted Payments,"
- transactions permitted by, and complying with, the provisions described under "— Covenants —
 Merger, Consolidation and Sale of Assets," and

• transactions with suppliers or other purchases or sales of goods or services, in each case in the ordinary course of business (including, without limitation, pursuant to joint venture agreements) and otherwise in compliance with the terms of the new indenture which, in the reasonable determination of our Board of Directors, are on terms no less favorable to the company or its Restricted Subsidiaries than those we could reasonably have obtained at that time from an unaffiliated party.

Limitation on Designation of Unrestricted Subsidiaries. The new indenture provides that we will not designate any Subsidiary (other than a newly created Subsidiary in which no Investment has previously been made) as an "Unrestricted Subsidiary" under the new indenture (a "Designation") unless:

- no Default has occurred and is continuing at the time of or after giving effect to the Designation,
- immediately after giving effect to the Designation, we would be able to incur \$1.00 of additional Indebtedness (other than Permitted Indebtedness) under "— Covenants Limitation on Incurrence of Indebtedness," and
- the new indenture would not prohibit us from making an Investment at the time of Designation in an amount (the "Designation Amount") equal to the greater of (1) the book value of the Restricted Subsidiary on that date and (2) the Fair Market Value of the Restricted Subsidiary on that date.

In the event of a Designation, we will be deemed to have made an Investment in the Designation Amount constituting a Restricted Payment under "— Covenants — Limitation on Restricted Payments" for all purposes of the new indenture.

The new indenture will further provide that we will not designate an Unrestricted Subsidiary as a Restricted Subsidiary (a "Redesignation"), unless (1) no Default has occurred and is continuing at the time of and after giving effect to the Redesignation, and (2) all Liens and Indebtedness of the Unrestricted Subsidiary outstanding immediately following the Redesignation are deemed to have been incurred at that time and have been permitted to be incurred for all purposes of the new indenture.

An Unrestricted Subsidiary will be deemed to be redesignated as a Restricted Subsidiary at any time if:

- the company or any other Restricted Subsidiary (1) provides credit support for, or a guarantee of, any Indebtedness of the Unrestricted Subsidiary (including any undertaking, agreement or instrument evidencing that Indebtedness) or (2) is directly or indirectly liable for any Indebtedness of the Unrestricted Subsidiary,
- a default with respect to any Indebtedness of the Unrestricted Subsidiary (including any right that the holders of that Indebtedness may have to take enforcement action against it) would permit (upon notice, lapse of time or both) any holder of any other Indebtedness of the company or any Restricted Subsidiary to declare a default on the other Indebtedness or cause the payment of that Indebtedness to be accelerated or payable before its final scheduled maturity, or
- the Unrestricted Subsidiary incurs Indebtedness pursuant to which the lender has recourse to any of the assets of the company or any Restricted Subsidiary.

All Designations and Redesignations must be evidenced by Board Resolutions delivered to the trustee certifying compliance with the foregoing provisions. Subsidiaries that are not designated by our Board of Directors as Restricted or Unrestricted Subsidiaries will be deemed to be Restricted Subsidiaries. The Designation of a Restricted Subsidiary as an Unrestricted Subsidiary will be deemed a Designation of all of the Subsidiaries of the Unrestricted Subsidiary as Unrestricted Subsidiaries.

Provision of Financial Statements and Information. The new indenture provides that, whether or not we are subject to Section 13(a) or 15(d) of the Exchange Act, we will file with the Commission, so long as any new notes are outstanding, the annual reports, quarterly reports and other periodic reports that we would have been required to file with the Commission pursuant to Section 13(a) or 15(d) if we were so subject, and the documents must be filed with the Commission on or before the respective dates (the "Required Filing Dates") by which we would have been required so to file the documents if we were so subject, unless the Commission will not accept the filings. We will also in any event (1) within 15 days of each Required Filing

Date, file with the trustee, and supply the trustee with copies for delivery to the holders of the new notes, the annual reports, quarterly reports and other periodic reports that we would have been required to file with the Commission pursuant to Section 13(a) or 15(d) of the Exchange Act if we were subject to those Sections and (2) if the Commission will reject the filing of those documents, promptly upon written request and payment of the reasonable cost of duplication and delivery, supply copies of those documents to any prospective holder of the new notes.

Additional Covenants. The new indenture also contains covenants with respect to the following matters:

- payment of principal, premium and interest,
- maintenance of an office or agency in the City of New York,
- maintenance of our corporate existence,
- payment of taxes and other claims,
- maintenance of our properties, and
- maintenance of insurance.

Merger, Consolidation and Sale of Assets

The new indenture provides that we may not, in any single transaction or series of related transactions, consolidate or merge with or into (whether or not we are the Surviving Person), or sell, assign, transfer, lease, convey or otherwise dispose of all or substantially all of our properties or assets (determined on a consolidated basis for the company and its Restricted Subsidiaries) in one or more related transactions to, another Person, and we will not permit any Restricted Subsidiary to enter into that transaction or series of related transactions if the transaction or series of related transactions, in the aggregate, would result in a sale, assignment, transfer, lease, conveyance or other disposition of all or substantially all of the properties and assets of the company and the Restricted Subsidiaries, taken as a whole, to another Person, unless:

- the Surviving Person is a corporation organized or existing under the laws of the United States, any of its states or the District of Columbia,
- the Surviving Person (if other than the company or a guarantor) assumes all the obligations of the company under the new notes and the new indenture pursuant to a supplemental indenture or other written agreement, as the case may be, in a form reasonably satisfactory to the trustee,
- immediately after the transaction, no Default or Event of Default has occurred and is continuing,
- immediately after giving effect to the transaction or series of related transactions, (1) in the case of a transaction involving the company, the Surviving Person has a Consolidated Net Worth equal to or greater than our Consolidated Net Worth immediately before the transaction or series of related transactions or (2) in the case of a transaction involving one of our Restricted Subsidiaries, the Surviving Person has a Consolidated Net Worth equal to or greater than the Consolidated Net Worth of the Restricted Subsidiary immediately before the transaction or series of related transactions, and
- after giving effect to the transaction, it is expected that the Surviving Person would be permitted to incur at least \$1.00 of additional Indebtedness (other than Permitted Indebtedness) pursuant to the covenant described under "— Covenants Limitation on Incurrence of Indebtedness."

Despite the third, fourth and fifth bullet points above, any Restricted Subsidiary that is a guarantor may consolidate with, merge into or transfer all or part of its properties and assets to the company or another Restricted Subsidiary that is a guarantor.

If the company or a guarantor is not the Surviving Person in any transaction (other than a lease) described in and complying with the conditions listed in the preceding paragraph, then the Surviving Person

will succeed to, and be substituted for, and may exercise every right and power of, the company, and the company will be discharged from its obligations under, the new indenture and the new notes.

Events of Default

The new indenture will provide that each of the following constitutes an Event of Default:

- a default for 30 days in the payment when due of interest on any new note,
- a default in the payment when due of principal on any new note, whether upon maturity, acceleration, optional or mandatory redemption, required repurchase or otherwise,
- failure to perform or comply with any covenant, agreement or warranty in the new indenture (other than the defaults specified in the first two bullet points above) which failure continues for 60 days after written notice of the failure has been given to the company by the trustee or to the company and the trustee by the holders of at least 25% in aggregate principal amount of the then outstanding new notes.
- the occurrence of one or more defaults under any agreements, indentures or instruments under which the company or any Restricted Subsidiary then has outstanding Indebtedness in excess of \$5.0 million in the aggregate and, if not already matured at its final maturity in accordance with its terms, the Indebtedness has been accelerated and the acceleration is not rescinded, annulled or cured within 10 days,
- one or more judgments, orders or decrees for the payment of money in excess of \$5.0 million, either individually or in the aggregate, are entered against the company or any Restricted Subsidiary or any of their respective properties and which judgments, orders or decrees are not paid, discharged, bonded or stayed or stayed pending appeal for a period of 60 days after their entry,
- the bankruptcy, insolvency or reorganization of the company or any Restricted Subsidiary, or
- any Guarantee ceases for any reason to be in full force and effect or becomes invalid.

If any Event of Default (other than as specified in the sixth bullet point of the preceding paragraph with respect to the company) occurs and is continuing, then the trustee or the holders of at least 25% in aggregate principal amount of the then outstanding new notes may, and the trustee at the request of those holders must, declare all the new notes to be due and payable immediately by notice in writing to the company, and to the company and the trustee if by the holders, specifying the respective Event of Default and that the notice is a "notice of acceleration," and the new notes will become immediately due and payable. However, if an Event of Default arises from the event specified in that bullet point with respect to the company, then the principal of, premium, if any, and any accrued interest on all outstanding new notes will automatically become immediately due and payable without further action or notice. Holders of the new notes may not enforce the new indenture or the new notes except as provided in the new indenture.

The holders of a majority in aggregate principal amount of the new notes then outstanding, by notice to the trustee, may on behalf of the holders of all of the new notes waive any existing Default or Event of Default and its consequences under the new indenture except (1) a continuing Default or Event of Default in the payment of the principal of, or premium, if any, or interest on, the new notes (which may only be waived with the consent of each holder of new notes affected), or (2) in respect of a covenant or provision which under the new indenture cannot be modified or amended without the consent of the holder of each affected new note outstanding. Subject to limitations, the holders of a majority in principal amount of the then outstanding new notes may direct the trustee in its exercise of any trust or power. The trustee may withhold from holders of the new notes notice of any continuing Default or Event of Default (except a Default or Event of Default relating to the payment of principal, premium or interest) if it determines that withholding notice is in their interest.

We are required to deliver to the trustee annually a statement regarding compliance with the new indenture, and we are required, upon becoming aware of any Default or Event of Default, to deliver to the trustee a statement specifying the Default or Event of Default.

No Personal Liability of Directors, Officers, Employees and Stockholders

The new indenture provides that no recourse for the payment of the principal of, premium, if any, interest on or Liquidated Damages, if any, with respect to any of the new notes or for any claim based on the new notes or otherwise, and no recourse under or upon any obligation, covenant or agreement of the company in the new indenture, or in any of the new notes or because of the creation of any Indebtedness represented by the new notes, may be had against any incorporator, shareholder, officer, director, employee or controlling person of the company or any of its successors. Each holder, by accepting the new notes, waives and releases all of these liabilities.

Defeasance

We may, at our option and at any time, elect to have the obligations of the company and the guarantors discharged with respect to the outstanding new notes and the Guarantees (a "defeasance"). A defeasance means that we will be deemed to have paid and discharged the entire Indebtedness represented by the outstanding new notes and to have satisfied all other obligations under the new notes and the new indenture except for:

- the rights of holders of the outstanding new notes to receive, solely from the trust fund described below, payments in respect of the principal of, premium, if any, and interest on the new notes when the payments are due,
- our obligations to issue temporary new notes, register new notes, replace mutilated, destroyed, lost or stolen new notes, and maintain an office or agency for payment,
- the rights, powers, trusts, duties and immunities of the trustee under the new indenture, and
- the defeasance provisions of the new indenture.

In addition, we may, at our option and at any time, elect to have the obligations of the company and the guarantors released with respect to some of covenants that are described in the new indenture (a "covenant defeasance") and any failure to comply with those obligations will not constitute a Default or an Event of Default with respect to the new notes. If a covenant defeasance occurs, then some of the events (not including non-payment, bankruptcy and insolvency events) described under "— Events of Default" will no longer constitute Events of Default with respect to the new notes.

To exercise either a defeasance or covenant defeasance:

- we must irrevocably deposit with the trustee, as trust funds in trust, for the benefit of the holders of the new notes, cash in United States dollars, U.S. Government Obligations (as defined in the new indenture), or a combination of the foregoing, in amounts that will be sufficient, in the report of a nationally recognized firm of independent public accountants or a nationally recognized investment banking firm, to pay and discharge the principal of, premium, if any, and interest on the outstanding new notes to redemption or maturity,
- we must deliver to the trustee an opinion of counsel in the United States that the holders of the outstanding new notes will not recognize income, gain or loss for federal income tax purposes as a result of the defeasance or covenant defeasance, as the case may be, and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if the defeasance or covenant defeasance, as the case may be, had not occurred (in the case of defeasance, the opinion must refer to and be based upon a ruling of the Internal Revenue Service or a change in applicable federal income tax laws),

- no Default or Event of Default may have occurred and be continuing on the date of the deposit or at any time during the period ending on the 91st day after the date of deposit,
- the defeasance or covenant defeasance may not result in a breach or violation of, or constitute a Default under, the new indenture or any other agreement or instrument to which the company or any guarantor is a party or by which any of them is bound,
- we must deliver to the trustee an opinion of counsel that (1) the trust funds will not be subject to any rights of any creditors of the company of any guarantor (other than holders of the new notes) and (2) after the 91st day following the deposit, the trust funds will not be subject to the effect of any applicable bankruptcy, insolvency, reorganization or similar laws affecting creditors' rights generally, and
- we must deliver to the trustee an Officers' Certificate and an opinion of counsel, each stating that
 we have complied with all conditions precedent under the new indenture to either the defeasance or
 covenant defeasance, as the case may be, and that no violations under agreements governing any
 other outstanding Indebtedness would result from the defeasance or covenant defeasance.

Satisfaction and Discharge

The new indenture will be discharged and will cease to have any further effect (except as to surviving rights of registration of transfer or exchange of the new notes, as expressly provided for in the new indenture) as to all outstanding new notes when:

- either (1) all the new notes previously authenticated and delivered (except lost, stolen or destroyed new notes that have been replaced or paid and new notes for whose payment money has previously been deposited in trust and thereafter repaid to the company) have been delivered to the trustee for cancellation or (2) all new notes not previously delivered to the trustee for cancellation have become due and payable or have been called for redemption and we have irrevocably deposited or caused to be deposited with the trustee an amount in United States dollars sufficient to pay and discharge the entire Indebtedness on the new notes not previously delivered to the trustee for cancellation, for the principal of, premium, if any, and interest to the date of deposit or redemption together with an irrevocable instruction from us directing the trustee to apply the funds to the payment of that Indebtedness at maturity or redemption, as the case may be,
- the company and the guarantors have paid or caused to be paid all other sums payable under the new indenture, the new notes and the Guarantees, and
- we have delivered to the trustee an Officers' Certificate and an opinion of counsel each stating that we have complied with all conditions precedent under the new indenture relating to the satisfaction and discharge of the new indenture.

Amendment, Supplement and Waiver

Except as provided in the next two paragraphs, the holders of at least a majority in principal amount of the then outstanding new notes may consent in writing to (1) any amendment or supplement of the new indenture, the new notes or the Guarantees and (2) the waiver of any existing Default or Event of Default or compliance with any provision of the new indenture, the new notes or the Guarantees, whether in connection with a tender offer or exchange offer for new notes or otherwise.

Without the consent of each holder affected, an amendment, supplement or waiver may not:

- reduce the principal amount of the new notes whose holders must consent to the amendment, supplement or waiver,
- reduce the principal of or change the fixed maturity of any new note, or alter or waive the provisions with respect to the redemption of the new notes in a manner adverse to the holders of the new notes other than with respect to a Change of Control Offer or an Asset Sale Offer,

- reduce the rate of or change the time for payment of interest on any new notes,
- waive a Default or Event of Default in the payment of principal of, premium, if any, or interest on the new notes, except that holders of at least a majority in aggregate principal amount of the then outstanding new notes may (1) rescind an acceleration of the new notes that resulted from a non-payment default and (2) waive the payment default that resulted from the acceleration,
- make any new note payable in money other than that stated in the new notes,
- make any change in the provisions of the new indenture relating to waivers of past Defaults or relating to waivers of the rights of holders of new notes to receive payments of principal of, or premium, if any, or interest on, the new notes,
- following the occurrence of a Change of Control, amend, change or modify our obligation to make and consummate a Change of Control Offer in the event of a Change of Control in a manner adverse to the holders of the new notes, or following the occurrence of an Asset Sale, amend, change or modify the company's obligation to make and consummate an Asset Sale Offer in a manner adverse to the holders of the new notes, or
- release any guarantor from any of its obligations under its Guarantee or the new indenture other than in compliance with the new indenture.

In addition, without the consent of any of the holders of new notes or the guarantors, the company and the trustee may amend or supplement the new indenture, the new notes or the Guarantees to:

- cure any ambiguity, defect or inconsistency,
- provide for the issuance of uncertificated new notes in addition to or in place of certificated new notes,
- provide for the assumption of our obligations to holders of the new notes in the event of any Disposition involving the company in which we are not the Surviving Person,
- make any change that would provide any additional rights or benefits to the holders of the new notes or that does not adversely affect the rights of the holders,
- release any Guarantee permitted to be released under the new indenture, or
- comply with the requirements of the Commission to effect or maintain the qualification of the new indenture under the Trust Indenture Act.

Transfer and Exchange

The registered holder of a new note will be treated as its owner for all purposes. A holder may transfer or exchange new notes in accordance with the new indenture. The exchange agent and the trustee may require a holder, among other things, to furnish appropriate endorsements and transfer documents, and we may require a holder to pay any taxes and fees required by law or permitted by the new indenture.

Neither the company nor the exchange agent will be required to issue, register the transfer of or exchange any new note:

- during a period beginning at the opening of business on the day the trustee receives notice of any redemption from the company and ending at the close of business on the day the notice of redemption is sent to holders,
- selected for redemption, in whole or in part, except the unredeemed portion of any new note being partially redeemed may be transferred or exchanged, and
- during a Change of Control Offer or an Asset Sale Offer if the new note is tendered pursuant to the Change of Control Offer or Asset Sale Offer and not withdrawn.

The Trustee

HSBC Bank USA will be the trustee under the new indenture and has been appointed by the company as exchange agent, book-entry depository and paying agent with regard to the new notes.

The new indenture (including the provisions of the Trust Indenture Act incorporated by reference in the new indenture) will contain limitations on the rights of the trustee, if it becomes a creditor of the company, to obtain payment of claims in some cases or to realize on property received by it in respect of those claims, as security or otherwise. The trustee will be permitted to engage in other transactions, but if it acquires any conflicting interest, it must either eliminate the conflict or resign.

Governing Law

The new indenture, the new notes and the Guarantees will be governed by the laws of the State of Ohio.

Definitions

The following are some of the defined terms used in the new indenture that we refer to in this description of the new notes. We refer you to the new indenture for the definition of all other terms used in the new indenture.

"Acquired Debt" means, with respect to any specified Person, Indebtedness of any Acquired Person existing at the time the Acquired Person merges with or into, or becomes a Restricted Subsidiary of, the specified Person, including Indebtedness incurred in connection with, or in contemplation of, the Acquired Person merging with or into, or becoming a Restricted Subsidiary of, the specified Person, except that Indebtedness of the Acquired Person that is redeemed, defeased, retired or otherwise repaid at the time of or immediately upon consummation of the transactions by which the Acquired Person merges with or into or becomes a Restricted Subsidiary of the specified Person may not be Acquired Debt.

"Acquired Person" means a Person that is merged with or into the company or that becomes a Restricted Subsidiary of the Company.

"Affiliate" means, with respect to any specified Person, any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with the specified Person. For purposes of this definition, "control" (including, with correlative meanings, the terms "controlling," "controlled by" and "under common control with") of any Person means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of the Person, whether through the ownership of voting securities, by agreement or otherwise.

"Asset Sale" means (1) any sale, lease, conveyance or other disposition by the company or any Restricted Subsidiary of any assets (including by way of a sale-and-leaseback) other than in the ordinary course of business, or (2) the issuance or sale of Capital Stock of any Restricted Subsidiary, in the case of each of clauses (1) and (2), whether in a single transaction or a series of related transactions, to any Person (other than to the company or a Restricted Subsidiary and other than directors' qualifying shares) for Net Proceeds in excess of \$100,000.

"Board of Directors" means, as to (1) any corporate Person, the board of directors of such Person or any duly authorized committee thereof, (2) any partnership, limited liability company or comparably organized Person that is ultimately controlled by a corporate general partner, managing member or other corporation, the "Board of Directors" of such corporation as specified in the first clause of this definition, and (3) any partnership, limited liability company or comparably organized Person which is ultimately controlled by individuals, such controlling individuals.

"Board Resolution" means, with respect to any Person, a duly adopted resolution of the Board of Directors.

"Capital Lease Obligation" of any Person means, at the time the determination is to be made, the amount of the liability in respect of a capital lease for property leased by the Person that would at that time be required to be capitalized on the balance sheet of the Person in accordance with GAAP.

"Capital Stock" of any Person means any and all shares, interests, rights to purchase, warrants, options, participations or other equivalents of or interests in (however designated) corporate stock or other equity participations, including partnership and limited liability company interests, whether general or limited, of the Person, including any Preferred Stock.

"Cash Equivalents" means:

- marketable direct obligations issued by, or unconditionally guaranteed by, the United States Government or issued by any of its agencies and backed by the full faith and credit of the United States, in each case maturing within one year from the date of acquisition of the obligations,
- marketable direct obligations issued by any state of the United States of America or any political subdivision or public instrumentality of that state maturing within one year from the date of acquisition of the obligations and, at the time of acquisition, having one of the two highest ratings obtainable from either Standard & Poor's Rating Services or Moody's Investors Service, Inc.,
- commercial paper maturing no more than one year from the date of creation of the commercial paper and, at the time of acquisition, having a rating of at least A-1 from Standard & Poor's Rating Services or at least P-1 from Moody's Investors Service, Inc.,
- certificates of deposit or bankers' acceptances (or, with respect to foreign banks, similar instruments) maturing within one year from the date of their acquisition issued by any bank organized under the laws of the United States of America or any of its states or the District of Columbia or any U.S. branch of a foreign bank having at the date of their acquisition combined capital and surplus of not less than \$200 million,
- repurchase obligations with a term of not more than seven days for underlying securities of the types described in the first bullet point above entered into with any bank meeting the qualifications specified in the fourth bullet point above, and
- investments in money market funds that invest substantially all their assets in securities of the types described in the foregoing bullet points.

"Cash Flow" means, with respect to any period, Consolidated Net Income for that period, plus, to the extent deducted in computing that Consolidated Net Income:

- extraordinary net losses, plus
- provision for taxes based on income or profits and any provision for taxes used in computing the extraordinary net losses under the first bullet point above, plus
- Consolidated Interest Expense, plus
- depreciation, amortization and all other non-cash charges (including amortization of goodwill and other intangibles).

"Change of Control" means the occurrence of any of the following events:

• any "person" or "group" (as those terms are used in Sections 13(d) and 14(d) of the Exchange Act) (other than Permitted Holders) is or becomes (including by merger, consolidation or otherwise) the "beneficial owner" (as defined in Rules 13d-3 and 13d-5 under the Exchange Act, except that a Person will be deemed to have beneficial ownership of all shares that the Person has the right to acquire, whether the right is exercisable immediately or only after the passage of time), directly or indirectly, of 50% or more of the voting power of the our total outstanding Voting Stock,

- during any period of two consecutive years, individuals who at the beginning of that period constituted our Board of Directors (together with any new directors whose election to the Board of Directors, or whose nomination for election by our stockholders, was approved by a vote of 66²/₃% of the directors then still in office who were either directors at the beginning of that period or whose election or nomination for election was previously so approved) cease for any reason to constitute a majority of our Board of Directors then in office,
- the approval by the holders of Capital Stock of the company of any plan or proposal for the liquidation or dissolution of the company (whether or not otherwise in compliance with the terms of the new indenture), or
- the sale or other disposition (including by merger, consolidation or otherwise) of all or substantially all of the Capital Stock or assets of the company to any Person or group (as defined in Rule 13d-5 of the Exchange Act) (other than to the Permitted Holders) as an entirety or substantially as an entirety in one transaction or a series of related transactions.

"Consolidated Cash Flow Coverage Ratio" means, for any period, the ratio of:

- the aggregate amount of Cash Flow for that period, to
- Consolidated Interest Expense for that period, determined on a pro forma basis after giving pro forma effect to:
 - the incurrence of the Indebtedness giving rise to the calculation of the Consolidated Cash Flow Coverage Ratio and (if applicable) the application of the net proceeds therefrom, including to refinance other Indebtedness, as if the Indebtedness was incurred, and the application of those proceeds occurred, at the beginning of that period,
 - the incurrence, repayment or retirement of any other Indebtedness by the company and its Restricted Subsidiaries since the first day of that period as if the Indebtedness was incurred, repaid or retired at the beginning of that period (except that, in making the computation, the amount of Indebtedness under any revolving credit facility will be computed based upon the average balance of the Indebtedness at the end of each month during that period,
 - in the case of Acquired Debt, the related acquisition as if the acquisition had occurred at the beginning of that period, and
 - any acquisition or disposition by the company and its Restricted Subsidiaries of any
 company or any business or any assets out of the ordinary course of business, or any related
 repayment of Indebtedness, in each case since the first day of that period, assuming the
 acquisition or disposition had been consummated on the first day of that period.

"Consolidated Interest Expense" means, with respect to any period, the sum of:

- the interest expense of the company and its Restricted Subsidiaries for that period, including, without limitation:
 - amortization of debt discount,
 - the net payments, if any, under interest rate contracts (including amortization of discounts),
 - the interest portion of any deferred payment obligation, and
 - accrued interest, plus
- the interest component of the Capital Lease Obligations paid, accrued and/or scheduled to be paid or accrued by the company and its Restricted Subsidiaries during that period, and all capitalized interest of the company and its Restricted Subsidiaries, plus
- all dividends paid during that period by the company and its Restricted Subsidiaries with respect to any Disqualified Stock (other than by any Restricted Subsidiary to the company or any other

Restricted Subsidiary and other than any dividend paid in Capital Stock (other than Disqualified Stock)), and all dividends paid during that period by any Restricted Subsidiary with respect to any Preferred Stock, in each case, as determined on a consolidated basis in accordance with GAAP consistently applied.

"Consolidated Net Income" means, with respect to any period, the net income (or loss) of the company and its Restricted Subsidiaries for that period, determined on a consolidated basis in accordance with GAAP consistently applied, adjusted to the extent included in calculating the net income (or loss), by excluding, without duplication:

- all extraordinary gains but not losses (less all fees and expenses relating thereto),
- the portion of net income (or loss) of the company and its Restricted Subsidiaries allocable to interests in unconsolidated Persons or Unrestricted Subsidiaries, except to the extent of the amount of dividends or distributions actually paid to the company or its Restricted Subsidiaries by that other Person during that period,
- net income (or loss) of any Person combined with the company or any of its Restricted Subsidiaries on a "pooling-of-interests" basis attributable to any period before the date of combination,
- net gain but not losses (less all fees and expenses relating thereto) in respect of disposition of assets (including, without limitation, pursuant to sale and leaseback transactions) other than in the ordinary course of business, or
- the net income of any Restricted Subsidiary to the extent that the declaration of dividends or similar distributions by that Restricted Subsidiary of that income to the company is not at the time permitted, directly or indirectly, by operation of the terms of its charter or any agreement, instrument, judgment, decree, order, statute, rule or governmental regulation applicable to that Restricted Subsidiary or its stockholders.

"Consolidated Net Worth" of any Person means the consolidated stockholders' equity of that Person, determined on a consolidated basis in accordance with GAAP, less (without duplication) amounts attributable to Disqualified Stock of that Person.

"Currency Agreement Obligations" means the obligations of any person under a foreign exchange contract, currency swap agreement or other similar agreement or arrangement to protect that person against fluctuations in currency values.

"Default" means any event that is, or after the giving of notice or passage of time or both would be, an Event of Default.

"Disposition" means, with respect to any Person, any merger, consolidation or other business combination involving that Person (whether or not that Person is the Surviving Person) or the sale, assignment, transfer, lease, conveyance or other disposition of all or substantially all of that Person's assets.

"Disqualified Stock" means (1) any Preferred Stock of any Restricted Subsidiary and (2) any Capital Stock that, by its terms (or by the terms of any security into which it is convertible or for which it is exchangeable), or upon the happening of any event, matures or is mandatorily redeemable, pursuant to a sinking fund obligation or otherwise, or is redeemable at the option of the holder of the Capital Stock (other than upon a change of control of the company in circumstances where the holders of the new notes would have similar rights), in whole or in part on or before the stated maturity of the new notes.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Fair Market Value" means, with respect to any asset or property, the sale value that would be obtained in an arm's-length transaction between an informed and willing seller under no compulsion to sell and an informed and willing buyer under no compulsion to buy.

"Foreign Subsidiary" means a Restricted Subsidiary not organized under the laws of the United States or any of its political subdivisions and the operations of which are located entirely outside the United States.

"GAAP" means generally accepted accounting principles in the United States set forth in the Statements of Financial Accounting Standards and the Interpretations, Accounting Principles Board Opinions and AICPA Accounting Research Bulletins that are applicable as of the Issue Date and consistently applied.

"guarantee", depending on the context, means, as applied to any obligation, (1) a guarantee (other than endorsement of negotiable instruments for collection in the ordinary course of business), direct or indirect, in any manner, of any part or all of that obligation and (2) an agreement, direct or indirect, contingent or otherwise, the practical effect of which is to assure in any way the payment or performance (or payment of damages in the event of non-performance) of all or any part of that obligation, including, without limiting the foregoing, the payment of amounts drawn down by letters of credit.

"Guarantee" has the meaning given that term under "— The Guarantees" above.

''guarantor'' means (1) each of Allegheny Clearfield, Inc., Friction Products Co., Hawk Brake, Inc., Hawk MIM, Inc., Hawk Motors, Inc., Hawk Precision Components Group, Inc., Helsel, Inc., Logan Metal Stampings, Inc., Net Shape Technologies LLC, Quarter Master Industries, Inc., S.K. Wellman Holdings, Inc., S.K. Wellman Corp., Sinterloy Corporation and Tex Racing Enterprises, Inc., and (2) any other Subsidiary of the company that guarantees the new notes.

"Indebtedness" means, with respect to any Person, without duplication, and whether or not contingent:

- all indebtedness of that Person for borrowed money or that is evidenced by a note, bond, debenture or similar instrument,
- all obligations of that Person to pay the deferred or unpaid purchase price of property or services, which purchase price is due more than six months after the date of placing that property in service or taking delivery and title thereto or the completion of that service,
- all Capital Lease Obligations of that Person,
- all obligations of that Person in respect of letters of credit or bankers' acceptances issued or created for the account of that Person,
- to the extent not otherwise included in this definition, all net obligations of that Person under Interest Rate Agreement Obligations or Currency Agreement Obligations of that Person,
- all liabilities of others of the kind described in the first three bullet points above that are secured by any Lien on any property owned by that Person, but if the obligations secured by a Lien (other than a Permitted Lien not securing any liability that would itself constitute Indebtedness) or any assets or property have not been assumed by that Person in full or are not that Person's legal liability in full, then the amount of the Indebtedness for purposes of this definition will be limited to the lesser of the amount of Indebtedness secured by that Lien and the Fair Market Value of the property subject to that Lien,
- all Disqualified Stock issued by that Person and all Preferred Stock issued by a Subsidiary of that Person, and
- to the extent not otherwise included, any guarantee by that Person of any other Person's indebtedness or other obligations described in the foregoing bullet points.

"Indebtedness" of the company and the Restricted Subsidiaries will not include current trade payables incurred in the ordinary course of business and payable in accordance with customary practices, and non-interest bearing installment obligations and accrued liabilities incurred in the ordinary course of business that are not more than 90 days past due. The principal amount outstanding of any Indebtedness issued with original issue discount is the accreted value of the Indebtedness. However, Indebtedness will not include Indebtedness arising from the honoring by a bank or other financial institution of a check, draft or similar

instrument inadvertently drawn against insufficient funds in the ordinary course of business; so long as the Indebtedness is extinguished within 3 business days of its incurrence.

"Independent Director" means a director of the company other than a director (1) who (apart from being a director of the company or any Subsidiary of the company) is an employee, associate or Affiliate of the company or a Subsidiary of the company, or (2) who is a director, employee, associate or Affiliate of another party (other than the company or any of its Subsidiaries) to the transaction in question.

"Interest Rate Agreement Obligations" means, with respect to any Person, the Obligations of that Person under (1) interest rate swap agreements, interest rate cap agreements and interest rate collar agreements and (2) other agreements or arrangements designed to protect that Person against fluctuations in interest rates.

"Investment" means, with respect to any Person, any direct or indirect loan or other extension of credit (including, without limitation, a guarantee) or capital contribution to (by means of any transfer of cash or other property to others or any payment for property or services for the account or use of others), or any purchase or acquisition by that Person of any Capital Stock, bonds, notes, debentures or other securities or evidences of Indebtedness issued by, any Person. "Investment" will exclude extensions of trade credit by the company and its Restricted Subsidiaries on commercially reasonable terms in accordance with normal trade practices of the company or the Restricted Subsidiary, as the case may be. For the purposes of the "Limitation on Restricted Payments" covenant, (1) "Investment" will include and be valued at the Fair Market Value of the net assets of any Restricted Subsidiary at the time that the Restricted Subsidiary is designated an Unrestricted Subsidiary and will exclude the Fair Market Value of the net assets of any Unrestricted Subsidiary at the time that the Unrestricted Subsidiary is designated a Restricted Subsidiary and (2) the amount of any Investment will be the original cost of the Investment plus the cost of all additional Investments by the company or any of its Restricted Subsidiaries, without any adjustments for increases or decreases in value, or write-ups, write-downs or write-offs with respect to the Investment, reduced by the payment of dividends or distributions in connection with the Investment or any other amounts received in respect of the Investment, except that no payment of dividends or distributions or receipt of any of those other amounts will reduce the amount of any Investment if the payment of dividends or distributions or receipt of any of those amounts would be included in Consolidated Net Income. If we or any Restricted Subsidiary of the company sells or otherwise disposes of any Common Stock of any direct or indirect Restricted Subsidiary of the company so that, after giving effect to the sale or disposition, we no longer own, directly or indirectly, greater than 50% of the outstanding Common Stock of the Restricted Subsidiary, we will be deemed to have made an Investment on the date of the sale or disposition equal to the Fair Market Value of the Common Stock of the Restricted Subsidiary not sold or disposed of.

"Issue Date" means , 2002.

"Lien" means, with respect to any asset, mortgage, lien, pledge, charge, security interest or encumbrance of any kind in respect of that asset, whether or not filed, recorded or otherwise perfected under applicable law (including any conditional sale or other title retention agreement, any lease of a similar nature, any option or other agreement to sell or give a security interest in any asset and any filing of, or agreement to give, any financing statement under the Uniform Commercial Code (or equivalent statutes) of any jurisdiction).

"Net Proceeds" means, with respect to any Asset Sale by any Person, the aggregate cash or Cash Equivalent proceeds received by that Person and/or its Affiliates in respect of that Asset Sale, which amount is equal to the excess, if any, of:

- the cash or Cash Equivalent received by that Person and/or its Affiliates (including any cash payments received by way of deferred payment pursuant to, or monetization of, a note or installment receivable or otherwise, but only as and when received) in connection with that Asset Sale, over
- the sum of:

- the amount of any Indebtedness that is secured by that asset and that is required to be repaid by that Person in connection with that Asset Sale, plus
- all fees, commissions and other expenses incurred by that Person in connection with that Asset Sale, plus
- provision for taxes, including income taxes, directly attributable to the Asset Sale or to required prepayments or repayments of Indebtedness with the proceeds of that Asset Sale, plus
- if that Person is a Restricted Subsidiary, any dividends or distributions payable to holders of minority interests in the Restricted Subsidiary from the proceeds of that Asset Sale.

"new credit facility" means the new senior secured credit facility among the company, some of its Subsidiaries and the lenders named in the facility as the same may be amended, modified, renewed, refunded, replaced or refinanced from time to time, including (1) any related notes, letters of credit, guarantees, collateral documents, instruments and agreements executed in connection with the new credit facility, and in each case as amended, modified, renewed, refunded, replaced or refinanced from time to time, and (2) any notes, guarantees, collateral documents, instruments and agreements executed in connection with any amendment, modification, renewal, refunding, replacement or refinancing of the new credit facility.

"Officer" means, with respect to any Person, the Chairman of the Board, the Senior Chairman of the Board, the Chief Executive Officer, the President, any Vice President, the Chief Operating Officer, the Controller, or the Secretary of such Person, or any other officer designated by the Board of Directors serving in a similar capacity.

"Officers' Certificate" means, with respect to any Person, a certificate signed by two Officers or by an Officer and either an Assistant Treasurer or an Assistant Secretary of such Person and otherwise complying with the requirements of the new indenture as they relate to the making of an Officers' Certificate.

"Obligations" means any principal, interest, penalties, fees, indemnifications, reimbursement obligations, damages and other liabilities payable under the documentation governing any Indebtedness.

"Permitted Holders" means any of Norman C. Harbert, Ronald E. Weinberg, Byron S. Krantz or any "group" (as defined in Rule 13d-5 of the Exchange Act) consisting of any or all of the foregoing.

"Permitted Investments" means:

- any Investment in the company or any Restricted Subsidiary that is a guarantor,
- any Investment in Cash Equivalents,
- any Investment in an Acquired Person if, as a result of that Investment, (1) the Acquired Person becomes a Restricted Subsidiary of the company and becomes a guarantor of the new notes, or (2) the Acquired Person either is merged, consolidated or amalgamated with or into the company or one of its Restricted Subsidiaries that is a guarantor of the new notes and the company or that Restricted Subsidiary is the Surviving Person, or transfers or conveys substantially all of its assets to, or is liquidated into, the company or one of its Restricted Subsidiaries that is a guarantor of the new notes,
- · Investments in accounts and notes receivable acquired in the ordinary course of business,
- any securities received in connection with an Asset Sale that complies with the covenant described under "— Covenants — Limitations on Asset Sales,"
- Interest Rate Obligations and Currency Agreement Obligations permitted pursuant to the second paragraph of the covenant described under "— Covenants — Limitation on Incurrence of Indebtedness" above, and
- investments in or acquisitions of Capital Stock or similar interests in Persons (other than Affiliates of the company) received in the bankruptcy or reorganization of or by that Person or

any exchange of that investment with the issuer or taken in settlement of or other resolution of claims or disputes.

"Permitted Liens" means:

- · Liens securing Indebtedness under the new credit facility,
- Liens securing Indebtedness of a Person existing at the time that the Person is merged into or consolidated with the company or a Restricted Subsidiary, so long as the Liens were in existence before the contemplation of the merger or consolidation and do not extend to any assets other than those of that Person,
- Liens on property acquired by the company or a Restricted Subsidiary, so long as the Liens were in existence before the contemplation of the acquisition and do not extend to any other property,
- Liens in respect of Interest Rate Obligations and Currency Agreement Obligations permitted under the new indenture,
- Liens in favor of the company, any Restricted Subsidiary or any guarantor,
- Liens existing or created on the Issue Date,
- any Liens securing the new notes, and
- Liens securing Permitted Indebtedness of the company or any Restricted Subsidiary representing Capitalized Lease Obligations and any refinancings of Capitalized Lease Obligations or, in respect of Purchase Money Obligations for property acquired, constructed or improved in the ordinary course of business and any refinancings of Purchase Money Obligations, that taken together in the aggregate do not exceed \$5.0 million at any time outstanding.

"Person" means any individual, corporation, partnership, joint venture, association, joint-stock company, limited liability company, trust, unincorporated organization or government or any government agency or political subdivision.

"Preferred Stock" as applied to the Capital Stock of any Person, means Capital Stock of any class or classes (however designated) that is preferred as to the payment of dividends or distributions, or as to the distribution of assets upon any voluntary or involuntary liquidation or dissolution of that Person, over Capital Stock of any other class of that Person.

"Purchase Money Obligation" means any Indebtedness secured by a Lien on assets related to the business of the company or the Restricted Subsidiaries, and any additions and accessions thereto, that are purchased, constructed or improved by the company or any Restricted Subsidiary at any time after the Issue Date, so long as:

- any security agreement or conditional sales or other title retention contract pursuant to which the
 Lien on the assets is created (collectively, a "Security Agreement") is entered into within
 90 days after the purchase or substantial completion of the construction of the assets and is at all
 times confined solely to the assets so purchased or acquired, any additions and accessions thereto
 and any proceeds therefrom,
- the aggregate principal amount of the outstanding Indebtedness secured by the Lien is at no time increased, except in connection with the purchase of additions and accessions thereto and except in respect of fees and other obligations in respect of the Indebtedness, and
- the aggregate outstanding principal amount of Indebtedness secured by the Lien (determined on a per asset basis in the case of any additions and accessions) does not at the time the Security Agreement is entered into exceed 100% of the purchase price to the company or any Restricted Subsidiary of the assets subject to the Lien or (2) the Indebtedness secured by the Lien may be with recourse solely to the assets so purchased or acquired, any additions and accessions to those assets and any proceeds derived from those assets.

"Restricted Investment" means an Investment other than a Permitted Investment.

"Restricted Payment" means:

- any dividend or other distribution declared or paid on any Capital Stock of the company (other than (1) dividends or distributions payable solely in Capital Stock (other than Disqualified Stock) of the company or (2) dividends or distributions payable to the company or any Restricted Subsidiary),
- any payment to purchase, redeem or otherwise acquire or retire for value any Capital Stock of the company,
- any payment to purchase, redeem, defease or otherwise acquire or retire for value, before any scheduled maturity, repayment or sinking fund payment, any Indebtedness that is subordinated in right of payment to the new notes other than a purchase, redemption, defeasance or other acquisition or retirement for value that is paid for with the proceeds of Refinancing Indebtedness permitted under the covenant described in "— Covenants Limitation on Incurrence of Indebtedness," or
- any Restricted Investment.

"Restricted Subsidiary" means each direct or indirect Subsidiary of the company other than an Unrestricted Subsidiary.

"Senior Debt" means the principal of and interest (including post-petition interest) on, and all other amounts owing in respect of, the new credit facility, Indebtedness evidenced by the new notes and any other Indebtedness incurred by the company (including, but not limited to, reasonable fees and expenses of counsel and all other charges, fees and expenses incurred in connection with the Indebtedness), unless the instrument creating or evidencing the Indebtedness or pursuant to which the Indebtedness is outstanding expressly provides that the Indebtedness is subordinated in right of payment to the new notes. However, Senior Debt will not include:

- any Indebtedness for federal, state, local or other taxes,
- any Indebtedness among or between the company, any of its Subsidiaries or their Affiliates,
- any Indebtedness incurred for the purchase of goods or materials, or for services obtained, in the ordinary course of business or any obligations in respect of any the Indebtedness,
- any Indebtedness that is incurred in violation of the new indenture, or
- Indebtedness of the company that is expressly subordinate or junior in right of payment to any other Indebtedness of the company.

"Subordinated Indebtedness" means Indebtedness of the company subordinated in right of payment to the new notes.

"Subsidiary" of a Person means:

- any corporation of which more than 50% of the outstanding voting power of the Voting Stock is owned or controlled, directly or indirectly, by that Person or by one or more other Subsidiaries of that Person, or by that Person and one or more other Subsidiaries of that Person,
- any limited partnership of which that Person or any Subsidiary of that Person is a general partner,
- any limited liability company of which that Person or any Subsidiary of that Person is a manager, or
- any other Person (other than a corporation, limited partnership or limited liability company) in which that Person or one or more other Subsidiaries of that Person, or that Person and one or more other Subsidiaries of that Person, directly or indirectly, has more than 50% of the

outstanding partnership or similar interests or has the power, by contract or otherwise, to direct or cause the direction of the policies, management and affairs of that other Person.

"Surviving Person" means, with respect to any Person involved in or that makes any Disposition, the Person formed by or surviving that Disposition or the Person to which that Disposition is made.

"Unrestricted Subsidiary" means a Subsidiary of the company designated as an Unrestricted Subsidiary pursuant to and in compliance with the covenant described under "— Covenants — Limitation on Designation of Unrestricted Subsidiaries" and not redesignated a Restricted Subsidiary in compliance with that covenant.

"Voting Stock" of a Person means Capital Stock of that Person of the class or classes pursuant to which the holders of that Capital Stock have the general voting power under ordinary circumstances to elect at least a majority of the board of directors, managers or trustees of that Person (irrespective of whether or not at the time stock of any other class or classes have or might have voting power by reason of the happening of any contingency).

"Weighted Average Life to Maturity" means, when applied to any Indebtedness at any date, the number of years obtained by dividing (1) the sum of the products obtained by multiplying (a) the amount of each then remaining installment, sinking fund, serial maturity or other required scheduled payment of principal, including payment at final maturity, in respect of the Indebtedness with (b) the number of years (calculated to the nearest one-twelfth) that will elapse between that date and the making of the payment, by (2) the then outstanding aggregate principal amount of the Indebtedness.

Book-Entry; Delivery and Form

Except as set forth below, we will issue new notes in registered, global form in denominations of \$1,000 and integral multiples of \$1,000 in excess of \$1,000, except that we may elect to issue new notes in denominations of less than \$1,000. We will issue new notes at the closing of the exchange offer only pursuant to valid tenders of old notes.

We expect that the new notes initially will be represented by a single note in registered, global form without interest coupons (the "Global Note"). We will deposit the Global Note upon issuance with the trustee as custodian for the Depository Trust Company ("DTC") in New York, New York, and register it in the name of DTC or its nominee, in each case for credit to an account of a direct or indirect participant in DTC as described below.

Except as set forth below, the Global Note may be transferred, in whole and not in part, only to another nominee of DTC or to a successor of DTC or its nominee. You may not exchange beneficial interests in the Global Note for notes in certificated form except in the limited circumstances described below. See "—Exchange of Interests in the Global Note for Certificated Notes" below.

Transfers of beneficial interests in the Global Note will be subject to the applicable rules and procedures of DTC and its direct or indirect participants (including, if applicable, those of Euroclear and Clearstream), which may change from time to time.

Depository Procedures

We are providing the following description of the operations of DTC, Euroclear and Clearstream solely as a matter of convenience. These operations and procedures are solely within the control of the respective settlement systems and are subject to changes by them. We take no responsibility for these operations and procedures and urge you to contact the system or their participants directly to discuss these matters. DTC has advised us that it is a limited-purpose trust company created to hold securities for its participating organizations (collectively, the "Participants") and to facilitate the clearance and settlement of transactions in those securities between Participants through electronic book-entry changes in accounts of its Participants. The Participants include securities brokers and dealers, banks, trust companies, clearing corporations and other organizations. Access to DTC's system is also available to other entities such as banks, brokers, dealers

and trust companies that maintain a custodial relationship with a Participant, either directly or indirectly (collectively, the "Indirect Participants"). Persons who are not Participants may beneficially own securities held by or on behalf of DTC only through Participants or the Indirect Participants.

The ownership of interests in, and transfers of ownership interests in, each security held by or on behalf of DTC are recorded on the records of the Participants and the Indirect Participants. DTC has also advised us that, pursuant to procedures established by it: (1) upon deposit of the Global Note, DTC will credit the accounts of the Participants designated by holders of old notes who exchange their old notes in the exchange offer with portions of the principal amount of the Global Note, and (2) ownership of these interests in the Global Note will be shown on, and the transfer of ownership of these interests will be effected only through, records maintained by DTC (with respect to the Participants) or by the Participants and the Indirect Participants (with respect to other owners of beneficial interest in the Global Note).

Investors in the Global Note who are Participants in DTC's system may hold their interests in the Global Note directly through DTC. Investors in the Global Note that are not Participants may hold their interests indirectly though organizations (including Euroclear and Clearstream) which are Participants in that system. All interests in the Global Note, including those held through Euroclear or Clearstream, may be subject to the procedures and requirements of DTC. Those interests held through Euroclear or Clearstream may also be subject to the procedures and requirements of those systems. The laws of some states require that some persons take physical delivery in definitive form of securities they own. Consequently, the ability to transfer beneficial interests in the Global Note to other persons will be limited to that extent. Because DTC can act only on behalf of Participants, which in turn act on behalf of Indirect Participants, the ability of a person having beneficial interests in the Global Note to pledge those interests to persons that do not participate in the DTC system, or otherwise take actions in respect of those interests, may be affected by the lack of a physical certificate evidencing those interests.

Except as described below, owners of interests in the Global Note will not have new notes registered in their name, will not receive physical delivery of new notes in certificated form and will not be considered the registered owners or "holders" of new notes under the new indenture for any purpose.

Payments in respect of the principal of, and interest (including additional interest) and premium, if any, on the Global Note registered in the name of DTC or its nominee will be payable to DTC in its capacity as the registered holder under the new indenture. Under the terms of the new indenture, we and the trustee will treat the persons in whose names the new notes, including the Global Note, are registered as the owners of the new notes for the purpose of receiving payments and all other purposes. Consequently, neither we, the trustee nor any agent of us or the trustee has or will have any responsibility or liability for: (1) any aspect of DTC's records or any Participant's or Indirect Participant's records relating to payments made on account of beneficial ownership interests in the Global Note or for maintaining, supervising or reviewing any of DTC's records or any Participant's or Indirect Participant's records relating to the beneficial ownership interests in the Global Note, or (2) any other matter relating to the actions or practices of DTC or any of its Participants or Indirect Participants.

DTC has advised us that its current practice, upon receipt of any payment in respect of securities such as the new notes (including principal and interest), is to credit the accounts of the relevant Participants with the payment on the payment date unless DTC has reason to believe it will not receive payment on the payment date. Each relevant Participant is credited with an amount proportionate to its beneficial ownership of an interest in the principal amount of the relevant security as shown on the records of DTC. Payments by the Participants and the Indirect Participants to the beneficial owners of new notes will be governed by standing instructions and customary practices and will be the responsibility of the Participants or the Indirect Participants and will not be the responsibility of DTC, the trustee or the company. Neither we nor the trustee will be liable for any delay by DTC or any of its Participants in identifying the beneficial owners of the new notes, and we and the trustee may conclusively rely on and will be protected in relying on instructions from DTC or its nominee for all purposes.

Transfers between Participants in DTC will be effected in accordance with DTC's procedures, and will be settled in same-day funds, and transfers between Participants in Euroclear and Clearstream will be effected in accordance with their respective rules and operating procedures.

Cross-market transfers between the Participants in DTC, on the one hand, and Euroclear or Clearstream participants, on the other hand, will be effected through DTC in accordance with DTC's rules on behalf of Euroclear or Clearstream, as the case may be, by its respective depositary; however, these cross-market transactions will require delivery of instructions to Euroclear or Clearstream, as the case may be, by the counterparty in that system in accordance with the rules and procedures and within the established deadlines (Brussels time) of that system. Euroclear or Clearstream, as the case may be, will, if the transaction meets the settlement requirements, deliver instructions to its respective depositary to take action to effect final settlement on its behalf by delivering or receiving interests in the Global Note in DTC, and making or receiving payment in accordance with normal procedures for same day fund settlement applicable to DTC. Euroclear participants and Clearstream participants may not deliver instructions directly to the depositories for Euroclear or Clearstream.

DTC has advised us that it will take any action permitted to be taken by a holder of new notes only at the direction of one or more Participants to whose account DTC has credited the interests in the Global Note and only in respect of the portion of the aggregate principal amount of the new notes to which the Participant or Participants has or have given the direction. However, if there is an Event of Default under the new notes, then DTC reserves the right exchange the Global Note for new notes in certificated form, and to distribute the new notes to its Participants.

Although DTC, Euroclear and Clearstream have agreed to the foregoing procedures to facilitate transfers of interests in the Global Note among Participants in DTC, Euroclear and Clearstream, they are under no obligation to perform or to continue to perform these procedures, and may discontinue these procedures at any time. Neither we nor the trustee nor any of our respective agents will have any responsibility for the performance by DTC, Euroclear or Clearstream or their respective participants or indirect participants of their respective obligations under the rules and procedures governing their operations.

Exchange of Interests in the Global Note for Certificated Notes

We may exchange beneficial interests in the Global Note for definitive new notes in registered certificated form ("Certificated Notes") if:

- DTC has (1) notified us that it is unwilling or unable to continue as depositary for the Global Note, and we fail to appoint a successor depositary or (2) ceased to be a clearing agency registered under the Exchange Act,
- at our option, we notify the trustee in writing that we elect to cause the issuance of the Certificated Notes, or
- there has occurred and is continuing a Default or Event of Default with respect to the new notes.

In addition, we may exchange beneficial interests in the Global Note for Certificated Notes upon prior written notice given to the trustee by or on behalf of DTC in accordance with the new indenture. In all cases, the Certificated Notes we deliver in exchange for the beneficial interests in the Global Note will be registered in the names, and issued in any approved denominations, requested by or on behalf of the depositary (in accordance with its customary procedures).

Same Day Settlement and Payment

We will make payments in respect of the new notes represented by the Global Note (including principal, premium, if any, interest and liquidated damages, if any) by wire transfer of immediately available funds to the accounts specified by the Global Note holder. We will make all payments of principal, interest and premium and liquidated damages, if any, with respect to Certificated Notes by wire transfer of immediately available funds to the accounts specified by the holders of new notes or, if no account is specified, by mailing

a check to that holder's registered address. The new notes represented by the Global Note are expected to trade in DTC's Same Day Funds Settlement System, and any permitted secondary market trading activity in the new notes will, therefore, be required by DTC to be settled in immediately available funds. We expect that secondary trading in any Certificated Notes will also be settled in immediately available funds.

Because of time zone differences, the securities account of a Euroclear or Clearstream participant purchasing an interest in the Global Note from a Participant in DTC will be credited and any crediting of this type will be reported to the relevant Euroclear or Clearstream participant, during the securities settlement processing day (which must be a business day for Euroclear and Clearstream) immediately following DTC's settlement date. DTC has advised us that cash received in Euroclear or Clearstream as a result of sales of interests in the Global Note by or through a Euroclear or Clearstream participant to a Participant in DTC will be received with value on the settlement date of DTC but will be available in the relevant Euroclear or Clearstream cash account only as of the business day for Euroclear or Clearstream following DTC's settlement date.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES

United States Tax Consequences

The following is a general discussion of the United States federal income tax consequences associated with the exchange offer and the ownership and disposition of the new notes offered in this prospectus and consent solicitation statement. Except where noted, it deals only with those holders who hold the old notes and new notes as capital assets and does not deal with special situations, like those of brokers, dealers in securities or currencies, financial institutions, tax exempt entities, insurance companies, persons liable for alternative minimum tax, U.S. persons whose "functional currency" is not the U.S. dollar, persons holding old notes or new notes, as the case may be, as part of a hedging, integrated, conversion or constructive sale transaction or a straddle, and traders in securities that elect to use a mark-to-market method of accounting for their securities holdings. The following summary does not address state or local or non United States tax consequences or United States federal tax consequences (e.g., estate or gift tax) other than those pertaining to the income tax.

We have not requested and do not intend to request a ruling from the Internal Revenue Service (the "IRS"). At the closing, we will receive an opinion of Kohrman Jackson & Krantz P.L.L. that the discussion of the federal income tax consequences contained in this prospectus and consent solicitation statement is accurate in all material respects. Opinions of counsel, such as that to be provided to us, merely reflect counsel's best judgment based on existing authorities. These opinions are not binding on the IRS or the courts. The IRS may disagree with the opinion, and a court may sustain the position of the IRS.

This discussion is based on provisions of the Internal Revenue Code of 1986, as amended (the "Code"), the Treasury Regulations promulgated thereunder, and administrative and judicial interpretations of the foregoing, all as in effect as of the date hereof and all of which are subject to change, possibly with retroactive effect. This discussion does not address tax consequences of the purchase, ownership or disposition of the new notes to holders of new notes other than those holders who acquired their new notes pursuant to the exchange offer. If a partnership holds the old notes or new notes, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. Partners of partnerships that hold old notes or will acquire new notes pursuant to the exchange offer should consult their own tax advisors.

As used in this prospectus and consent solicitation statement, the term "U.S. Holder" means a holder of old notes or new notes, as the case may be, that is, for United States federal income tax purposes, a U.S. Person as defined below under "— U.S. Federal Income Tax Documentation Requirements" below. The term "non-U.S. Holder" means a holder of old or new notes that is not a U.S. Person.

Each U.S. Holder and non-U.S. Holder should consult its tax advisor regarding the particular tax consequences to that holder of the exchange offer, the ownership and disposition of the old notes and

new notes, as well as any tax consequences that may arise under the laws of any other relevant foreign, state, local or other taxing jurisdiction.

U.S. Holders

Exchange Offer

Under general principles of tax law, the "significant modification" of a debt instrument creates a deemed exchange (upon which gain or loss may be recognized) if the modified debt instrument differs materially either in kind or in extent from the original debt instrument. Under applicable Treasury Regulations, the modification of a debt instrument is a significant modification that will create a deemed exchange if, based on all the facts and circumstances and taking into account some of the modifications of the debt instrument collectively, the legal rights or obligations that are altered and the degree to which they are altered is "economically significant." In addition, a significant modification that will create a deemed exchange occurs if one of the bright line tests set forth in Treasury Regulations Section 1.1001-3(e) is met.

The exchange of old notes for new notes pursuant to the exchange offer will constitute a significant modification of a debt instrument pursuant to Treasury Regulations Section 1.1001-3(e). Accordingly, a U.S. Holder who exchanges old notes for the new notes pursuant to the exchange offer will realize gain or loss equal to the difference between the amount realized by the U.S. Holder on the exchange and the U.S. Holder's adjusted basis in the old notes immediately prior to the date of the exchange. The amount realized by a U.S. Holder on the exchange of old notes for new notes will, based on the position that we intend to take with respect to the consent payments, be the issue price of the new notes received by the U.S. Holder. Because the new notes will be publicly traded within the meaning of Treasury Regulations section 1.1273-2(f), the issue price of the new notes will be their fair market value on the date of their issue. The accrued but previously unpaid interest that will be paid, in cash, on the old notes in the exchange will be reportable as ordinary interest income by a U.S. Holder in accordance with its method of accounting.

The proper treatment of the consent payments is unclear. However, we intend to take the position that the payments will represent additional consideration received by U.S. Holders in exchange for their old notes. You should consult your own tax advisor as to possible alternative treatments of the consent payments.

The tax treatment of gain or loss realized by a U.S. Holder on the exchange of old notes for new notes depends upon whether both the old and the new notes constitute "securities" for U.S. federal income tax purposes, as discussed further below.

Exchanges of debt instruments for other debt instruments in the same corporation may qualify as a tax-free recapitalization for the holder of the debt instruments if both the old and new debt instruments qualify as securities for federal income tax purposes. If the exchange qualifies as a tax-free recapitalization, a U.S. Holder would not recognize a taxable loss and would recognize taxable gain only up to the amount which is the lesser of the fair market value of "other property" received by the U.S. Holder in the exchange or U.S. Holder's realized gain on the exchange (see previous paragraph for a discussion of the amount realized on the exchange). Based on the position that we intend to take with respect to the consent payments, no "other property" would be received in the exchange. If the exchange of the old notes for the new notes qualifies as a tax-free recapitalization, a U.S. Holder would take an initial tax basis in the new notes equal to its adjusted tax basis in the old notes immediately before the exchange, increased by the amount of gain recognized by the U.S. Holder in the recapitalization. A U.S. Holder's holding period for the new notes would include the period during which it held the old notes surrendered in the exchange. U.S. Holders are urged to consult their own tax advisors regarding the possible tax-free treatment for exchanges of the old notes for the new notes, including whether the old and the new notes qualify as securities for federal income tax purposes.

If the exchange does not qualify as a tax-free recapitalization, then a U.S. Holder would recognize the entire gain or loss realized on the transaction. The U.S. Holder would take an initial tax basis in the new notes equal to their issue price.

Any gain or loss recognized by a U.S. Holder would be capital gain or loss, subject to the market discount rules discussed in the following paragraph. The deductibility of any recognized capital loss would be subject to limitations.

A U.S. Holder who has acquired the old notes with market discount (*i.e.*, an excess of the stated redemption price at maturity over the basis of the old note immediately after acquisition by the U.S. Holder) in excess of a statutorily defined *de minimis* amount generally will be required to treat gain on the exchange of the old notes as ordinary income to the extent of the market discount accrued to the date of the disposition, less any accrued market discount income previously included in the U.S. Holder's income pursuant to an election, if any.

If the issue price of the new notes is less than their stated redemption price at maturity, the exchange could result in the new notes being deemed to be issued with original issue discount ("OID"), which would be included in the U.S. Holder's income over the term of the new notes. If the exchange is treated as a recapitalization, a U.S. Holder would amortize any premium (*i.e.*, any excess of the U.S. Holder's tax basis in the new notes immediately after the exchange over the issue price of the new notes, reduced by an amount equal to any accrued but unpaid interest on the old notes) under a constant yield-to-maturity basis as an offset to interest on the new notes. The issue price of the new notes may be less than their stated redemption price at maturity. See "— Original Issue Discount."

Each U.S. Holder should consult its tax advisor regarding the particular tax consequences to that U.S. Holder of the exchange transaction.

Consequences to Non-Tendering U.S. Holders

Under general principles of tax law, the significant modification of a debt instrument creates a deemed exchange (upon which gain or loss may be recognized) if the modified debt instrument differs materially either in kind or in extent from the original debt instrument. Applicable Treasury Regulations contain the general rule that the modification of a debt instrument is a significant modification that will create a deemed exchange if, based on all the facts and circumstances and taking into account some of the modifications of the debt instrument collectively, the legal rights or obligations that are altered and the degree to which they are altered is economically significant. A modification that adds, deletes or alters customary accounting or financial covenants is not a significant modification.

Although the matter is not entirely free from doubt, the adoption of the proposed amendments to the old indenture should not cause the non-tendering U.S. Holders of the old notes ("Non-Tendering U.S. Holders") to be deemed to have exchanged the old notes for "deemed new" notes as the proposed amendments to the old indenture should be viewed as a modification that adds, deletes or alters customary accounting or financial covenants and therefore, should not constitute a significant modification of the old notes under Treasury Regulations Section 1.1001-3(e)(6). Therefore, Non-Tendering U.S. Holders of the old notes should not realize any gain or loss with respect to the adoption of the amendments to the old indenture.

If the adoption of the proposed amendments to the old indenture were not viewed by the Internal Revenue Service as effecting a change only to customary accounting or financial covenants, then this adoption would only trigger a realization event for the Non-Tendering U.S. Holders if the adoption of the amendments to the old indenture is economically significant and consequently constitutes a significant modification. If it were determined by the Internal Revenue Service that the adoption of the amendments to the old indenture constitutes a significant modification, then a Non-Tendering U.S. Holder would recognize gain or loss equal to the difference between the issue price of the deemed new notes (less an amount equal to any accrued and unpaid interest on the old notes) and that Non-Tendering U.S. Holder's adjusted tax basis in the old notes immediately before the date of the deemed exchange. Since the deemed new notes are publicly traded within the meaning of Treasury Regulations Section 1.1273-2(f)(4), the issue price of the deemed new notes would be their fair market value on the exchange date.

If the adoption of the proposed amendments to the old indenture were treated as a deemed exchange and if the issue price of the deemed new notes were less than their stated redemption price at maturity, then the

exchange could result in the deemed new notes being deemed to be issued with OID, which would be included in the Non-Tendering U.S. Holder's income over the term of the deemed new notes. See "— Original Issue Discount." Each Non-Tendering U.S. Holder should consult its tax advisor regarding the particular tax consequences to that holder of a failure to tender the old notes in the exchange offer, including any possible deemed exchange of the old notes that may result from the adoption of the proposed amendments to the old indenture.

Payment of Interest

Stated interest payable on the new notes generally will be included in the gross income of a U.S. Holder as ordinary interest income at the time accrued or received, in accordance with that U.S. Holder's method of accounting for United States federal income tax purposes.

Original Issue Discount

If the new notes are issued at a discount from their stated redemption price at maturity (the sum of all payments to be made on the new notes other than payments of qualified stated interest), and the discount is equal to or more than the product of 0.25% of the stated redemption price at maturity of the new notes multiplied by the number of full years to their maturity, then the difference between the issue price and the stated redemption price at maturity of the new notes will be OID. U.S. Holders should be aware that, as described in greater detail below, they generally must include OID in gross income as it accrues, in advance of the receipt of cash attributable to that income.

The amount of OID includible in income by the initial U.S. Holder of the new notes is the sum of the "daily portions" of OID with respect to the new notes for each day during the taxable year or portion of the taxable year in which that U.S. Holder held the new notes ("accrued OID"). The daily portion is determined by allocating to each day in any "accrual period" a pro rata portion of the OID allocable to that accrual period. The "accrual period" for the new notes may be of any length and may vary in length over the term of the new notes, so long as each accrual period is no longer than one year and each scheduled payment of principal or interest occurs either on the first day or the final day of an accrual period. The amount of OID allocable to any accrual period is an amount equal to the excess, if any, of (i) the product of the new note's adjusted issue price at the beginning of the accrual period and its yield to maturity (determined on the basis of compounding at the close of each accrual period and properly adjusted for the length of the accrual period) less (ii) the amount of any qualified stated interest allocable to the accrual period. OID allocable to a final accrual period is the difference between the amount payable at maturity (other than a payment of qualified stated interest) and the adjusted issue price at the beginning of the final accrual period (this is referred to as the constant yield method). Special rules will apply for calculating OID for an initial short accrual period. The adjusted issue price of the new notes at the beginning of any accrual period is equal to its issue price increased by the accrued OID for each prior accrual period previously includible in the gross income of the U.S. Holder and decreased by the amount of any payments previously made on the new notes (other than qualified stated interest payments). Under these rules, a U.S. Holder will have to include in income increasingly greater amounts of OID in successive accrual periods. Finally, we are required to provide information returns stating the amount of OID accrued on the new notes held of record by the various holders.

U.S. Holders may elect to treat all interest on the new notes as OID and calculate the amount included in gross income under the constant yield method. For the purposes of this election, interest includes stated interest, acquisition discount, OID, *de minimis* OID, market discount, *de minimis* discount and unstated interest, as adjusted by any amortizable bond premium or acquisition premium. The election is to be made for the taxable year in which the U.S. Holder acquired the new notes and may not be revoked without the consent of the Internal Revenue Service. U.S. Holders should consult with their own tax advisors about this election.

Sale, Exchange and Retirement of New Notes

Upon the sale, exchange, retirement at maturity, or other taxable disposition of the new notes, a U.S. Holder generally will recognize capital gain or loss equal to the difference between the amount realized by that holder (less an amount equal to any accrued and unpaid interest not previously included in income, which will be treated as ordinary interest income) and that holder's adjusted tax basis in the new notes. A U.S. Holder's adjusted tax basis in the new notes would generally be equal to its initial tax basis in those notes (see discussion under "The Exchange Offer" above), increased by OID included in the gross income of the U.S. Holder and reduced by any payments on the new notes other than qualified stated interest payments. The deductibility of capital losses is subject to limitations.

Backup Withholding and Information Reporting

In general, information reporting requirements will apply to accrual of OID and some of the payments of principal and interest paid on the new notes and to the proceeds of the sale of new notes or old notes made to U.S. Holders other than some exempt recipients (like corporations). A backup withholding tax will apply to payments of those amounts if the U.S. Holder fails to provide a taxpayer identification number on a Form W-9, furnishes an incorrect taxpayer identification number, fails to certify foreign or other exempt status from backup withholding or fails to report in full dividend and interest income.

Backup withholding is not an additional tax. Any amounts withheld from a payment to a U.S. Holder under the backup withholding rules will be allowed as a credit against the holder's United States federal income tax liability and may entitle the holder to a refund, so long as the required information is furnished to the Internal Revenue Service.

Non-U.S. Holders

Subject to the discussion of backup withholding and information reporting below, the interest income and gains that a non-U.S. Holder derives in respect of the old notes and the new notes generally will be exempt from U.S. federal income taxes, including withholding tax.

Payments of interest or principal in respect of the new notes, including interest that is due as a result of the exchange transaction, by us or our paying agent to a holder that is a non-U.S. Holder will not be subject to withholding of United States federal income tax, so long as, in the case of payments of interest (including OID):

- the income is effectively connected with the conduct by that non-U.S. Holder of a trade or business carried on in the United States and the non-U.S. Holder complies with applicable identification requirements (described below under "— Backup Withholding and Information Reporting"); or
- the non-U.S. Holder and each securities clearing organization, bank or other financial institution that holds the new notes on behalf of that non-U.S. Holder in the ordinary course of its trade or business, in the chain between the non-U.S. Holder and the paying agent, complies with applicable identification requirements (described below under "—Backup Withholding and Information Reporting") to establish that the holder is a non-U.S. Holder and in addition, that the following requirements of the "portfolio interest" exception under the Code are satisfied:
 - the non-U.S. Holder does not actually or constructively own 10% or more of our voting stock,
 - the non-U.S. Holder is not a controlled foreign corporation with respect to us,
 - the non-U.S. Holder is not a bank whose receipt of interest on the new notes is described in Section 881(c)(3)(A) of the Code, and
 - the interest is not contingent interest described in Section 871(h)(4) of the Code.

Any gain that a non-U.S. Holder realizes on a sale or exchange of the old notes or the new notes generally will be exempt from U.S. federal income tax, including withholding tax, unless:

- the gain is effectively connected with the conduct of a trade or business in the United States (or if a tax treaty applies, the gain is attributable to a permanent establishment of the non-U.S. Holder),
- in the case of a non-U.S. Holder that is an individual, that non-U.S. Holder is present in the United States for 183 days or more during the taxable year in which the sale, exchange or other disposition occurs, or
- in the case of gain representing accrued interest, the requirements of the portfolio interest exception are not satisfied and no applicable income tax treaty between the United States and a foreign country exempts that income from U.S. taxation.

In the case of a non-U.S. Holder that is subject to United States federal income taxation on a net basis in respect of the notes, that holder will generally be taxed under the same rules that govern the taxation of a U.S. Holder. In addition, if that holder is a foreign corporation, it may be subject to an additional branch profits tax.

In addition, a non-U.S. Holder that has acquired the old notes with market discount (*i.e.*, an excess of the stated redemption price at maturity over the basis of the notes immediately after acquisition by the non-U.S. Holder in excess of a statutorily defined *de minimis* amount) generally will be required to treat gain on the exchange of the old notes as ordinary income to the extent of the market discount accrued to the date of the disposition, less any accrued market discount income previously included in the non-U.S. Holder's income pursuant to an election, if any. A non-U.S. Holder will not be subject to U.S. withholding tax on this portion of the gain.

Backup Withholding and Information Reporting

Payment of the proceeds of a sale of a note or payment of interest (including OID) will be subject to information reporting requirements and backup withholding tax unless the beneficial owner certifies its non-U.S. status under penalties of perjury or otherwise establishes an exemption (absent actual knowledge by the paying agent that the holder is actually a U.S. Holder). Treasury Regulations provide some presumptions under which a non-U.S. Holder will be subject to backup withholding and information reporting unless the holder certifies as to its non-U.S. status or otherwise establishes an exemption. In addition, the Treasury Regulations contain some procedural requirements related to establishing a holder's non-U.S. status. Non-U.S. Holders should consult with their own tax advisors regarding the foregoing issues.

Any amounts withheld from a payment to a non-U.S. Holder under the backup withholding rules will be allowed as a credit against the holder's United States federal income tax liability and may entitle the holder to a refund, so long as the required information is furnished to the Internal Revenue Service.

Applicable identification requirements generally will be satisfied if the following is delivered to the person from whom you receive payment or who credits your account before the payment of the stated interest or OID:

- a Form W-8BEN signed under penalties of perjury by the non-U.S. Holder, stating that the holder of the new notes is not a U.S. person and providing the non-U.S. Holder's name and address,
- with respect to non-U.S. Holders of the new notes residing in a country that has a tax treaty with the United States who seek an exemption or reduced tax rate (depending on the treaty terms), Form W-8BEN (if the treaty provides only for a reduced rate, then withholding tax will be imposed at that rate unless the non-U.S. Holder qualifies under the portfolio interest rules set forth in the Code and files a W-8BEN), or
- with respect to interest income effectively connected with the conduct by the non-U.S. Holder of a trade or business carried on in the United States, Form W-8ECI,

as long as in each of the foregoing cases:

- the applicable form is delivered pursuant to applicable procedures and is properly transmitted to the U.S. withholding agent otherwise required to withhold tax, and
- none of the entities receiving the form has actual knowledge or reason to know that the holder is a U.S. Holder.

U.S. Federal Income Tax Documentation Requirements

A non-U.S. beneficial owner of the new notes holding them through a paying agent will be subject to U.S. withholding tax that generally applies to payments of interest (including OID) on registered debt issued by U.S. Persons as well as interest (including OID) that is due as a result of the exchange transaction, unless (i) each clearing system, bank or other financial institution that holds customers' securities in the ordinary course of its trade or business in the chain of intermediaries between that beneficial owner and the U.S. entity required to withhold tax complies with applicable certification requirements and (ii) that beneficial owner takes one of the following steps to obtain an exemption or reduced tax rate:

Exemption for non-U.S. Persons (Form W-8BEN). A beneficial owner of the new notes that is a non-U.S. Person can obtain a complete exemption from the withholding tax by qualifying under the portfolio interest rules set forth in the Code and by filing a Form W-8BEN (Certificate of Foreign Status of Beneficial Owner for United States Withholding), or otherwise satisfying the documentary evidence requirements for establishing that it is a non-U.S. Person. If the information shown on Form W-8BEN changes, the withholding agent or payer must be notified within 30 days of the change in circumstances and a new Form W-8BEN must be filed.

Exemption for non-U.S. Persons with effectively connected income (Form W-8ECI). A non-U.S. Person, including a non-U.S. corporation or bank with a U.S. branch, for which the interest income is effectively connected with its conduct of a trade or business in the United States, can obtain an exemption from the withholding tax by filing Form W-8ECI (Certificate of Foreign Person's Claim for Exemption from Withholding on Income Effectively Connected with the Conduct of a Trade or Business in the United States).

Exemption or reduced rate of non-U.S. Persons resident in treaty countries (Form W-8BEN). Alternatively, non-U.S. Persons that are new notes owners residing in a country that has an income tax treaty with the United States can obtain an exemption or reduced tax rate (depending on the treaty terms) by filing Form W-8BEN, or otherwise satisfying the documentary evidence requirements. If the treaty provides only for a reduced rate, withholding tax will be imposed at that rate unless the filer qualifies under the portfolio interest rules set forth in the Code and files Form W-8BEN, or otherwise satisfies the documentary evidence requirements.

Exemption for U.S. Persons (Form W-9). U.S. Persons can obtain a complete exemption from the withholding tax by filing Form W-9 (Payer's Request for Taxpayer Identification Number and Certification).

U.S. Federal Income Tax Reporting Procedure. A holder of new notes files by submitting the appropriate form to the person through whom it holds (the clearing agency, in the case of persons holding directly on the books of the clearing agency). Forms W-8BEN and W-8ECI are effective for three calendar years unless a change in circumstances makes any information in the form incorrect.

The term "U.S. Person" means (1) a citizen or resident of the United States, (2) a corporation or partnership organized in or under the laws of the United States or any of its states, (3) an estate or trust the income of which is includible in gross income for United States tax purposes, regardless of its source, or (4) a trust which is subject to the supervision of a court within the United States and the control of a United States person as described in Code Section 7701(a)(30).

This summary does not deal with all aspects of U.S. federal income tax withholding that may be relevant to non-U.S. Holders of the new notes. Investors are advised to consult their own tax advisors for specific tax advice concerning their holding and disposing of the new notes.

PLAN OF DISTRIBUTION

We will receive no proceeds in connection with the exchange offer. We will distribute the new notes in the manner described in "The Exchange Offer — Acceptance of Old Notes for Exchange; Delivery of New Notes" above.

LEGAL MATTERS

Kohrman Jackson & Krantz P.L.L. has passed on various legal matters for us with respect to the new notes and the guarantees. Byron S. Krantz, a partner in Kohrman Jackson & Krantz P.L.L., is one of our stockholders and directors and is also our Secretary. Marc C. Krantz, a son of Byron S. Krantz and a partner in Kohrman Jackson & Krantz P.L.L., is our Assistant Secretary and a stockholder. We paid legal fees of \$179,796 in the quarterly period ended March 31, 2002, and \$384,287 for the year ended December 31, 2002, to Kohrman Jackson & Krantz P.L.L. for legal services rendered in connection with a variety of matters.

McGuireWoods LLP will pass on a number of legal matters with respect to the new notes for the dealer manager.

EXPERTS

Ernst & Young LLP, independent auditors, have audited our consolidated financial statements at December 31, 2001 and 2000, and for each of the three years in the period ended December 31, 2001, as set forth in their report. We have included our financial statements in this prospectus and consent solicitation statement and elsewhere in the registration statement in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

THE HAWK CORPORATION

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Report of Independent Auditors

Shareholders and Board of Directors Hawk Corporation

We have audited the accompanying consolidated balance sheets of Hawk Corporation and subsidiaries as of December 31, 2001 and 2000 and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2001. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Hawk Corporation and subsidiaries at December 31, 2001 and 2000 and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States.

/s/ Ernst & Young LLP

Cleveland, Ohio March 25, 2002, except for Notes D and M, as to which the date is May 15, 2002

Consolidated Balance Sheets

(In Thousands, except share data)

(In Thousands, except share data)			
	March 31,	Decem	ber 31,
	2002	2001	2000
	(Unaudited)		
Assets	,		
Current assets:			
Cash and cash equivalents	\$ 2,412	\$ 3,084	\$ 4,010
Accounts receivable, less allowance of \$480 in 2002, \$455 in 2001 and \$372 in 2000	32,708	25,773	29,602
Inventories:	, , , , ,	.,	,,,,,
Raw materials and work-in-process	20,723	19,360	20,140
Finished products	8,875	9,792	11,724
	29,598	29,152	31,864
	27,570	25,132	31,001
Deferred income taxes	1,199	1,200	1,113
Other current assets	5,206	4,638	2,976
Total current assets	71,123	63,847	69,565
Property, plant and equipment:	, ,	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Land and improvements	1,608	1,608	1,603
Buildings and improvements	18,781	18,657	18,240
Machinery and equipment	96,839	96,688	89,330
Furniture and fixtures	7,593	7,168	5,584
Construction in progress	2,267	1,450	3,316
	127,088	125,571	118,073
Less accumulated depreciation and amortization	60,771	58,208	47,672
Total property, plant and equipment	66,317	67,363	70,401
Other assets:	00,017	07,505	, 0, . 0 1
Goodwill	53,877	53,877	56,629
Other intangible assets	12,472	12,828	14,084
Shareholder notes	1,010	1,010	1,010
Other	5,196	5,180	3,696
Total other assets	72,555	72,895	75,419
Total assets	\$209,995	\$204,105	\$215,385
	\$207,775	\$204,103	Ψ213,303
Liabilities and shareholders' equity			
Current liabilities:	0.15014	Ø 12 122	A 11.550
Accounts payable	\$ 15,214	\$ 13,432	\$ 11,579
Accrued compensation	4,722 9,202	5,233 6,832	7,791 6,446
Other accrued expenses Current portion of long-term debt	32,153	6,862	7,273
Total current liabilities	61,291	32,359	33,089
Long-term liabilities:	60 0 11	00.057	06 661
Long-term debt Deferred income taxes	68,841 10,976	90,957 10,978	96,661 11,554
Other	3,392	3,374	2,392
Total long-term liabilities	83,209	105,309	110,607
Shareholders' equity: Series D preferred stock, \$.01 par value; an aggregate liquidation value of \$1,530, plus any			
unpaid dividends with 9.8% cumulative dividend (1,530 shares authorized, issued and			
outstanding)	1	1	1
Class E preferred stock, \$.01 par value; 100,000 shares authorized; none issued or outstanding	_	_	_
Class A common stock, \$.01 par value; 75,000,000 shares authorized; 9,187,750 issued; and			
8,557,240, 8,552,920 and 8,548,520 outstanding in 2002, 2001 and 2000, respectively	92	92	92
Class B common stock, \$.01 par value; 10,000,000 shares authorized; none issued or			
outstanding	E4 (10	54 (2)	54 (21
Additional paid-in capital	54,619 18 085	54,626	54,631
Retained earnings	18,985	19,623	24,109
Treasury stock, at cost, 633,006, 634,830 and 639,230 shares in 2002, 2001 and 2000,	(3,530)	(3,201)	(2,409)
respectively respectively	(4,672)	(4,704)	(4,735)
Total shareholders' equity			71,689
• •	65,495	66,437	
Total liabilities and shareholders' equity	\$209,995	\$204,105	\$215,385

Consolidated Statements of Operations

(In Thousands, except per share data)

Three Months ended March 31, Year ended December 31, 2002 2001 2001 **2000** 1999 (Unaudited) \$49,804 \$53,781 \$184,388 \$202,329 \$187,638 147,387 39,025 39,961 144,409 138,879 Gross profit..... 10,779 13,820 39,979 54,942 48,759 Operating Expenses: Selling, technical and administrative expenses . . 9,198 8,780 30,804 31,318 26,366 Restructuring costs..... 1,055 356 1,131 4,548 4,161 3,829 Total operating expenses 9,554 9,911 36,407 35,479 30,195 Income from operations..... 1,225 3,909 3,572 19,463 18,564 (2,443)(9,469)(9,016)(9,409)Interest expense (2,298)63 42 233 218 431 405 78 Other (expense) income, net (202) (530)(535)(Loss) income before income taxes 1,586 10,130 9,991 (1,212)(6,194)Income tax (benefit) provision 729 4,360 3,662 <u>(612</u>) <u>(1,858</u>) 6,329 (600)857 5,770 Net (loss) income \$ (4,336) Earnings per share: (.07)Basic (loss) earnings per share10 (.52).66 .71 .10 (.52).71 Diluted (loss) earnings per share **(.07**) .66

Consolidated Statements of Shareholders' Equity(In Thousands)

					Accumulat Comprehei			
	Preferred Stock	Common Stock	Additional Paid-in Capital	Retained Earnings	Foreign Currency Translation	Minimum Pension Liability	Treasury Stock	Total
Balance at January 1, 1999 Net income Other comprehensive income: Foreign currency translation	\$1	\$92	\$54,645	\$12,310 6,329	\$ (640) (1,309)	\$ —	\$(1,993)	\$64,415 6,329 (1,309)
Total comprehensive income	_			(148)			(2,798)	5,020 (148) (2,798)
Balance at December 31, 1999 Net income Other comprehensive income: Minimum pension liability (net of	1	92	54,645	18,491 5,770	(1,949)	_	(4,791)	66,489 5,770
tax)					(377)	(83)		(83) (377)
Total comprehensive income			(14)	(152)			5.6	5,310 (152)
treasury as compensation Balance at December 31, 2000	<u> </u>	92	(14) 54,631	24,109	(2,326)	(83)	(4,735)	71,689
Net loss	1	92	34,031	(4,336)	(2,320)	(495)	(4,733)	(4,336) (495)
Foreign currency translation					(297)			(297)
Total comprehensive loss Preferred stock dividend Issuance of common stock from treasury as compensation			(5)	(150)			31	(5,128) (150)
Balance at December 31, 2001	<u>\$1</u>	<u>\$92</u>	\$54,626	\$19,623	\$(2,623)	\$(578)	\$(4,704)	\$66,437
Net loss (unaudited) Other comprehensive loss: Foreign currency translation	Ψ1	Ψ-2	ÇC 1,020	(600)	ψ(=,0=0)	φ(υ/υ)	ψ(,,,ο,,)	(600)
(unaudited)					(329)			(329)
Total comprehensive loss (unaudited)								(929)
Preferred stock dividend (unaudited) Issuance of common stock from treasury as compensation (unaudited)			(7)	(38)			32	(38) 25
Balance at March 31, 2002		_	(//		-			
(unaudited)	<u>\$1</u>	<u>\$92</u>	\$54,619	\$18,985	<u>\$(2,952)</u>	<u>\$(578)</u>	<u>\$(4,672</u>)	\$65,495

Consolidated Statements of Cash Flows

(In Thousands)

	Three I ended M		Year er	ber 31,		
	2002	2001	2001	2000	1999	
	(Unau	dited)				
Cash flows from operating activities						
Net (loss) income	\$ (600)	\$ 857	\$ (4,336)	\$ 5,770	\$ 6,329	
Adjustments to reconcile net (loss) income to net cash provided by operating activities:						
Depreciation and amortization	3,093	3,911	15,929	14,976	13,673	
Deferred income taxes		(81)	(637)	1,650	1,440	
Loss on fixed assets			399	216	518	
Changes in operating assets and liabilities, net of acquired assets:						
Accounts receivable	(7,067)	(5,667)	3,495	590	(2,690)	
Inventories	(565)	13	2,453	(3,622)	121	
Other assets	(185)	(26)	(3,156)	57	581	
Accounts payable	1,847	2,553	2,006	(205)	(67)	
Other liabilities	1,557	(382)	(1,683)	2,132	(159)	
Net cash provided by operating activities	(1,920)	1,178	14,470	21,564	19,746	
Cash flows from investing activities						
Business acquisitions	— (4 004)	(2.0.40)	(0.00.6)	(6,510)	(19,350)	
Purchases of property, plant and equipment	(1,931)	(2,840)	(9,096)	(10,489)	(10,134)	
Proceeds from sale of assets				69	3,682	
Net cash used in investing activities	(1,931)	(2,840)	(9,096)	(16,930)	(25,802)	
Payments on short-term debt	_	_	_	(808)	_	
Proceeds from long-term debt	15,838	13,733	40,457	30,217	38,022	
Payments on long-term debt	(12,569)	(12,781)	(46,520)	(33,886)	(39,701)	
Payments of preferred stock dividends	(38)	(37)	(150)	(152)	(148)	
Repurchase of common stock					(2,798)	
Net cash used in financing activities	3,231	915	(6,213)	(4,629)	(4,625)	
Effect of exchange rate changes on cash	(52)	(109)	(87)	12	357	
Net (decrease) increase in cash and cash	((50)	(0.5.6)	(02.6)	1.7	(10.224)	
equivalents	(672) 3,084	(856) 4,010	(926) 4,010	17 3,993	(10,324) 14,317	
Cash and cash equivalents at end of year	<u>\$ 2,412</u>	\$ 3,154	\$ 3,084	\$ 4,010	\$ 3,993	
Supplemental cash flow information	¢ 465	¢ 505	¢ 0.040	¢ 0.045	¢ 0.402	
Cash payments for interest	\$ 465	\$ 565	\$ 8,940	\$ 9,045	\$ 9,403	
Net cash payments (refunds) for income taxes	<u>\$ (288)</u>	<u>\$ (41)</u>	\$ 871	\$ 3,685	\$ 2,596	
Non-cash investing and financing activities:						
Equipment purchased with capital leases and notes payable	\$ 333	\$ 441	\$ 422	\$ 24	\$ 85	
Issuance of common stock from treasury	\$ 25	\$ 26	\$ 26	\$ 42	\$ —	
,						

Notes to Consolidated Financial Statements

Years ended December 31, 2001, 2000 and 1999 Three Months ended March 31, 2002 (Unaudited) (Dollars in Thousands, except per share data)

A. Basis of Presentation

Hawk Corporation (the Company) designs, engineers, manufactures and markets specialized components used in a wide variety of aerospace, industrial and commercial applications.

The consolidated financial statements of the Company include its wholly owned subsidiaries. Beginning in December 2000, the financial statements also include the Company's majority ownership interest in Net Shape Technologies LLC (Net Shape). All significant intercompany accounts and transactions have been eliminated in the accompanying financial statements. Certain amounts have been reclassified in 2000 and 1999 to conform with the 2001 presentation.

In the fourth quarter of 2000, the Company adopted Emerging Issues Task Force Issue 00-10 "Accounting for Shipping and Handling Fees and Costs," and changed its accounting policy to reflect in its consolidated statement of operations all shipping and handling costs as cost of sales and related shipping revenue in net sales. All prior periods have been changed to conform to current year presentation.

The accompanying unaudited consolidated financial statements at March 31, 2002 and for the three months ended March 31, 2002 and 2001 have been prepared in accordance with generally accepted accounting principles for interim financial information and Article 10 of Regulation S-X. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included. Operating results for the three month period ended March 31, 2002 and 2001 are not necessarily indicative of the results that may be expected for future interim periods or the year ending December 31, 2002.

B. Significant Accounting Policies

Cash and Cash Equivalents

The Company considers all highly liquid investments with maturity of three months or less when purchased to be cash equivalents.

Inventories

Inventories are stated at the lower of cost or market. Cost is determined by the first-in, first-out (FIFO) method.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost and include expenditures for additions and major improvements. Expenditures for repairs and maintenance are charged to operations as incurred. The Company uses the straight-line method of depreciation for financial reporting purposes. Buildings and improvements are depreciated over periods ranging from 15 to 33 years. Machinery and equipment is depreciated over periods ranging from 4 to 12 years. Furniture and fixtures are depreciated over periods ranging from 3 to 10 years. Accelerated methods of depreciation are used for federal income tax purposes. The Company's depreciation expense was \$11,381 in 2001, \$10,815 in 2000 and \$9,844 in 1999.

Intangible Assets

Intangible assets are amortized using the straight-line method over periods ranging from 5 to 40 years (See Note D). The Company evaluates the recoverability of long-lived assets (under Statement of Financial Accounting Standards (SFAS) No. 121 "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to

Notes to Consolidated Financial Statements (Continued)

B. Significant Accounting Policies (Continued)

Be Disposed Of") and the related estimated remaining lives at each balance sheet date. The Company would record an impairment charge or change in the useful life whenever events or changes in circumstances indicate that the carrying amount may not be recoverable, determined using undiscounted cash flows and measured using discounted cash flows (generally, at the subsidiary level), or the useful life has changed.

Foreign Currency Translation

The assets and liabilities of the Company's foreign subsidiaries are translated into U.S. dollars at year-end exchange rates.

Revenues and expenses are translated at weighted average exchange rates. Gains and losses from transactions are included in results of operations.

Gains and losses resulting from translation are included in accumulated other comprehensive loss, a component of shareholders' equity.

Revenue Recognition

In accordance with Staff Accounting Bulletin (SAB) No. 101, "Revenue Recognition in Financial Statements," which became effective in 2000, revenue from the sale of the Company's products is recognized upon shipment to the customer and when title has transferred. Substantially all of the Company's revenues are derived from fixed price purchase orders. Costs and related expenses to manufacture the products are recorded as costs of sales when the related revenue is recognized. The Company establishes bad debt reserves based on historical experience and believes that collections of revenues, net of the bad debt reserves, is reasonably assured.

Significant Concentrations

The Company provides credit, in the normal course of its business, to original equipment and aftermarket manufacturers. The Company's customers are not concentrated in any specific geographic region. The Company performs ongoing credit evaluations of its customers and maintains allowances for potential credit losses which, when realized, have been within the range of management's expectations.

Product Research and Development

Product research and development costs are expensed as incurred. The Company's expenditures for product research and development and engineering were approximately \$3,893 in 2001, \$3,533 in 2000 and \$3,229 in 1999.

Income Taxes

The Company uses the liability method in measuring the provision for income taxes and recognizing deferred tax assets and liabilities in the balance sheet. The liability method requires that deferred income taxes reflect the tax consequences of currently enacted rates for differences between the tax and financial reporting bases of assets and liabilities.

Fair Value of Financial Instruments

The following methods and assumptions were used by the Company in estimating its fair value disclosures for financial instruments:

Cash and Cash Equivalents — The carrying amounts reported in the consolidated balance sheets for cash and cash equivalents approximate fair value.

Notes to Consolidated Financial Statements (Continued)

B. Significant Accounting Policies (Continued)

Long-Term Debt (including Current Portion) — The fair values of the Company's publicly traded debentures, shown in the following table, are based on quoted market prices. The fair values of the Company's non-traded debt, also shown in the following table, are estimated using discounted cash flow analysis, based on the Company's current incremental borrowing rates for similar types of borrowing arrangements.

			December 31,			
	March 31, 2002		2001		2000	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value	Carrying Amount	Fair Value
	(Unauc	dited)				
Publicly traded debt	\$65,000	\$62,156	\$65,000	\$62,156	\$65,000	\$61,100
Non-traded debts (including capital leases)	\$35,994	\$35,994	\$32,819	\$32,819	\$38,934	\$38,934

Interest Rate Swap — The Company enters into interest rate swaps primarily to hedge against interest rate risks. These agreements generally involve the exchange of fixed and floating rate interest payment obligations without the exchange of the underlying principal amounts. Counterparties to this agreement are major financial institutions. During the first quarter of 2001, the Company entered into an interest rate swap agreement to moderate exposure to interest rate changes. Under this agreement, the Company effectively converted a portion of its floating rate debt to a fixed rate of 5.34% on \$10,000 notional amount. Although this financial instrument did not meet the hedge accounting criteria of SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities," it continues to be effective in achieving the risk management objectives for which it was intended. The carrying value and the fair value of the interest rate swap at December 31, 2001 is \$400 (liability). The change in the fair value is reflected in the Consolidated Statement of Operations in other (expense) income, net.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that effect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Recently Issued Accounting Pronouncements

Effective January 1, 2001, the Company adopted SFAS No. 133, as amended by SFAS No. 138 "Accounting for Certain Derivative Instruments and Certain Hedging Activities." SFAS No. 133, as amended, requires that an entity recognize all derivatives as either assets or liabilities in the balance sheet and measure those instruments at fair value and recognize changes in the fair value of derivatives in earnings in the period of change unless the derivative qualifies as an effective hedge that offsets certain exposures. The adoption of SFAS No. 133 did not have a material effect on January 1, 2001.

In June 2001, the Financial Accounting Standards Board issued SFAS No. 141, "Business Combinations," and SFAS No. 142, "Goodwill and Other Intangible Assets." SFAS No. 141 requires that the purchase method of accounting be used for all business combinations initiated after June 30, 2001. SFAS No. 141 also includes guidance on the initial recognition and measurement of goodwill and other intangible assets arising from business combinations completed after June 30, 2001. SFAS No. 142 prohibits the amortization of goodwill and intangible assets with indefinite useful lives. SFAS No. 142 requires that these assets be reviewed for impairment at least annually. Intangible assets with finite lives will continue to be amortized over their useful lives. Additionally, SFAS No. 142 requires that goodwill included in the carrying value of equity method investments no longer be amortized.

Notes to Consolidated Financial Statements (Continued)

B. Significant Accounting Policies (Continued)

The Company is currently in the process of performing the first step of the prescribed transitional goodwill impairment test with respect to existing goodwill. The first step of the transitional goodwill impairment test involves a comparison of the fair value of a reporting unit, as defined under FAS 142, with its carrying amount. If the carrying amount exceeds the fair value of any reporting unit, the Company will perform step 2 of the transitional goodwill impairment test, which will be used to measure the amount of any impairment loss. The Company has not yet determined what the effect of these tests will be on its financial position or results of operations. As of March 31, 2002, the Company has recognized no impairment of goodwill. The Company is required to complete step 1 of the transitional goodwill impairment test by June 30, 2002, and step 2 by December 31, 2002. The Company cannot assure you that future goodwill impairments will not occur. The unaudited pro forma effect of applying the non-amortization provisions of FAS 142 to the quarter ended March 31, 2001 and the years ended December 31, 2001, 2000 and 1999 would have been to decrease amortization expense by approximately \$0.8 million, \$3.2 million, \$2.8 million and \$2.1 million, respectively, resulting in unaudited pro forma basic and diluted earnings (loss) per share of \$0.15, \$(0.30), \$0.86 and \$0.86, respectively.

C. Business Acquisitions

In March 1999, the Company acquired all of the outstanding stock of Allegheny Powder Metallurgy, Inc. (Allegheny) for \$14,500 in cash and \$2,000 in notes payable to the selling shareholders. The acquisition was accounted for as a purchase. The excess of the purchase price over the estimated fair value of the net assets acquired of \$8,110 is currently being amortized over 30 years and is included in intangible assets. The results of operations of Allegheny are included in the Company's consolidated statements of operations since the date of acquisition.

In November 1999, the Company acquired substantially all of the assets (except cash) and assumed certain liabilities of Quarter Master Industries, Inc. (Quarter Master) for \$4,850 in cash and a \$1,000 note payable to the selling shareholder. The purchase price also includes future contingent payments based on earnings. The Company does not anticipate these contingent payments to be material. The acquisition was accounted for as a purchase. The excess of the purchase price over the estimated fair value of the net assets acquired of \$4,240 is currently being amortized over 15 years and is included in intangible assets. The results of operations of Quarter Master are included in the Company's consolidated statements of operations since the date of acquisition.

In November 2000, the Company acquired all of the outstanding stock of Tex Racing Enterprises, Inc. (Tex Racing) for \$6,030 in cash and a \$1,500 note payable to the selling shareholder. The purchase price also includes future contingent payments based on earnings. The Company does not anticipate these contingent payments to be material. The acquisition was accounted for as a purchase. The excess of the purchase price over the estimated fair value of the net assets acquired of \$4,700 is currently being amortized over 15 years and is included in intangible assets. The results of operations of Tex Racing are included in the Company's consolidated statements of operations since the date of acquisition.

In December 2000, the Company acquired a majority of Net Shape membership interests for \$480 in cash. The acquisition was accounted for as a purchase. The excess of the purchase price over the estimated fair value of net assets acquired in the amount of \$742 is currently being amortized over 10 years and is included in intangible assets. The results of operations of Net Shape are included in the Company's consolidated statements of operations since the date of acquisition.

The following unaudited pro forma consolidated results of operations for 2000 give effect to the Allegheny, Quarter Master, Tex Racing and Net Shape acquisitions as though they had occurred on January 1, 2000 and include certain adjustments, such as additional goodwill amortization expense.

Notes to Consolidated Financial Statements (Continued)

C. Business Acquisitions (Continued)

	Year ended December 31, 2000
Net sales	\$209,435
Net income	\$ 5,658
Income per share — basic	\$.64
Income per share — diluted	\$.64

Pro forma net sales and net income are not necessarily indicative of the net sales and net income that would have occurred had the acquisitions been made at the beginning of 2000 or the results that may occur in the future.

D. Goodwill and Other Intangible Assets

The components of goodwill and other intangible assets and the related accumulated amortization are as follows:

Tollows.				December 31,					
	1	March 31, 2002	2	,	2001		2000		
	Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net
		(Unaudited)							
Goodwill, beginning of the period	\$67,808	\$13,931	\$53,877	\$67,380	\$10,751	\$56,629	\$61,895	\$ 7,941	\$53,954
Additions				428	3,180	(2,752)	5,485	2,810	2,675
Goodwill, end of the period	\$67,808	\$13,931	\$53,877	\$67,808	\$13,931	\$53,877	\$67,380	\$10,751	\$56,629
Other intangible assets subject to amortization:									
Product certifications	\$20,820	\$ 9,724	\$11,096	\$20,820	\$ 9,544	\$11,276	\$20,820	\$ 8,824	\$11,996
Deferred financing	4,693	3,746	947	4,693	3,593	1,100	4,693	2,981	1,712
Other intangible assets	3,013	2,584	429	3,013	2,561	452	2,901	2,525	376
Subtotal	\$28,526	\$16,054	\$12,472	\$28,526	\$15,698	\$12,828	\$28,414	\$14,330	\$14,084
Total	\$96,334	\$29,985	\$66,349	\$96,334	\$29,629	\$66,705	\$95,794	\$25,081	\$70,713

Product certifications were acquired and valued based on the acquired company's position as a certified supplier of friction materials to the major manufacturers of commercial aircraft brakes.

A summary of the Company's net goodwill for the periods ended March 31, 2002, December 31, 2001 and 2000 by reportable operating segment is as follows:

	March 31,	Decem	ber 31,
	2002	2001	2000
	(Unaudited)		
Friction products	\$11,100	\$11,100	\$12,219
Precision components	28,039	28,039	29,092
Performance automotive	8,392	8,392	8,720
Motor	6,346	6,346	6,598
Consolidated	\$53,877	\$53,877	\$56,629

The Company estimates its amortization expense for the next five years to be as follows: 2002 - \$1,422; 2003 - \$1,257; 2004 - \$789; 2005 - \$789 and 2006 - \$776.

Notes to Consolidated Financial Statements (Continued)

E. Financing Arrangements

	March 31,	Decem	ber 31,
	2002	2001	2000
	(Unaudited)		
Senior Notes	\$65,000	\$65,000	\$65,000
Term Loan	16,250	17,500	22,500
Revolver	13,058	8,337	8,145
Other	6,686	6,982	8,289
	100,994	97,819	103,934
Less current portion	32,153	6,862	7,273
	<u>\$66,841</u>	\$90,957	\$96,661

In November 1996, the Company issued \$100,000 in Senior Notes (Senior Notes) due on December 1, 2003, of which \$65,000 is outstanding at December 31, 2001. In accordance with the terms of the Senior Notes agreement, the Company has the option to redeem the Senior Notes prior to the due date. Interest is payable semi-annually on June 1 and December 1 of each year commencing June 1, 1997, at a fixed rate of 10.25%. In March 1997, the Senior Notes were exchanged for notes registered with the Securities and Exchange Commission. The Senior Notes are fully and unconditionally guaranteed on a joint and several basis by each of the direct and indirect wholly owned domestic subsidiaries of the Company (Guarantor Subsidiaries) (See Note N).

In May 1998, the Company entered into a \$35,000 term loan facility and a \$50,000 revolving credit facility (the Credit Facility). The term loan has quarterly maturities of \$1,250 beginning September 30, 1998 with the remaining principal of \$12,500 due on March 31, 2003. The revolving credit facility matures March 31, 2003. As of December 31, 2001, the Company was paying an average rate of 6.4% on its Credit Facility outstanding compared to an average rate of 8.7% at December 31, 2000.

On March 25, 2002, the Company amended the Credit Facility reducing the revolving credit component of the facility to \$25,000, modifying the terms of financial covenants as of December 31, 2001 and for future reporting periods and increasing the margin over the base interest rates. The interest rates on the credit facility range from 250 to 450 basis points over the Eurodollar rate, or alternatively, 125 to 325 basis points over the prime rate based on certain quarterly performance criteria. The Company is required to pay a facility fee of 0.50% on the commitment amount of the Credit Facility. The Credit Facility is collateralized by a security interest in the accounts receivable, inventory, equipment and real estate and other assets of the Company and its subsidiaries, and the Company has pledged the stock of all of its U.S. subsidiaries and certain stock of its foreign subsidiaries as collateral. Restrictive terms of the credit facility require that the Company maintain specified financial ratios and comply with other loan covenants. Based on the amended Credit Facility, the Company was in compliance with the financial covenants as of December 31, 2001.

As of March 31, 2002 and December 31, 2001, the Company had approximately \$8,200 (unaudited) and \$6,200, respectively, available for future borrowings under its Credit Facility, as amended.

The Company has stand-by Letters of Credit totaling \$1,262. There are no outstanding balances at December 31, 2001.

Aggregate principal payments due on long-term debt as of December 31, 2001 are as follows: 2002 - \$6,862; 2003 - \$88,215; 2004 - \$1,325; 2005 - \$826; 2006 - \$118; and thereafter - \$473.

Notes to Consolidated Financial Statements (Continued)

F. Shareholders' Equity

Dividends on the Series D preferred stock are cumulative at a rate of 9.8%. Each share of Series D preferred stock is (1) entitled to a liquidation preference equal to \$1,000 per share plus any accrued or unpaid dividends, (2) not entitled to vote, except in certain circumstances, and (3) redeemable in whole, at the option of the Company, for \$1 per share plus all accrued dividends to the date of redemption. The Company also has 100,000 authorized shares of \$.01 par value, Series E preferred stock, of which no shares are issued or outstanding. Each share of Series E preferred stock is (1) not redeemable and is entitled to dividends in the amount of 1,000 times the per share dividend received by the holders of common stock, (2) entitled to 1,000 votes per share, and (3) entitled to a liquidation right of 1,000 times the aggregate amount distributed per share to the holder of common stock.

On November 13, 1997, the Board of Directors declared a dividend of one Series E preferred share purchase right (a Right) for each outstanding share of common stock. The dividend was payable to the shareholders of record as of January 16, 1998, and with respect to common stock, issued thereafter until the Distribution Date, as defined in the Rights Agreement, and in certain circumstances, with respect to common stock issued after the Distribution Date. Except as set forth in the Rights Agreement, each Right, when it becomes exercisable, entitles the registered holder to purchase from the Company one one-thousandth of a share of Series E preferred stock at a price of \$70 per one one-thousandth share of a Series E preferred stock, subject to adjustment.

G. Employee Stock Option Plan

The Company grants stock options to certain employees under various plans, to purchase shares of Class A common stock. During 2001, 2000 and 1999, the Company granted stock options to purchase an aggregate of 701,594, 328,878 and 147,400 shares, respectively, at exercise prices representing the closing market price of the Company's stock at the date of grant. The options vest ratably over specific defined periods. Canceled options are available for future issuance under the provisions of the stock option plans.

The following table summarizes the stock option activity for the years ended December 31, 2001, 2000 and 1999:

	20	001 2		2000		99
	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price
Options outstanding at beginning of						
year	766,267	\$10.51	472,600	\$13.78	340,200	\$16.50
Granted	701,594	3.64	328,878	6.11	147,400	7.47
Exercised	_	_				
Canceled	(143,215)	10.45	(35,211)	13.16	(15,000)	13.83
Options outstanding at end of year	1,324,646	\$ 6.73	766,267	\$10.51	472,600	\$13.78
Exercisable at the end of the year	242,169	\$12.36	159,300	\$14.91	65,340	\$16.62
Weighted average fair value of options granted during the year		\$ 2.56		\$ 4.00		\$ 4.13
Shares available for future grant	75,354		633,733		227,400	

Notes to Consolidated Financial Statements (Continued)

G. Employee Stock Option Plan (Continued)

Exercise prices for options outstanding as of December 31, 2001 ranged from \$3.00 to \$18.70. A summary of the options by range of exercise prices is as follows:

		Outstandii	ng	Exercisable		
Range of Exercise Price	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (years)	Options	Weighted Average Exercise Price	
\$3.00 to \$6.00	850,246	\$ 3.96	9.5	30,709	\$ 5.49	
\$6.01 to \$12.00	263,700	\$ 7.30	8.0	82,640	\$ 7.42	
\$12.01 to \$18.70	210,700	\$17.17	5.7	128,820	\$17.17	

The Company has adopted the disclosure-only provisions of SFAS No. 123, "Accounting for Stock-Based Compensation," but applies Accounting Principles Board Opinion No. 25 and related interpretations in accounting for its stock option plans. Accordingly, no compensation expense has been reflected in the accompanying consolidated financial statements related to the stock options issued pursuant to these plans. If the Company had elected to recognize compensation expense based on the fair value at the grant dates for awards consistent with the method prescribed by SFAS No. 123, net income and net income per share would have been changed to the pro forma amounts indicated below:

	Year end	ıber 31,	
	2001	2000	1999
Net (loss) income:			
As reported	\$(4,336)	\$5,770	\$6,329
Pro forma	(5,158)	4,975	5,469
(Loss) earnings per share (basic and diluted):			
As reported	(.52)	.66	.71
Pro forma	(.62)	.58	.63

The fair value of the options granted used to compute pro forma net (loss) income and (loss) earnings per share disclosures is the estimated present value at the grant date using the Black-Scholes option-pricing model with the following assumptions:

	Year en	Year ended Decemb		
	2001	2000	1999	
Dividend yield	0%	0%	0%	
Expected volatility	58.4%	57.8%	48.8%	
Risk free interest rate	5.00%	5.25%	6.5%	
Expected average holding period	7 years	7 years	7 years	

H. Employee Benefits

The Company has several defined benefit pension plans that cover certain employees. Benefits payable are based primarily on compensation and years of service or a fixed annual benefit for each year of service. Certain hourly employees are also covered under collective bargaining agreements. The Company funds the plans in amounts sufficient to satisfy the minimum amounts required under the Employee Retirement Income Security Act of 1974.

Notes to Consolidated Financial Statements (Continued)

H. Employee Benefits (Continued)

The components of the defined benefit pension plans are as follows:

	December 31,		
	2001	2000	
Change in benefit obligation:			
Benefit obligation at beginning of year	\$15,003	\$12,530	
Service cost	550	508	
Interest cost	1,148	1,019	
Actuarial losses	1,609	1,601	
Plan amendments	_	220	
Foreign currency exchange rate charges	(41)	(25)	
Benefits paid	<u>(741</u>)	(850)	
Benefit obligation at end of year	\$17,528	\$15,003	
Change in plan assets:			
Fair value of plan assets at beginning of year	\$19,449	\$20,270	
Actual return on plan assets	(190)	(398)	
Foreign currency exchange rate charges	(67)	(45)	
Company contributions	948	472	
Benefits paid	(741)	(850)	
Fair value of plan assets at end of year	<u>\$19,399</u>	\$19,449	
Funded status of the plans	\$ 1,871	\$ 4,446	
Unrecognized net actuarial losses (gains)	1,484	(1,882)	
Unrecognized prior service cost	500	576	
Net prepaid benefit cost	\$ 3,855	\$ 3,140	
Amounts recognized in the balance sheet consist of the following:			
Prepaid benefit cost	\$ 3,855	\$ 3,140	
Accrued benefit liability	(1,400)	(393)	
Intangible asset	454	253	
Cumulative other comprehensive loss	946	140	
Net amount recognized	\$ 3,855	\$ 3,140	

Amounts applicable to the Company's underfunded pension plans at December 31, 2001 and 2000 are as follows:

	December 31,	
	2001	2000
Projected benefit obligation	\$4,877	\$4,303
Accumulated benefit obligation	4,877	4,269
Fair value of plan assets	4,120	4,139
Amounts recognized as accrued benefit liabilities	1,400	393
Amounts recognized as intangible asset	454	253

Notes to Consolidated Financial Statements (Continued)

H. Employee Benefits (Continued)

	Year ended December 31,			
	2001	2000	1999	
Components of net periodic pension cost:				
Service cost	\$ 550	\$ 508	\$ 613	
Interest cost	1,148	1,019	920	
Expected return on plan assets	(1,585)	(1,455)	(1,498)	
Amortization of prior service cost	76	67	60	
Recognized net actuarial loss (gain)	10	(26)	58	
	\$ 199	\$ 113	\$ 153	

The plans' assets are primarily invested in fixed income and equity securities. In addition, one of the Company's defined benefit plans also contains investments in the Company's stock. As of December 31, 2001 60,000 shares of the Company's stock were held by the defined benefit plan at a cost of \$717. The market value of these investment as of December 31, 2001 was \$216.

The following assumptions were used in accounting for the defined benefit plans:

	2001	<u>2000</u>	1999
Used to compute the projected benefit obligation as of December 31:			
Weighted average discount rate	7.25%	7.5%	8.0%
Annual salary increase	3.0%	3.0%	3.0%
Weighted average expected long-term rate of return on plan assets for the			
year ended December 31	9.0%	9.5%	9.5%

The Company also sponsors several defined contribution plans which provide voluntary employee contributions and, in certain plans, matching and discretionary employer contributions. Expenses associated with these plans were approximately \$581 in 2001, \$1,444 in 2000 and \$1,263 in 1999. In 2001, the Company made no discretionary employer contributions.

I. Lease Obligations

The Company has capital lease commitments for buildings and equipment. Future minimum annual rentals are: 2002 — \$300; 2003 — \$218; 2004 — \$206; 2005 — \$151; 2006 — \$35; and thereafter — \$0. Amount representing interest is \$130. Total capital lease obligations are included in other long-term debt. Amortization of assets recorded under capital leases is included with depreciation expense.

The Company leases certain office and warehouse facilities and equipment under operating leases. Rental expense was approximately \$2,131 in 2001, \$1,828 in 2000 and \$1,127 in 1999. Future non-cancelable minimum lease commitments under these agreements that have an original or existing term in excess of one year as of December 31, 2001 are as follows: 2002 - \$1,864; 2003 - \$1,550; 2004 - \$1,437; 2005 - \$1,054; 2006 - \$502; and thereafter - \$474.

Notes to Consolidated Financial Statements (Continued)

J. Income Taxes

The (benefit) provision for income taxes consists of the following:

	Year ended December 31,			
	2001	2000	1999	
Current:				
Federal	\$(2,792)	\$2,020	\$1,771	
State and local	(26)	171	113	
Foreign	297	527	251	
	(2,521)	2,718	2,135	
Deferred:				
Federal	1,118	1,468	1,259	
State and local	62	119	138	
Foreign	(517)	55	130	
	663	1,642	1,527	
Total income tax (benefit) provision	<u>\$(1,858)</u>	\$4,360	\$3,662	

Deferred income taxes reflect the net effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting and income tax purposes. Significant components of the Company's deferred tax assets and liabilities as of December 31 are as follows:

	2001	2000
Deferred tax assets:		
Accrued vacation	\$ 529	\$ 530
Other accruals	836	639
Foreign capital leases	1,278	1,304
Foreign net operating loss carryforwards	496	_
Inventory	472	871
Total deferred tax assets	3,611	3,344
Deferred tax liabilities:		
Tax over book depreciation and amortization	11,381	11,384
Employee benefits	373	687
Foreign leased property	1,627	1,666
Other	8	48
Total deferred tax liabilities	13,389	13,785
Net deferred tax liabilities	\$ 9,778	\$10,441

Notes to Consolidated Financial Statements (Continued)

J. Income Taxes (Continued)

The (benefit) provision for income taxes differs from the amounts computed by applying the federal statutory rate as follows:

	December 31,		
	2001	<u>2000</u>	1999
Income tax (benefit) expense at federal statutory rate	(35.0)%	35.0%	35.0%
State and local tax, net of federal tax benefit	0.4	1.8	1.6
Nondeductible goodwill amortization	6.2	3.9	4.0
Adjustment to worldwide tax accrual and other, net	(1.6)	2.3	(3.9)
Provision for income taxes	<u>(30.0</u>)%	<u>43.0</u> %	<u>36.7</u> %

The increase in the Company's effective tax rate from 1999 to 2000 was primarily attributable to the increase in higher tax rate foreign earnings relative to the domestic earnings taxed at the federal statuary rate. The adjustment to worldwide tax accrual and other, net component of the income tax rate reconciliation includes adjustments to tax accruals as a result of the resolution of certain tax contingencies during the periods presented.

Undistributed earnings of the Company's foreign subsidiaries amounted to approximately \$6,500 at December 31, 2001. These earnings are considered to be indefinitely reinvested and, accordingly, no provision for U.S. federal and state income taxes has been provided. The Company cannot determine in any practical manner the amount of income tax liability that would result had these earnings actually been repatriated. Upon distribution of these earnings in the form of dividends or otherwise, the Company would be subject to both U.S. income taxes, which may be offset by foreign tax credits, and withholding taxes payable to various foreign countries.

Notes to Consolidated Financial Statements (Continued)

K. (Loss) Earnings per Share

Basic and diluted (loss) earnings per share are computed as follows:

		Months ded				
	Marc	ch 31,	Year ended December 31,			
	2002	2001	2001	2000	1999	
	(Unau	udited)				
(Loss) income available to common shareholders:						
Net (loss) income	\$(600)	\$ 857	\$(4,336)	\$5,770	\$6,329	
Less: Preferred stock dividends	(38)	(37)	150	152	148	
Net (loss) income attributable to common shareholders	<u>\$(638)</u>	\$ 820	\$(4,486)	\$5,618	\$6,181	
Weighted average shares (in thousands):						
Basic weighted average shares	8,555	8,550	8,552	8,548	8,657	
Diluted:						
Basic from above	8,555	8,550	8,552	8,548	8,657	
Effect of stock options		19		21		
Diluted weighted average shares	8,555	8,569	8,552	8,569	8,657	
(Loss) earnings per share:						
Basic (loss) earnings per share	<u>\$ (.07)</u>	\$.10	<u>\$ (.52)</u>	\$.66	\$.71	
Diluted (loss) earnings per share	<u>\$ (.07</u>)	\$.10	<u>\$ (.52)</u>	\$.66	\$.71	

Stock options outstanding were not included in the computation of diluted earnings per share for 2001 and 1999, since it would have resulted in an anti-dilutive effect.

L. Related Parties

In July 1995, certain shareholders of the Company issued interest-bearing notes to the Company in the amount of \$2,000, enabling them to repay certain indebtedness incurred by them with respect to an acquisition. The notes are due and payable on December 31, 2005 and bear interest at the prime rate. The balance outstanding at December 31, 2001 and 2000 is \$1,010.

M. Business Segments

During 2000, as a result of recent acquisitions, the Company changed its segment reporting structure to match management's internal reporting of businesses operations. Significant changes include the segregation of the performance automotive and motor businesses.

The Company now operates in four primary business segments: friction products, precision components (formerly powder metal), performance automotive and motors. The Company's reportable segments are strategic business units that offer different products and services. They are managed separately based on fundamental differences in their operations.

The friction products segment engineers, manufactures and markets specialized components, used in a variety of aerospace, industrial and commercial applications. The Company, through this segment, is a worldwide supplier of friction components for brakes, clutches and transmissions.

Notes to Consolidated Financial Statements (Continued)

M. Business Segments (Continued)

The precision components segment engineers, manufactures and markets specialized powder metal components, used primarily in industrial applications. The Company, through this segment, targets three areas of the powder metal component marketplace: high precision components that are used in fluid power applications, large powder metal parts used in construction, agricultural and truck applications, and smaller high-volume parts.

The performance automotive segment engineers, manufactures and markets premium branded clutch and drive-train components. The Company, through this segment, targets leading teams in the NASCAR, CART and IRL racing series, as well as other road race and oval track competition cars. An operating unit formerly associated with the Company's performance automotive segment was reclassified as of January 1, 2002 to the Company's friction products segment as a result of changes in the internal operating responsibility of that unit. All prior periods have been reclassified to reflect this change.

The motor segment engineers, manufactures and markets die-cast aluminum rotors for use in fractional and subfractional electric motors. The Company, through this segment, targets a wide variety of application such as small household appliances and business equipment.

The information by segment is as follows:

	Three Months ended March 31,		V 2222 22	adad Daaam	h 21
			-	nded Decem	
	2002	2001	2001	2000	1999
	(Unau	ıdited)			
Net sales to external customers:					
Friction products	\$26,033	\$29,563	\$104,127	\$116,267	\$117,430
Precision components	17,206	17,846	58,272	72,019	61,063
Performance automotive	3,895	4,161	12,967	5,612	514
Motor	2,670	2,211	9,022	8,431	8,631
Consolidated	<u>\$49,804</u>	\$53,781	\$184,388	\$202,329	\$187,638
Depreciation and amortization:					
Friction products	\$ 1,908	\$ 2,306	\$ 9,276	\$ 9,297	\$ 8,888
Precision components	944	1,194	4,886	4,525	4,080
Performance automotive	203	183	742	386	54
Motor	38	228	1,025	768	651
Consolidated	\$ 3,093	\$ 3,911	\$ 15,929	\$ 14,976	\$ 13,673
Gross profit (loss):					
Friction products	\$ 6,036	\$ 7,761	\$ 24,899	\$ 30,901	\$ 28,414
Precision components	3,127	4,446	11,495	19,360	17,806
Performance automotive	1,413	1,404	3,854	2,856	241
Motor	203	209	(269)	1,825	2,298
Consolidated	\$10,779	\$13,820	\$ 39,979	\$ 54,942	\$ 48,759

Notes to Consolidated Financial Statements (Continued)

M. Business Segments (Continued)

	Three Months					
		larch 31,	Year ei	Year ended Decembe		
	2002	2001	2001	2000	1999	
	(Unau	dited)				
Operating income (loss):						
Friction products	\$ 772	\$ 2,871	\$ 6,386	\$ 11,403	\$ 10,187	
Precision components	121	1,102	312	8,419	8,737	
Performance automotive	824	381	285	907	(10)	
Motor	(492)	(445)	(3,411)	(1,266)	(350)	
Consolidated	\$ 1,225	\$ 3,909	\$ 3,572	\$ 19,463	\$ 18,564	
Capital expenditures:						
(including capital leases):						
Friction products	\$ 996	\$ 1,361	\$ 5,000	\$ 3,912	\$ 5,626	
Precision components	177	977	2,882	4,416	3,015	
Performance automotive	152	20	171	230	2	
Motor	606	482	1,043	1,955	1,576	
Consolidated	\$ 1,931	\$ 2,840	\$ 9,096	\$ 10,513	\$ 10,219	
			March 31,	Decem	ber 31,	
			2002	2001	2000	
			(Unaudited)			
Total assets:						
Friction products			\$106,626	\$104,095	\$113,066	
Precision components			70,601	69,002	72,603	
Performance automotive			15,613	14,633	14,402	
Motor			17,155	16,375	15,314	
Consolidated			<u>\$209,995</u>	\$204,105	\$215,385	

Geographic information for the years ended December 31, 2001, 2000 and 1999 is as follows:

		2001		2000			1999			
	Domestic Operations	Foreign Operations	Total	Domestic Operations	Foreign Operations	Total	Domestic Operations	Foreign Operations	Total	
Net sales	\$160,810	\$23,578	\$184,388	\$180,632	\$21,697	\$202,329	\$166,429	\$21,209	\$187,638	
Income (loss) from operations	6,980	(3,408)	3,572	19,499	(36)	19,463	18,131	433	18,564	
Net (loss) income	(211)	(4,125)	(4,336)	7,274	(1,504)	5,770	6,916	(587)	6,329	
Total assets	186,532	17,573	204,105	194,659	20,726	215,385	187,363	22,257	209,620	

The Company has foreign operations in Canada, Italy, Mexico and China.

Notes to Consolidated Financial Statements (Continued)

N. Supplemental Guarantor Information

As discussed in Note E, each of the Guarantor Subsidiaries has fully and unconditionally guaranteed, on a joint and several basis, the obligation to pay principal, premium, if any, and interest with respect to the Senior Notes. The Guarantor Subsidiaries are direct or indirect wholly owned subsidiaries of the Company.

The following supplemental consolidating condensed financial statements present:

- Consolidating condensed balance sheets as of March 31, 2002 (Unaudited), December 31, 2001 and December 31, 2000, consolidating condensed statements of operations for the three months ended March 31, 2002 (Unaudited) and the years ended December 31, 2001, 2000 and 1999 and consolidating condensed statements of cash flows for the three months ended March 31, 2002 (Unaudited) and the years ended December 31, 2001, 2000 and 1999.
- Hawk Corporation (Parent), combined Guarantor Subsidiaries and combined Non-Guarantor Subsidiaries
 consisting of the Company's subsidiaries in Canada, Italy, Mexico and China with their investments in
 subsidiaries accounted for using the equity method.
- Elimination entries necessary to consolidate Parent and all of its subsidiaries.

Management does not believe that separate financial statements of the Guarantor Subsidiaries are material to investors. Therefore, separate financial statements and other disclosures concerning the Guarantor Subsidiaries are not presented.

Notes to Consolidated Financial Statements (Continued)

_	March 31, 2002							
-	Combined Combined Guarantor Non-Guarantor Parent Subsidiaries Subsidiaries E (Unaudited)		Eliminations	Consolidated				
Assets								
Current assets:	T-00	Φ 400	4.704		0 2 412			
Cash and cash equivalents	§ 720	\$ 108 25 106	\$ 1,584 7,512		\$ 2,412			
Accounts receivable, net Inventories, net		25,196 22,502	7,512 7,096		32,708 29,598			
Deferred income taxes	1,111	22,502	88		1,199			
Other current assets	2,841	1,516	849		5,206			
Total current assets	4,672	49,322	17,129		71,123			
Investment in subsidiaries	794	(1,911)		\$ 1,117	, 1,120			
Inter-company advances, net	160,428	15,826	(14,245)	(162,009)				
Property, plant and equipment, net	16	57,413	8,888		66,317			
Intangible assets	199	66,150			66,349			
Other	1,010	5,198	1,008	(1,010)	6,206			
Total assets	\$167,119	\$191,998	\$ 12,780	\$(161,902)	\$209,995			
Liabilities and shareholders' equity								
Current liabilities:								
Accounts payable		\$ 11,623	\$ 3,591		\$ 15,214			
Accrued compensation S		3,506	898		4,722			
Other accrued expenses	3,495	4,450	1,257		9,202			
Current portion of long-term debt	26,000	2,722	3,431		32,153			
Total current liabilities	29,813	22,301	9,177		61,291			
Long-term liabilities:								
Long-term debt	65,000	3,499	342		68,841			
Deferred income taxes	10,894	2.155	82		10,976			
Other	1 120	2,157	1,232	\$(162,422)	3,389			
Inter-company advances, net		157,434	3,858	<u>\$(162,422)</u>				
Total long-term liabilities	77,024	163,090	5,514	(162,422)	83,206			
Total liabilities	106,837	185,391	14,691	(162,422)	144,497			
Shareholders' equity (deficit)	60,282	6,607	(1,911)	<u>520</u>	65,498			
Total liabilities and shareholders' equity	\$167,119	<u>\$191,998</u>	\$ 12,780	<u>\$(161,902)</u>	\$209,995			

Notes to Consolidated Financial Statements (Continued)

	December 31, 2001									
	Parent	Combined Guarantor Subsidiaries	Combined Non-Guarantor Subsidiaries	Eliminations	Consolidated					
Assets										
Current assets:										
Cash and cash equivalents	\$ 1,073	\$ 247	\$ 1,764		\$ 3,084					
Accounts receivable, net	160	18,828	6,785		25,773					
Inventories	42	22,566	6,544		29,152					
Deferred income taxes	1,111		89		1,200					
Other current assets	2,976	1,143	519		4,638					
Total current assets	5,362	42,784	15,701		63,847					
Investment in subsidiaries	794	(1,080)		\$ 286						
Inter-company advances, net	153,455	9,447	(8,555)	(154,347)						
Property, plant and equipment	18	58,026	9,319		67,363					
Intangible assets	199	66,506			66,705					
Other	1,010	5,082	1,108	(1,010)	6,190					
Total assets	\$160,838	\$180,765	\$17,573	<u>\$(155,071)</u>	\$204,105					
Liabilities and shareholders' equity										
Current liabilities:										
Accounts payable		\$ 10,292	\$ 3,140		\$ 13,432					
Accrued compensation	\$ (18)	4,440	811		5,233					
Other accrued expenses	1,449	4,345	1,038		6,832					
Current portion of long-term										
debt	5,000	1,669	193		6,862					
Total current liabilities Long-term liabilities:	6,431	20,746	5,182		32,359					
Long-term debt	82,450	4,765	3,742		90,957					
Deferred income taxes	10,894		84		10,978					
Other		2,154	1,220		3,374					
Inter-company advances, net	1,350	144,786	8,425	\$(154,561)						
Total long-term liabilities	94,694	151,705	13,471	(154,561)	105,309					
Total liabilities	101,125	172,451	18,653	(154,561)	137,668					
Shareholders' equity	59,713	8,314	(1,080)	(510)	66,437					
Total liabilities and shareholders' equity	\$160,838	\$180,765	<u>\$17,573</u>	<u>\$(155,071)</u>	\$204,105					

Notes to Consolidated Financial Statements (Continued)

	December 31, 2000							
Pa	rent_	Combined Guarantor Subsidiaries	Combined Non-Guarantor Subsidiaries	Eliminations	Consolidated			
Assets								
Current assets:								
Cash and cash equivalents \$	553	\$ 1,027	\$ 2,430		\$ 4,010			
Accounts receivable, net		22,785	6,817		29,602			
Inventories		25,792	6,072		31,864			
Deferred income taxes	1,199		(86)		1,113			
Other current assets	967	1,363	646		2,976			
Total current assets	2,719	50,967	15,879		69,565			
Investment in subsidiaries	794	3,168		\$ (3,962)				
Inter-company advances, net 16	0,192	5,784	(5,084)	(160,892)				
Property, plant and equipment	26	61,219	9,156		70,401			
Intangible assets	207	70,506			70,713			
Other	1,010	3,931	775	(1,010)	4,706			
Total assets	4,948	\$195,575	\$20,726	\$(165,864)	\$215,385			
Liabilities and shareholders' equity								
Current liabilities:								
Accounts payable		\$ 8,313	\$ 3,266		\$ 11,579			
Accrued compensation \$	5	6,854	932		7,791			
Other accrued expenses	633	5,047	766		6,446			
Current portion of long-term	5 000	1.001	272		7.070			
	5,000	1,901	<u>372</u>		7,273			
	5,638	22,115	5,336		33,089			
Long-term liabilities:								
· ·	0,645	5,574	442		96,661			
	1,128		426		11,554			
Other		1,237	1,155		2,392			
Inter-company advances, net	1,197	149,909	10,199	<u>\$(161,305)</u>				
Total long-term liabilities 10	2,970	156,720	12,222	(161,305)	110,607			
Total liabilities 10	8,608	178,835	17,558	(161,305)	143,696			
Minority interest Shareholders'								
equity	6,340	16,740	3,168	(4,559)	71,689			
Total liabilities and shareholders' equity	4,948	\$195,575	\$20,726	\$(165,864)	\$215,385			
510	1,7 TO	Ψ1/3,3/3	Ψ20,120	ψ(103,007)	Ψ213,303			

Notes to Consolidated Financial Statements (Continued)

N. Supplemental Guarantor Inform	•	•	Months Ended Ma	arch 31 2002	
	Parent	Combined Guarantor Subsidiaries	Combined Non-Guarantor Subsidiaries	Eliminations	Consolidated
			(Unaudited)		
Net sales		\$42,756	\$7,048		\$49,804
Cost of sales		32,800	6,225		39,025
Gross profit		9,956	823		10,779
Expenses:					
Selling, technical and administrative expenses	\$ 400	7,725	1,073		9,198
Amortization of intangible assets	2	354	1,073		356
	-		1.072		
Total expenses		8,079	1,073		9,554
(Loss) income from operations	(402)	1,877	(250)		1,225
Interest income (expense), net Income (loss) from equity investees	911 (1,192)	(2,938) (581)	(208)	\$1,773	(2,235)
Other income (expense), net		20	(45)	\$1,773	(202)
	(1//)		(43)		(202)
Income (loss) before income taxes and minority interest	(860)	(1,622)	(503)	1,773	(1,212)
Income tax (benefit) provision	` ,	(430)	78	,	(612)
Net (loss) income	\$ (600)	\$(1,192)	\$ (581)	\$1,773	\$ (600)
		Thus	Mantha Endad M	auch 21 2001	
			Months Ended M	arch 31, 2001	
	Parent	Three Combined Guarantor Subsidiaries	Months Ended M Combined Non-Guarantor Subsidiaries	arch 31, 2001 Eliminations	Consolidated
	Parent	Combined Guarantor	Combined Non-Guarantor		Consolidated
Net sales		Combined Guarantor	Combined Non-Guarantor Subsidiaries		Consolidated \$53,781
Net sales		Combined Guarantor Subsidiaries	Combined Non-Guarantor Subsidiaries (Unaudited)		
		Combined Guarantor Subsidiaries \$47,093	Combined Non-Guarantor Subsidiaries (Unaudited) \$6,688		\$53,781
Cost of sales Gross profit Expenses:		Combined Guarantor Subsidiaries \$47,093 34,362	Combined Non-Guarantor Subsidiaries (Unaudited) \$6,688 5,599		\$53,781 39,961
Cost of sales Gross profit Expenses: Selling, technical and		Combined Guarantor Subsidiaries \$47,093 34,362 12,731	Combined Non-Guarantor Subsidiaries (Unaudited) \$6,688 5,599 1,089		\$53,781 39,961 13,820
Cost of sales Gross profit Expenses: Selling, technical and administrative expenses	\$(412)	Combined Guarantor Subsidiaries \$47,093 34,362 12,731	Combined Non-Guarantor Subsidiaries (Unaudited) \$6,688 5,599		\$53,781 39,961 13,820 8,780
Cost of sales Gross profit Expenses: Selling, technical and administrative expenses Amortization of intangible assets	\$(412) 3	Combined Guarantor Subsidiaries \$47,093 34,362 12,731 8,074 1,128	Combined Non-Guarantor Subsidiaries (Unaudited) \$6,688 5,599 1,089		\$53,781 <u>39,961</u> 13,820 8,780 1,131
Cost of sales Gross profit Expenses: Selling, technical and administrative expenses Amortization of intangible assets Total expenses	\$(412) 3 (409)	Combined Guarantor Subsidiaries \$47,093 34,362 12,731 8,074 1,128 9,202	Combined Non-Guarantor Subsidiaries (Unaudited) \$6,688 5,599 1,089 1,118		\$53,781 39,961 13,820 8,780 1,131 9,911
Cost of sales Gross profit Expenses: Selling, technical and administrative expenses Amortization of intangible assets Total expenses Income from operations	\$(412) 3 (409) 409	Combined Guarantor Subsidiaries \$47,093 34,362 12,731 8,074 1,128 9,202 3,529	Combined Non-Guarantor Subsidiaries (Unaudited) \$6,688 5,599 1,089 1,118 1,118 (29)		\$53,781 39,961 13,820 8,780 1,131 9,911 3,909
Cost of sales Gross profit Expenses: Selling, technical and administrative expenses Amortization of intangible assets Total expenses Income from operations Interest income (expense), net	\$(412) 3 (409) 409 925	Combined Guarantor Subsidiaries \$47,093 34,362 12,731 8,074 1,128 9,202 3,529 (3,132)	Combined Non-Guarantor Subsidiaries (Unaudited) \$6,688 5,599 1,089 1,118	Eliminations	\$53,781 39,961 13,820 8,780 1,131 9,911
Cost of sales Gross profit Expenses: Selling, technical and administrative expenses Amortization of intangible assets Total expenses Income from operations Interest income (expense), net Income (loss) from equity investees	\$(412) 3 (409) 409 925 (213)	Combined Guarantor Subsidiaries \$47,093 34,362 12,731 8,074 1,128 9,202 3,529 (3,132) (417)	Combined Non-Guarantor Subsidiaries (Unaudited) \$6,688 5,599 1,089 1,118 1,118 (29) (194)		\$53,781 39,961 13,820 8,780 1,131 9,911 3,909 (2,401)
Cost of sales Gross profit Expenses: Selling, technical and administrative expenses Amortization of intangible assets Total expenses Income from operations Interest income (expense), net Income (loss) from equity investees Other income (expense), net	\$(412) 3 (409) 409 925 (213)	Combined Guarantor Subsidiaries \$47,093 34,362 12,731 8,074 1,128 9,202 3,529 (3,132)	Combined Non-Guarantor Subsidiaries (Unaudited) \$6,688 5,599 1,089 1,118 1,118 (29)	Eliminations	\$53,781 39,961 13,820 8,780 1,131 9,911 3,909
Cost of sales Gross profit Expenses: Selling, technical and administrative expenses Amortization of intangible assets Total expenses Income from operations Interest income (expense), net Income (loss) from equity investees Other income (expense), net Income (loss) before income taxes	\$(412) 3 (409) 409 925 (213)	Combined Guarantor Subsidiaries \$47,093 34,362 12,731 8,074 1,128 9,202 3,529 (3,132) (417) (64)	Combined Non-Guarantor Subsidiaries (Unaudited) \$6,688 5,599 1,089 1,118 1,118 (29) (194) 142	Eliminations \$630	\$53,781 39,961 13,820 8,780 1,131 9,911 3,909 (2,401)
Cost of sales Gross profit Expenses: Selling, technical and administrative expenses Amortization of intangible assets Total expenses Income from operations Interest income (expense), net Income (loss) from equity investees Other income (expense), net	\$(412) 3 (409) 409 925 (213) 1,121	Combined Guarantor Subsidiaries \$47,093 34,362 12,731 8,074 1,128 9,202 3,529 (3,132) (417)	Combined Non-Guarantor Subsidiaries (Unaudited) \$6,688 5,599 1,089 1,118 1,118 (29) (194)	Eliminations	\$53,781 39,961 13,820 8,780 1,131 9,911 3,909 (2,401)
Cost of sales Gross profit Expenses: Selling, technical and administrative expenses Amortization of intangible assets Total expenses Income from operations Interest income (expense), net Income (loss) from equity investees Other income (expense), net Income (loss) before income taxes and minority interest	\$(412) 3 (409) 409 925 (213) 1,121 264	Combined Guarantor Subsidiaries \$47,093 34,362 12,731 8,074 1,128 9,202 3,529 (3,132) (417) (64) (84)	Combined Non-Guarantor Subsidiaries (Unaudited) \$6,688	Eliminations \$630	\$53,781 39,961 13,820 8,780 1,131 9,911 3,909 (2,401) 78

Notes to Consolidated Financial Statements (Continued)

n. Supplemental Guarantoi inion			r ended Decembe	r 31, 2001	
	Parent	Combined Guarantor Subsidiaries	Combined Non-Guarantor Subsidiaries	Eliminations	Consolidated
Net sales		\$160,810	\$23,578		\$184,388
Cost of sales		122,070	22,339		144,409
Gross profit		38,740	1,239		39,979
Selling, technical and	¢ (545)	27 152	4.107		20.804
administrative expenses	\$ (343)	27,152 605	4,197 450		30,804 1,055
Restructuring costs	9	4,539	430		4,548
			4 6 4 7	-	
Total expenses	(536)	32,296	4,647		36,407
Income (loss) from operations	536	6,444	(3,408)		3,572
Interest (income) expense, net Income (loss) from equity investees	(3,686) (7,520)	12,050 (4,125)	872	\$11,645	9,236
Other (income) expense		(4,123) (114)	65	\$11,043	530
Income (loss) before income taxes	(3,877)	(9,617)	(4,345)	11,645	(6,194)
Income tax (benefit) provision	459	(2,017) $(2,097)$	(220)	11,043	(0,194) $(1,858)$
Net income (loss)		\$ (7,520)	\$ (4,125)	\$11,645	\$ (4,336)
Thet income (1033)	ψ(4,330)		<u>=====</u>		Ψ (4,330)
			r ended Decembe	r 31, 2000	
		Combined Guarantor	Combined Non-Guarantor		
	Parent	Subsidiaries	Subsidiaries	Eliminations	Consolidated
Net sales		\$180,632	\$21,697		\$202,329
Cost of sales	\$ 285	129,265	17,837		147,387
Gross profit	(285)	51,367	3,860		54,942
Expenses:					
Selling, technical and administrative expenses Amortization of intangible	(274)	27,696	3,896		31,318
assets	9	4,152			4 161
m . 1		7,134			4,101
Total expenses			3,896		<u>4,161</u> 35,479
Total expenses	(265)	31,848	3,896		35,479
Income from operations	(265) (20)	31,848 19,519	(36)		35,479 19,463
•	(265)	31,848			35,479
Income from operations	(265) (20)	31,848 19,519	(36)	\$(1,394)	35,479 19,463
Income from operations Interest (income) expense, net Income (loss) from equity	(265) (20) (3,803)	31,848 19,519 11,947	(36)	\$(1,394)	35,479 19,463
Income from operations	(265) (20) (3,803)	31,848 19,519 11,947 (1,504)	(36) 654	\$(1,394) (1,394)	35,479 19,463 8,798
Income from operations	(265) (20) (3,803) 2,898	31,848 19,519 11,947 (1,504) 394	(36) 654 ———————————————————————————————————		35,479 19,463 8,798

Notes to Consolidated Financial Statements (Continued)

	Year ended December 31, 1999							
	Parent	Combined Guarantor Subsidiaries	Combined Non-Guarantor Subsidiaries	Eliminations	Consolidated			
Net sales		\$166,429	\$21,209		\$187,638			
Cost of sales	\$ (165)	121,163	17,881		138,879			
Gross profit	165	45,266	3,328		48,759			
Expenses:								
Selling, technical and administrative expenses	(283)	23,754	2,895		26,366			
Amortization of intangible assets	8	3,821			3,829			
Total expenses	(275)	27,575	2,895		30,195			
Income from operations	440	17,691	433		18,564			
Interest (income) expense, net	(3,782)	12,220	540		8,978			
Income (loss) from equity investees	3,688	(587)		\$(3,101)				
Other (income) expense	(4)	(500)	99		(405)			
Income (loss) before income taxes	7,914	5,384	(206)	(3,101)	9,991			
Income taxes	1,585	1,696	381		3,662			
Net income (loss)	\$ 6,329	\$ 3,688	<u>\$ (587)</u>	\$(3,101)	\$ 6,329			

Notes to Consolidated Financial Statements (Continued)

	Three Months ended March 31, 2002								
	Parent	Combined Guarantor Subsidiaries	Combined Non-Guarantor Subsidiaries	Eliminations	Consolidated				
			(Unaudited)						
Net cash provided by (used in) operating activities	\$ (3,865)	\$ 1,661	\$ 284		\$ (1,920)				
Cash flows from investing activities:									
Purchase of property, plant and equipment		(1,830)	<u>(101</u>)		(1,931)				
Net cash used in investing activities		(1,830)	(101)		(1,931)				
Cash flows from financing activities:									
Proceeds from debt	15,505	333			15,838				
Payments on debt	(11,955)	(545)	(69)		(12,569)				
Payment of preferred stock dividend	(38)				(38)				
Net cash provided by (used in) financing activities	3,512	(212)	(69)		3,231				
Net (decrease) increase in cash and cash equivalents	(353)	(381)	114		(620)				
Effect of currency rate changes	, ,	242	(294)		(52)				
Cash and cash equivalents at		-							
beginning of period	\$ 1,073	\$ 247	\$1,764		\$ 3,084				
Cash and cash equivalents at end of period	\$ 720	<u>\$ 108</u>	<u>\$1,584</u>		\$ 2,412				

Notes to Consolidated Financial Statements (Continued)

N. Supplemental Guarantor Information (Continued)

Three Months Ended March 31, 2001 Combined Combined Guarantor **Non-Guarantor** $\underline{Subsidiar} ies$ **Eliminations** Consolidated **Parent** Subsidiaries (Unaudited) Net cash provided by operating activities \$ 2,207 \$ 1,922 \$(2,951) \$ 1,178 Cash flows from investing activities: Purchase of property, plant and equipment__ (2,242) (598)(2,840)Net cash used in investing activities (2,242)(598)(2,840)Cash flows from financing activities: Proceeds from long-term debt . . 10,190 3,543 13,733 Payments on long-term debt ... (12,085) (12,781)(534)(162)Payment of preferred stock dividend....___ (37) (37) Net cash (used in) provided by financing activities 915 (1,932)(534)3,381 Net decrease in cash and cash 275 (854)(168)(747)equivalents..... Effect of currency rate changes . . . (109)(109)Cash and cash equivalents at 553 beginning of period\$ \$ 1,027 \$ 4,010 \$ 2,430 Cash and cash equivalents at end 828 of period 173 \$ 2,153 3,154

Notes to Consolidated Financial Statements (Continued)

	Year ended December 31, 2001							
	Parent	Combined Guarantor Subsidiaries	Combined Non-Guarantor Subsidiaries	Eliminations	Consolidated			
Net cash provided by (used in) operating activities	\$ 8,865	\$ 7,445	\$(1,840)		\$ 14,470			
Cash flows from investing activities:								
Purchases of property, plant and equipment		(7,183)	(1,913)		(9,096)			
Net cash used in investing activities		(7,183)	(1,913)		(9,096)			
Cash flows from financing activities:								
Proceeds from long-term debt	35,820	1,126	3,511		40,457			
Payments on long-term debt	(44,015)	(2,168)	(337)		(46,520)			
Payment of preferred stock dividends	(150)				(150)			
Net cash (used in) provided by financing activities	(8,345)	(1,042)	3,174		(6,213)			
Effect of exchange rate changes on cash			(87)		(87)			
Net (decrease) increase in cash and cash equivalents	520	(780)	(666)		(926)			
Cash and cash equivalents, at beginning of period	553	1,027	2,430		4,010			
Cash and cash equivalents, at end of period	\$ 1,073	\$ 247	<u>\$ 1,764</u>	<u>\$ </u>	\$ 3,084			

Notes to Consolidated Financial Statements (Continued)

		Yea	r ended December	31, 2000	
	Parent	Combined Guarantor Subsidiaries	Combined Non-Guarantor Subsidiaries	Eliminations	Consolidated
Net cash provided by operating activities	\$ 7,330	\$ 9,976	\$ 4,258		\$ 21,564
Cash flows from investing activities:					
Business acquisitions	(6,510)				(6,510)
Purchases of property, plant and		<i>(</i> = = 1=)	(2 - 12)		(10.100)
equipment		(7,747)	(2,742)		(10,489)
Proceeds from sale of assets		69			69
Net cash used in investing activities	(6,510)	(7,678)	(2,742)		(16,930)
Cash flows from financing activities:					
Payments on short-term debt			(808)		(808)
Proceeds from long-term debt	29,443	774			30,217
Payments on long-term debt	(31,249)	(2,238)	(399)		(33,886)
Payment of preferred stock dividends	(152)				(152)
Net cash used in financing activities	(1,958)	(1,464)	(1,207)		(4,629)
Effect of exchange rate changes on cash			12		12
Net (decrease) increase in cash and cash equivalents	(1,138)	834	321		17
Cash and cash equivalents, at beginning of period	1,691	193	2,109		3,993
Cash and cash equivalents, at end of period	\$ 553	\$ 1,027	<u>\$ 2,430</u>	<u>\$</u>	\$ 4,010

Notes to Consolidated Financial Statements (Continued)

	Year ended December 31, 1999							
	Parent	Combined Guarantor Subsidiaries	Combined Non-Guarantor Subsidiaries	Eliminations	Consolidated			
Net cash provided by operating activities	\$ 11,158	\$ 4,886	\$ 3,702		\$ 19,746			
Cash flows from investing activities:								
Business acquisitions	(19,350)				(19,350)			
Purchases of property, plant and equipment		(7,953)	(2,181)		(10,134)			
Proceeds from sale of assets	·	3,682			3,682			
Net cash used in investing activities	(19,350)	(4,271)	(2,181)		(25,802)			
Cash flows from financing activities:								
Proceeds from long-term debt	37,897	125			38,022			
Payments on long-term debt	(37,946)	(1,147)	(608)		(39,701)			
Payment of preferred stock dividends	(148)				(148)			
Repurchase of common stock	(2,798)				(2,798)			
Net cash used in financing activities	(2,995)	(1,022)	(608)		(4,625)			
Effect of exchange rate changes on cash		554	(197)		357			
Net (decrease) increase in cash and cash equivalents	(11,187)	147	716		(10,324)			
Cash and cash equivalents, at beginning of period	12,878	46	1,393		14,317			
Cash and cash equivalents, at end of period	\$ 1,691	<u>\$ 193</u>	\$ 2,109	<u>\$</u>	\$ 3,993			

Notes to Consolidated Financial Statements (Continued)

O. Summary of Quarterly Results of Operations (Unaudited)

	March 31, 2001		June 30, 2001		September 30, 2001		December 31, 2001	
Net sales	\$53,781		\$47,419		\$42,208		\$40,980	
Gross profit	1.	13,820		0,334	8,704		7,121	
Net income (loss)		857		1,419)	(953)		(2,821)	
Basic earnings (loss) per share	\$.10	\$	(.17)	\$	(.12)	\$	(.33)
Diluted earnings (loss) per share	\$.10	\$	(.17)	\$	(.12)	\$	(.33)
		rch 31,		ne 30,		mber 30, 2000		mber 31,
Net sales	\$5	5,170	\$53,837		\$47,861		\$4	5,461
Gross profit	1	4,943	14,958		13,362		11,679	
Net income (loss)		2,164		1,910		1,493		203
Basic earnings (loss) per share	\$.25	\$.22	\$.17	\$.02
Diluted earnings (loss) per share	\$.25	\$.22	\$.17	\$.02

ANNEX A

Deleted Provisions of the Old Indenture

If the proposed amendments to the old indenture become effective, then we will delete the provisions set forth in the form of italicized clauses below from the old indenture, as well as those definitions from the old indenture that are used only in the provisions that would be eliminated as part of the proposed amendments. We and the trustee for the old indenture will make these deletions in the form of a supplemental indenture to the old indenture. In addition, certain other provisions of the old indenture will be amended, deleted or renumbered to conform them to reflect the changes described below.

The provisions of the old indenture reprinted below are qualified in their entirety by reference to the old indenture. Capitalized terms used but not otherwise defined in this Annex A have the meanings set forth in the old indenture.

ARTICLE IV COVENANTS

SECTION 4.3 Corporate Existence.

[Delete: Except as otherwise permitted by Article V or by Section 4.16, the Company shall do or cause to be done, at its own cost and expense, all things necessary to preserve and keep in full force and effect its corporate existence and the corporate existence of each of the Restricted Subsidiaries in accordance with the respective organizational documents of each such Restricted Subsidiary and the material rights (charter and statutory) and franchises of the Company and each such Restricted Subsidiary; provided, however, that the Company shall not be required to preserve, with respect to itself, any material right or franchise and, with respect to any Restricted Subsidiary, any such existence, material right or franchise, if the Board of Directors of the Company shall determine in good faith that the preservation thereof is no longer desirable in the conduct of the business of the Company and the Restricted Subsidiaries, taken as a whole.]

SECTION 4.4 Payment of Taxes and Other Claims.

[Delete: The Company shall pay or discharge or cause to be paid or discharged, before the same shall become delinquent, (i) all material taxes, assessments and governmental charges (including withholding taxes and any penalties, interest and additions to taxes) levied or imposed upon it or any Restricted Subsidiary or properties of it or any Subsidiary and (ii) all material lawful claims for labor, materials and supplies that, if unpaid, might by law become a Lien upon the property of it or any Restricted Subsidiary; provided, however, that the Company shall not be required to pay or discharge or cause to be paid or discharged any such tax, assessment, charge or claim whose amount, applicability or validity is being contested in good faith by appropriate negotiations or proceedings properly instituted and diligently conducted for which adequate reserves, to the extent required under GAAP, have been taken.]

SECTION 4.5 Maintenance of Properties and Insurance.

[Delete: (a) The Company shall, and shall cause each Restricted Subsidiary to, maintain all properties used or useful in the conduct of its business in good working order and condition (subject to ordinary wear and tear) and make all necessary repairs, renewals, replacements, additions, betterments and improvements thereto and actively conduct and carry on its business; provided, however, that nothing in this Section 4.5 shall prevent the Company or any Restricted Subsidiary from discontinuing the operation and maintenance of any of its properties, if such discontinuance is (i) in the ordinary course of business pursuant to customary business terms or (ii) in the good faith judgment of the Board of Directors or other governing body of the Company or the Restricted Subsidiary, as the case may be, desirable in the conduct of their respective businesses and is not disadvantageous in any material respect to the Holders.

(b) The Company shall provide or cause to be provided, for itself and each Restricted Subsidiary, insurance (including appropriate self-insurance) against loss or damage of the kinds that, in the good faith judgment of the

Company, are adequate and appropriate for the conduct of the business of the Company and such Restricted Subsidiary in a prudent manner, with reputable insurers or with the government of the United States of America or an agency or instrumentality thereof, in such amounts, with such deductibles, and by such methods as shall be customary, in the good faith judgment of the Company, for companies similarly situated in the industry.]

* * *

SECTION 4.8 Waiver of Stay, Extension or Usury Laws.

[Delete: The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay or extension law or any usury law or other law that would prohibit or forgive the Company from paying all or any portion of the principal of or interest on the Notes as contemplated herein, wherever enacted, now or at any time hereafter in force, or which may affect the covenants or the performance of this Indenture; and (to the extent that it may lawfully do so) the Company hereby expressly waives all benefit or advantage of any such law, and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.]

SECTION 4.9 Provision of Financial Statements and Information.

(a) [Delete: Following effectiveness of the Exchange Offer (as defined in the Registration Rights Agreement), whether or not the Company is then subject to Section 13(a) or 15(d) of the Exchange Act, the Company will file with the Commission, so long as any Notes are outstanding, the annual reports, quarterly reports and other periodic reports which the Company would have been required to file with the Commission pursuant to such Section 13(a) or 15(d) if the Company were so subject, and such documents shall be filed with the Commission on or prior to the respective dates (the "Required Filing Dates") by which the Company would have been required so to file such documents if the Company were so subject; provided the Commission will accept such filings.] Upon qualification of this Indenture under the TIA, the Company shall [delete: also] comply with the provisions of TIA § 314(a).

[Delete: (b) The Company will also in any event (i) within 15 days of each Required Filing Date, file with the Trustee, and supply the Trustee with copies for delivery to the holders of the Notes, the annual reports, quarterly reports and other periodic reports which the Company would have been required to file with the Commission pursuant to Section 13(a) or 15(d) of the Exchange Act if the Company were subject to such Sections and (ii) if the Commission will not accept the filing of such documents promptly upon written request and payment of the reasonable cost of duplication and delivery, supply copies of such documents to any prospective holder of the Notes

(c) The Company shall provide to any Holder or any beneficial owner of Notes any information reasonably requested by such Holder or such beneficial owner concerning the Company and the Subsidiaries (including financial statements) necessary in order to permit such Holder or such beneficial owner to sell or transfer Notes in compliance with Rule 144A under the Securities Act.]

SECTION 4.10 <u>Limitation on Incurrence of Indebtedness.</u>

[Delete: (a) The Company shall not, and shall not permit any Restricted Subsidiary to, create, incur, issue, assume or directly or indirectly guarantee or in any other manner become directly or indirectly liable for (''incur'') any Indebtedness (including Acquired Debt), except that the Company may incur Indebtedness (including Acquired Debt) if, at the time of, and immediately after giving pro forma effect to, such incurrence of Indebtedness, the Consolidated Cash Flow Coverage Ratio of the Company for the most recently ended four fiscal quarters would be at least 2.0 to 1.0 if incurred during the period from the Issue Date through December 1, 1998, and 2.25 to 1.0 if incurred thereafter.

(b) The foregoing limitations will not apply to the incurrence of any of the following (collectively, "Permitted Indebtedness"), each of which shall be given independent effect:

- (i) Indebtedness of the Company arising under the New Revolving Credit Facility in an aggregate principal amount not to exceed at any time outstanding the greater of (x) \$25.0 million, less any permanent reduction in commitments thereunder, and (y) the sum, at such time, of (I) 85% of the consolidated book value of net accounts receivable of the Company and the Restricted Subsidiaries and (II) 60% of the consolidated book value of inventory of the Company and the Restricted Subsidiaries;
- (ii) Indebtedness of the Company represented by the Initial Notes and the Exchange Notes and Indebtedness of the Guarantors represented by the Guarantees;
- (iii) Indebtedness of the Company or any Restricted Subsidiary not covered by any other clause of this paragraph which is outstanding on the Issue Date ("Existing Indebtedness");
- (iv) Indebtedness owed by any Restricted Subsidiary to the Company or to another Restricted Subsidiary, or owed by the Company to any Restricted Subsidiary that, if owed to a Restricted Subsidiary that is not a Guarantor, is unsecured and subordinated in right of payment to the payment and performance of the Company's obligations under the Indenture and the Notes; provided, however, that any such Indebtedness shall at all times be held by a Person which is either the Company or a Restricted Subsidiary; provided, further, however, that upon either (a) the transfer or other disposition of any such Indebtedness to a Person other than the Company or another Restricted Subsidiary or (b) the sale, lease, transfer or other disposition of shares of Capital Stock (including by consolidation or merger) of any such Restricted Subsidiary to a Person other than the Company or another Restricted Subsidiary, the incurrence of such Indebtedness shall be deemed to be an incurrence that is not permitted by this clause (iv);
- (v) Indebtedness of the Company or any Restricted Subsidiary arising with respect to Interest Rate Agreement Obligations and Currency Agreement Obligations incurred for the purpose of fixing or hedging interest rate risk or currency risk with respect to any fixed or floating rate Indebtedness that is permitted by the terms of this Indenture to be outstanding or with respect to any receivable or liability the payment of which is determined by reference to a foreign currency;
- (vi) Indebtedness represented by performance, completion, guarantee, surety and similar bonds provided by the Company or any Restricted Subsidiary in the ordinary course of business consistent with past practice;
- (vii) Any Indebtedness incurred in connection with or given in exchange for the renewal, extension, substitution, refunding, defeasance, refinancing or replacement, in whole or in part, (a "refinancing") of any Indebtedness incurred as permitted under Section 4.10(a) or any Indebtedness described in clauses (i), (ii) or (iii) above and this clause (vii) ("Refinancing Indebtedness"); provided, however, that (a) the principal amount of such Refinancing Indebtedness shall not exceed the principal amount (or accreted amount, if less) of the Indebtedness so refinanced (plus the premiums and reasonable expenses to be paid in connection therewith, which, with respect to such premiums, shall not exceed the stated amount of any premium or other payment required to be paid in connection with such a refinancing pursuant to the terms of the Indebtedness being refinanced); (b) if the Weighted Average Life to Maturity of the Indebtedness being refinanced is equal to or greater than the Weighted Average Life to Maturity of the Notes, the Refinancing Indebtedness shall have a Weighted Average Life to Maturity equal to or greater than the Weighted Average Life to Maturity of the Indebtedness other than Senior Debt incurred by the Company, such Refinancing Indebtedness shall rank no more senior than, and, if applicable, shall be at least as subordinated in right of payment to the Notes as, the Indebtedness being refinanced; and (d) the obligor on such Refinancing Indebtedness shall be the obligor on the Indebtedness being refinanced or the Company;
- (viii) Indebtedness of the Company or any Restricted Subsidiary (a) representing Capitalized Lease Obligations and any refinancings thereof and/or (b) in respect of Purchase Money Obligations for property acquired, constructed or improved in the ordinary course of business and any refinancings thereof, which taken together in the aggregate do not exceed \$5.0 million at any time outstanding;

- (ix) Indebtedness of the Company or any Restricted Subsidiary relating to the acquisition of Hutchinson Foundry Products Company in an aggregate amount not to exceed \$2.0 million (the "Hutchinson Notes");
- (x) commodity agreements entered into in the ordinary course of business to protect against fluctuations in the prices of raw materials and not for speculative purposes;
- (xi) Indebtedness incurred by the Company or any Restricted Subsidiary constituting reimbursement obligations with respect to letters of credit issued in the ordinary course of business, including, without limitation, letters of credit in respect of workers' compensation claims or self-insurance, or other Indebtedness with respect to reimbursement type obligations regarding workers' compensation claims or self-insurance:
- (xii) (a) Guarantees by the Company of Indebtedness of a Restricted Subsidiary permitted to be incurred under this Indenture and (b) Guarantees of the Notes by the Guarantors;
- (xiii) Indebtedness of the Company or any Restricted Subsidiary arising from agreements providing for indemnification, adjustment of purchase price or similar obligations, in each case incurred or assumed in connection with the disposition of any business, assets or a Subsidiary, other guarantees of Indebtedness incurred by any Person acquiring all or any portion of such business, assets or a Subsidiary for the purpose of financing such acquisition; provided that the maximum liability in respect of such Indebtedness shall not exceed the gross proceeds actually received by the Company and its Restricted Subsidiaries in connection with such disposition; and
- (xiv) Indebtedness of the Company or any Restricted Subsidiary in addition to that described in clauses (i) through (xiii) above, and any renewals, extensions, substitutions, refinancings or replacements of such Indebtedness, so long as the aggregate principal amount of all such Indebtedness incurred pursuant to this clause (xiv) does not exceed \$5.0 million at any one time outstanding.
- (c) For purposes of determining any particular amount of Indebtedness under this Section 4.10, guarantees, Liens or obligations with respect to letters of credit supporting Indebtedness otherwise included in the determination of such particular amount shall not be included.
- (d) Indebtedness of any Person which is outstanding at the time such Person becomes a Restricted Subsidiary or is merged with or into or consolidated with the Company or a Restricted Subsidiary shall be deemed to have been incurred at the time such Person becomes a Restricted Subsidiary or is merged with or into or consolidated with the Company or a Restricted Subsidiary, and Indebtedness which is assumed at the time of the acquisition of any asset shall be deemed to have been incurred at the time of such acquisition.]

SECTION 4.11 Limitations on Restricted Payments.

[Delete: (a) The Company shall not, and shall not permit any Restricted Subsidiary to, directly or indirectly, make any Restricted Payment, unless at the time of and immediately after giving effect to the proposed Restricted Payment (with the value of any such Restricted Payment, if other than cash, to be determined reasonably and in good faith by the Board of Directors of the Company):

- (i) no Default or Event of Default shall have occurred and be continuing or would occur as a consequence thereof;
- (ii) the Company could incur at least \$1.00 of additional Indebtedness (other than Permitted Indebtedness) pursuant to Section 4.10(a); and
- (iii) the aggregate amount of all Restricted Payments made after the Issue Date shall not exceed the sum of:
 - (A) an amount equal to 50% of the Company's aggregate cumulative Consolidated Net Income accrued on a cumulative basis during the period (treated as one accounting period) beginning on the Issue Date and ending on the date of such proposed Restricted Payment (or, if such aggregate

cumulative Consolidated Net Income for such period shall be a deficit, minus 100% of such deficit); plus

- (B) the aggregate amount of all net cash proceeds received since the Issue Date by the Company from the issuance and sale (other than to a Restricted Subsidiary) of, or equity contribution with respect to, Capital Stock (other than Disqualified Stock) and the principal amount of Indebtedness of the Company or any Restricted Subsidiary that has been converted into or exchanged for Capital Stock (other than Disqualified Stock), in any such case to the extent that such proceeds are not used (x) to redeem, repurchase, retire or otherwise acquire Capital Stock or any Indebtedness of the Company or any Restricted Subsidiary pursuant to clause (ii) of the next paragraph or (y) to make any Restricted Investment pursuant to clause (iv) of the next paragraph; plus
- (C) the amount of the net reduction in Investments in Unrestricted Subsidiaries resulting from (x) the payment of dividends or the repayment in cash of the principal of loans or the cash return on any Investment, in each case to the extent received by the Company or any Restricted Subsidiary from Unrestricted Subsidiaries, (y) the release or extinguishment of any guarantee of Indebtedness of any Unrestricted Subsidiary, and (z) the redesignation of Unrestricted Subsidiaries as Restricted Subsidiaries (valued as provided in the definition of "Investment"), such aggregate amount of the net reduction in Investments not to exceed in the case of any Unrestricted Subsidiary the amount of Restricted Investments previously made by the Company or any Restricted Subsidiary in such Unrestricted Subsidiary, which amount was included in the calculation of the amount of Restricted Payments; plus
- (D) to the extent that any Restricted Investment that was made after the Issue Date is sold for cash or otherwise liquidated or repaid for cash, the amount of cash proceeds received with respect to such Restricted Investment, net of taxes and the cost of disposition, not to exceed the amount of Restricted Investments made after the Issue Date.
- (b) Section 4.11(a) shall not prohibit the following actions (collectively, "Permitted Payments"):
- (i) the payment of any dividend within 60 days after the date of declaration thereof, if at such declaration date such payment would have been permitted under this Indenture (which payment shall be deemed to have been paid on such date of declaration for purposes of Section 4.11(a)(iii));
- (ii) the redemption, repurchase, retirement or other acquisition of any Capital Stock or any Indebtedness of the Company or any Restricted Subsidiary in exchange for, or out of the proceeds of, the substantially concurrent sale (other than to a Restricted Subsidiary) of, or equity contribution with respect to, Capital Stock of the Company (other than any Disqualified Stock), including without limitation the Hawk Controlling Stockholder Merger that will occur concurrently with the Offering;
- (iii) any purchase or defeasance of Subordinated Indebtedness to the extent required upon a Change of Control or Asset Sale (as defined therein) by the indenture or other agreement or instrument pursuant to which such Subordinated Indebtedness was issued, but only if the Company (x) in the case of a Change of Control, has complied with its obligations under Section 4.15 or (y) in the case of an Asset Sale, has applied the Net Proceeds from such Asset Sale in accordance with Section 4.16;
- (iv) any Restricted Investment the sole consideration for which consists of, or is made with the proceeds of the substantially concurrent sale (other than to a Restricted Subsidiary) of, or equity contribution with respect to, Capital Stock of the Company (other than any Disqualified Stock);
- (v) loans or advances to employees of the Company or any of its Subsidiaries which loans or advances exist on the Issue Date, and other loans or advances to employees of the Company or any Subsidiary to pay reasonable relocation expenses;
- (vi) Restricted Investments in an amount such that the sum of the aggregate amount of Restricted Investments made pursuant to this clause (vi) after the Issue Date does not exceed \$2.0 million at any one time outstanding; and

(vii) the payment of any dividend on, or redemption of any or all of, the Company's redeemable 10% cumulative preferred stock, par value, \$0.01 per share, Series A; redeemable 9% cumulative preferred stock, par value, \$0.01 per share, Series B; and redeemable 10% cumulative preferred stock, par value, \$0.01 per share, Series C, in each case, outstanding on the Issue Date.

<u>provided</u>, <u>however</u>, that in the case of clauses (iii) and (vi) of this Section 4.11(b), no Default or Event of Default shall have occurred and be continuing.

- (c) For purposes of Section 4.11(a)(iii), the Permitted Payments referred to in clauses (i) and (vi) of Section 4.11(b) shall be included in the aggregate amount of Restricted Payments made since the Issue Date, and any other Permitted Payments described above shall be excluded.
- (d) Not later than thirty (30) days after the end of any fiscal quarter of the Company during which any Restricted Payment or Restricted Investment has been made, the Company shall deliver to the Trustee an Officers' Certificate stating that such Restricted Payment or Restricted Investment complies with this Indenture and setting forth in reasonable detail the basis upon which the required calculations were computed, which calculations may be based upon the Company's latest available internal quarterly financial statements.]

SECTION 4.12 Limitation on Liens.

[Delete: The Company shall not, and shall not permit any Restricted Subsidiary to, directly or indirectly, create, incur, assume or suffer to exist any Lien securing Indebtedness (other than Permitted Liens) on any asset now owned or hereafter acquired, or any income or profits therefrom, or assign or convey any right to receive income therefrom to secure any such Indebtedness, unless (i) if such Lien secures Indebtedness that is pari passu with the Notes, then the Notes are secured on an equal and ratable basis with the obligations so secured until such time as such obligation is no longer secured by a Lien or (ii) if such Lien secures Indebtedness that is subordinated to the Notes, any such Lien shall be subordinated to a Lien granted to the Holders of the Notes in the same collateral as that securing such Lien to the same extent as such subordinated Indebtedness is subordinated to the Notes.]

SECTION 4.13 <u>Limitation on Dividends and Other Payment Restrictions Affecting Restricted Subsidiaries.</u>

[Delete: The Company shall not, and shall not permit any Restricted Subsidiary to, directly or indirectly, create or otherwise cause to become effective any consensual encumbrance or consensual restriction on the ability of any Restricted Subsidiary to (i) pay dividends or make any other distributions to the Company or any other Restricted Subsidiary on its Capital Stock or with respect to any other interest or participation in, or measured by, its profits, or pay any Indebtedness owed to the Company or any other Restricted Subsidiary, (ii) make loans or advances to, or issue guarantees for the benefit of, the Company or any other Restricted Subsidiary, except for such encumbrances or restrictions existing under or by reason of:

- (a) the New Revolving Credit Facility;
- (b) applicable law;
- (c) any instrument governing Indebtedness or Capital Stock of an Acquired Person acquired by the Company or any of its Restricted Subsidiaries as in effect at the time of such acquisition (except to the extent such Indebtedness was incurred in connection with or in contemplation of such acquisition); provided, however, that no such encumbrance or restriction is applicable to any Person, or the properties or assets of any Person, other than the Acquired Person;
- (d) by reason of customary non-assignment, subletting or net worth provisions in leases or other agreements entered into the ordinary course of business and consistent with past practices;
- (e) Purchase Money Indebtedness for property acquired in the ordinary course of business that impose restrictions only on the property so acquired;

- (f) an agreement for the sale or disposition of assets or the Capital Stock of a Restricted Subsidiary; provided, however, that such restriction or encumbrance is only applicable to such Restricted Subsidiary or assets, as applicable, and such sale or disposition otherwise is permitted by Section 4.16; provided, further, however, that such restriction or encumbrance shall be effective only for a period from the execution and delivery of such agreement through a termination date not later than 180 days after such execution and delivery;
 - (g) this Indenture, the Notes and the Guarantees;
- (h) Indebtedness (including Refinancing Indebtedness) permitted to be incurred subsequent to the Issue Date pursuant to Section 4.10; <u>provided</u>, <u>however</u>, that any such restrictions are ordinary and customary with respect to the type of Indebtedness being incurred;
 - (i) encumbrances and restrictions imposed by Liens incurred in accordance with Section 4.12;
 - (j) customary provisions in joint venture agreements and other similar agreements; and
- (k) encumbrances and restrictions imposed by amendments, restatements, renewals, replacements or refinancings of the contracts, instruments or obligations referred to in clauses (a) through (j) above; provided that such encumbrances and restrictions are, in the good faith judgment of the Company's Board of Directors, no more restrictive, in any material respect, than those contained in such contracts, instruments or obligations immediately prior to such amendment, restatement, renewal, replacement or refinancing.]

SECTION 4.14 Limitation on Transactions with Affiliates.

[Delete: (a) The Company shall not, and shall not permit any Restricted Subsidiary to, directly or indirectly, enter into or suffer to exist any transaction or series of related transactions (including, without limitation, the sale, purchase, exchange or lease of assets, property or services) with any Affiliate of the Company unless (1) such transaction or series of transactions is on terms that are no less favorable to the Company or such Restricted Subsidiary, as the case may be, than those that could reasonably be obtainable at such time in a comparable transaction in arm's-length dealings with an unrelated third party, and (2) the Company delivers to the Trustee (a) with respect to any transaction or series of transactions involving aggregate payments in excess of \$500,000, an Officers' Certificate certifying that such transaction or series of related transactions complies with clause (1) above and (b) with respect to any transaction or series of transactions involving aggregate payments in excess of \$2.0 million, an Officers' Certificate certifying that such transaction or series of related transactions has been approved by a majority of the members of the Board of Directors of the Company (and approved by a majority of the Independent Directors or, in the event there is only one Independent Director, by such Independent Director), and (c) with respect to any transaction or series of transactions involving aggregate payments in excess of \$5.0 million, an opinion as to the fairness to the Company from a financial point of view issued by an investment banking firm of national standing.

(b) Section 4.14(a) will not apply to (i) employment agreements or compensation or employee benefit arrangements with any officer, director or employee of the Company or any of its Restricted Subsidiaries entered into in the ordinary course of business (including customary benefits thereunder and including reimbursement or advancement of out-of-pocket expenses, and director's and officer's liability insurance); (ii) the expense sharing arrangement between the Company and Weinberg Capital Corporation regarding the expenses incurred with respect to the Company's Cleveland, Ohio headquarters; (iii) the Hawk Controlling Stockholder Merger that will occur concurrently with the Offering; (iv) the secured promissory note in the original principal amount of \$500,000 issued to Helco, Inc.; (v) the Hutchinson Notes; (vi) any transaction entered into by or among the Company or one of its Restricted Subsidiaries with one or more Restricted Subsidiaries of the Company; (vii) any transactions permitted by Section 4.11(b); (viii) transactions permitted by, and complying with, Article Five; and (ix) transactions with suppliers or other purchases or sales of goods or services, in each case in the ordinary course of business (including, without limitation, pursuant to joint venture agreements) and otherwise in compliance with the terms of this Indenture which, in the reasonable determination of the Board of Directors of the Company, are on terms no less favorable to the Company or its Restricted Subsidiaries than those that could reasonably have been obtained at such time from an unaffiliated party.]

SECTION 4.15 Change of Control.

[Delete: (a) In the event of a Change of Control, each Holder shall have the right, unless the Company has given a notice of redemption, subject to the terms and conditions of this Indenture, to require the Company to offer to purchase all or any portion (equal to \$1,000 or an integral multiple thereof) of such Holder's Notes at a purchase price in cash equal to 101% of the aggregate principal amount thereof plus accrued and unpaid interest, if any, to the date of purchase, in accordance with the terms set forth below (a "Change of Control Offer").

In the event of any Change of Control, the Company shall not, and shall not cause or permit any of the Restricted Subsidiaries to, purchase, redeem or otherwise acquire or retire any Indebtedness of the Company ranking junior or subordinate to the Notes pursuant to any analogous provisions relating to such Indebtedness until after the 91st day after the Change of Control Payment Date (as such date may be extended).

- (b) On or before the 30th day following the occurrence of any Change of Control, the Company shall mail, by first-class mail (with a copy to the Trustee), to each Holder at such Holder's registered address a notice stating: (i) that a Change of Control has occurred and that such holder has the right to require the Company to purchase all or a portion (equal to \$1,000 or an integral multiple thereof) of such holder's Notes at a purchase price in cash equal to 101% of the aggregate principal amount thereof, plus accrued and unpaid interest, if any, to the date of purchase (the "Change of Control Purchase Date"), which shall be a Business Day, specified in such notice, that is not earlier than 30 days or later than 60 days from the date such notice is mailed; (ii) the amount of accrued and unpaid interest, if any, as of the Change of Control Purchase Date; (iii) that any Note not tendered will continue to accrue interest; (iv) that, unless the Company defaults in the payment of the purchase price for the Notes payable pursuant to the Change of Control Offer, any Notes accepted for payment pursuant to the Change of Control Offer shall cease to accrue interest on the Change of Control Purchase Date; (v) that Holders electing to have a Note purchased pursuant to a Change of Control Offer will be required to surrender the Note, with the form entitled "Option of Holder to Elect Purchase" on the reverse of the Note completed, to the Paying Agent at the address specified in the notice prior to the close of business on the second Business Day prior to the Change of Control Purchase Date; (vi) that Holders will be entitled to withdraw their election if the Paying Agent receives, not later than the second Business Day prior to the Change of Control Purchase Date, a facsimile transmission or letter setting forth the name of the Holder, the principal amount of the Notes the Holder delivered for purchase and a statement that such Holder is withdrawing his election to have such Notes purchased; (vii) that Holders whose Notes are purchased only in part will be issued new Notes in a principal amount equal to the unpurchased portion of the Notes surrendered; provided, however, that each Note purchased and each new Note issued shall be in an original principal amount of \$1,000 or integral multiples thereof; (viii) the circumstances and relevant facts regarding such Change of Control; and (ix) such other information as may be required by applicable laws and regulations.
- (c) On the Change of Control Purchase Date, the Company will (i) accept for payment all Notes or portions thereof tendered pursuant to the Change of Control Offer, (ii) deposit with the Paying Agent U.S. Legal Tender Sufficient to pay the aggregate purchase price of all Notes or portions thereof accepted for payment, and (iii) deliver or cause to be delivered to the Trustee all Notes tendered pursuant to the Change of Control Offer. The Paying Agent shall promptly mail to each holder of Notes or portions thereof accepted for payment an amount equal to the purchase price for such Notes plus accrued and unpaid interest, if any, thereon, and the Trustee shall promptly authenticate and mail to each holder of Notes accepted for payment in part a new Note equal in principal amount to any unpurchased portion of the Notes, and any Note not accepted for payment in whole or in part shall be promptly returned to the holder of such Note. On and after a Change of Control Purchase Date, interest will cease to accrue on the Notes or portions thereof accepted for payment, unless the Company defaults in the payment of the purchase price therefor. The Company will publicly announce the results of the Change of Control Offer on or as soon as practicable after the Change of Control Purchase Date.
- (d) The Company will comply with the applicable tender offer rules, including the requirements of Section 14(e) and Rule 14e-1 under the Exchange Act, and all other applicable securities laws and regulations in connection with any Change of Control Offer and will be deemed not to be in violation of any of the covenants under this Indenture to the extent such compliance is in conflict with such covenants.]

SECTION 4.16 Limitation on Asset Sales.

[Delete: (a) The Company shall not, and shall not permit any Restricted Subsidiary to, make any Asset Sale unless (i) the Company or such Restricted Subsidiary, as the case may be, receives consideration at the time of such Asset Sale at least equal to the Fair Market Value (as evidenced by a resolution of the Board of Directors set forth in an Officers' Certificate delivered to the Trustee) of the assets or other property sold or disposed of in the Asset Sale and (ii) at least 75% of such consideration consists of either cash or Cash Equivalents; provided, however, that for purposes of this Section 4.16, 'cash' shall include (x) the amount of any Indebtedness (other than any Indebtedness that is by its terms subordinated to the Notes) of the Company or such Restricted Subsidiary as shown on the Company's or such Restricted Subsidiary's most recent balance sheet or in the notes thereto that is assumed by the transferee of any such assets or other property in such Asset Sale (and excluding any liabilities that are incurred in connection with or in anticipation of such Asset Sale), but only to the extent that such assumption is effected on a basis such that there is no further recourse to the Company or any of the Restricted Subsidiaries with respect to such liabilities and (y) any notes, obligations or securities received by the Company or such Restricted Subsidiary into cash (to the extent of the cash received).

- (b) Within 180 days after any Asset Sale, the Company may elect to apply the Net Proceeds from such Asset Sale to (a) permanently reduce any Senior Debt of the Company and/or (b) make an investment in, or acquire assets and properties that will be used in, the business of the Company and the Restricted Subsidiaries existing on the Issue Date or in businesses reasonably related thereto. Pending the final application of any such Net Proceeds, the Company or any Restricted Subsidiary may temporarily reduce Indebtedness of the Company under the New Revolving Credit Facility or temporarily invest such Net Proceeds in any Investments described under clauses (i) through (iii) of the definition of Permitted Investments. Any Net Proceeds from an Asset Sale not applied or invested as provided in the first sentence of this Section 4.16(b) within 180 days of such Asset Sale will be deemed to constitute "Excess Proceeds."
- (c) Each date that the aggregate amount of Excess Proceeds in respect of which an Asset Sale Offer (as defined below) has not been made exceeds \$5.0 million shall be deemed an "Asset Sale Offer Trigger Date." As soon as practicable, but in no event later than 20 business days after each Asset Sale Offer Trigger Date, the Company shall commence an offer (an "Asset Sale Offer") to purchase the maximum principal amount of Notes that may be purchased out of the Excess Proceeds. Any Notes to be purchased pursuant to an Asset Sale Offer shall be purchased pro rata based on the aggregate principal amount of Notes outstanding, and all Notes shall be purchased at an offer price in cash in an amount equal to 100% of the principal amount thereof, plus accrued and unpaid interest, if any, to the date of purchase. To the extent that any Excess Proceeds remain after completion of an Asset Sale Offer, the Company may use the remaining amount for general corporate purposes otherwise permitted by this Indenture. In the event that the Company is prohibited under the terms of any agreement governing outstanding Senior Debt of the Company from repurchasing Notes with Excess Proceeds pursuant to an Asset Sale Offer as set forth in the first sentence of this Section 4.16(c), the Company shall promptly use all Excess Proceeds to permanently reduce such outstanding Senior Debt of the Company. Upon the consummation of any Asset Sale Offer, the amount of Excess Proceeds shall be deemed to be reset to zero.
- (d) Notice of an Asset Sale Offer shall be mailed, by first-class mail (with a copy to the Trustee), by the Company not later than the 20th business day after the related Asset Sale Offer Trigger Date to each holder of Notes at such holder's registered address, stating: (i) that an Asset Sale Offer Trigger Date has occurred and that the Company is offering to purchase the maximum principal amount of Notes that may be purchased out of the Excess Proceeds (to the extent provided in the immediately preceding paragraph), at an offer price in cash in an amount equal to 100% of the principal amount thereof, plus accrued and unpaid interest, if any, to the date of the purchase (the "Asset Sale Offer Purchase Date"), which shall be a business day, specified in such notice, that is not earlier than 30 days or later than 60 days from the date such notice is mailed, (ii) the amount of accrued and unpaid interest, if any, as of the Asset Sale Offer Purchase Date, (iii) that any Note not tendered will continue to accrue interest, (iv) that, unless the Company defaults in the payment of the purchase price for the Notes payable pursuant to the Asset Sale Offer, any Notes accepted for payment pursuant to the Asset Sale Offer shall cease to accrue interest after the Asset Sale Offer Purchase Date, (v) that Holders electing to have a Note purchased pursuant to a Asset Sale Offer will be required to surrender the Note, with the form entitled "Option of Holder to

Elect Purchase'' on the reverse of the Note completed, to the Paying Agent at the address specified in the notice prior to the close of business on the third Business Day prior to the Asset Sale Offer Purchase Date, (vi) that Holders will be entitled to withdraw their election if the Paying Agent receives, not later than the second Business Day prior to the Asset Sale Offer Purchase Date, a facsimile transmission or letter setting forth the name of the Holder, the principal amount of the Notes the Holder delivered for purchase and a statement that such Holder is withdrawing his election to have such Note purchased, (vii) that Holders whose Notes are purchased only in part will be issued new Notes in a principal amount equal to the unpurchased portion of the Notes surrendered; provided, however, that each Note purchased and each new Note issued shall be in an original principal amount of \$1,000 or integral multiples thereof, and (viii) such other information as may be required by applicable laws and regulations.

- (e) On the Asset Sale Offer Purchase Date, the Company will (i) accept for payment the maximum principal amount of Notes or portions thereof tendered pursuant to the Asset Sale Offer that can be purchased out of Excess Proceeds from such Asset Sale that are to be applied to an Asset Sale Offer, (ii) deposit with the Paying Agent U.S. Legal Tender sufficient to pay the aggregate purchase price of all Notes or portions thereof accepted for payment, and (iii) deliver or cause to be delivered to the Trustee all Notes tendered pursuant to the Asset Sale Offer. If less than all Notes tendered pursuant to the Asset Sale Offer are accepted for payment by the Company for any reason consistent with this Indenture, selection of the Notes to be purchased by the Company shall be in compliance with the requirements of the principal national securities exchange, if any, on which the Notes are listed or, if the Notes are not so listed, on a pro rata basis or by lot; provided, however, that Notes accepted for payment in part shall only be purchased in integral multiples of \$1,000. The Paying Agent shall promptly mail to each holder of Notes or portions thereof accepted for payment an amount equal to the purchase price for such Notes plus accrued and unpaid interest, if any, thereon, and the Trustee shall promptly authenticate and mail to such holder of Notes accepted for payment in part a new Note equal in principal amount to any unpurchased portion of the Notes, and any Note not accepted for payment in whole or in part shall be promptly returned to the holder of such Note. On and after an Asset Sale Offer Purchase Date, interest will cease to accrue on the Notes or portions thereof accepted for payment, unless the Company defaults in the payment of the purchase price therefor. The Company will publicly announce the results of the Asset Sale Offer on or as soon as practicable after the Asset Sale Offer Purchase Date.
 - (f) This Section 4.16 will not apply to a transaction consummated in compliance with Article Five.
- (g) The Company will comply with the applicable tender offer rules, including the requirements of Section 14(e) and Rule 14e-1 under the Exchange Act, and all other applicable securities laws and regulations in connection with any Asset Sale Offer and will be deemed not to be in violation of any of the covenants under this Indenture to the extent such compliance is in conflict with such covenants.]

* * *

ARTICLE V

SUCCESSOR CORPORATION

SECTION 5.1 Merger, Consolidation and Sale of Assets.

(a) The Company shall not, in any single transaction or series of related transactions, consolidate or merge with or into (whether or not the Company is the Surviving Person), or sell, assign, transfer, lease, convey or otherwise dispose of all or substantially all of its properties or assets (determined on a consolidated basis for the Company and its Restricted Subsidiaries) in one or more related transactions to, another Person, and the Company will not permit any Restricted Subsidiary to enter into any such transaction or series of related transactions if such transaction or series of related transactions, in the aggregate, would result in a sale, assignment, transfer, lease, conveyance or other disposition of all or substantially all of the properties and assets of the Company and the Restricted Subsidiaries, taken as a whole, to another Person, unless (i) the Surviving Person is a corporation organized or existing under the laws of the United States, any state thereof or the District of Columbia; [add: and] (ii) the Surviving Person (if other than the Company [delete: or a Guarantor]) assumes

all the obligations of the Company under the Notes, this Indenture and, if then in effect, the Registration Rights Agreement pursuant to a supplemental indenture or other written agreement, as the case may be, in a form reasonably satisfactory to the Trustee [delete:; (iii) immediately after such transaction, no Default or Event of Default shall have occurred and be continuing; (iv) immediately after giving effect to such transaction or series of related transactions, (a) in the case of a transaction involving the Company, the Surviving Person shall have a Consolidated Net Worth equal to or greater than the Consolidated Net Worth of the Company immediately prior to such transaction or series of related transactions or (b) in the case of a transaction involving a Restricted Subsidiary of the Company, the Surviving Person shall have a Consolidated Net Worth equal to or greater than the Consolidated Net Worth of such Restricted Subsidiary immediately prior to such transaction or series of related transactions; and (v) after giving pro forma effect to such transaction, the Surviving Person would be permitted to incur at least \$1.00 of additional indebtedness (other than Permitted Indebtedness) pursuant to Section 4.10(a). Notwithstanding clauses (iii), (iv) and (v) above, any Restricted Subsidiary that is a Guarantor may consolidate with, merge into or transfer all or part of its properties and assets to the Company or another Restricted Subsidiary that is a Guarantor].

In the event of any transaction (other than a lease) described in and complying with the conditions listed in the immediately preceding paragraph in which the Company [delete: or a Guarantor] is not the Surviving Person, such Surviving Person shall succeed to, and be substituted for, and may exercise every right and power of, the Company, and the Company shall be discharged from its obligations under, this Indenture, the Notes and the Registration Rights Agreement.

* * *

ARTICLE VI

DEFAULT AND REMEDIES

SECTION 6.1 "Events of Default", wherever used herein, means any one of the following events (whatever the reason for such Event of Default and whether it shall be voluntary or involuntary or be effected by operation of law or pursuant to any judgment, decree or order of any court or any order, rule or regulation of any administrative or governmental body):

- (i) the Company defaults for 30 days in the payment when due of interest on, or Liquidated Damages (if any) with respect to, any Note;
- (ii) the Company defaults in the payment when due of principal on any Note, whether upon maturity, acceleration, optional or mandatory redemption, required repurchase or otherwise;
- (iii) the Company's *[delete: or any Guarantor's]* failure to perform or comply with any covenant, agreement or warranty in this Indenture (other than the defaults specified in clauses (i) and (ii) above) which failure continues for 60 days after written notice thereof has been given to the Company by the Trustee or to the Company and the Trustee by the Holders of at least 25% in aggregate principal amount of the then outstanding Notes;

[delete: (iv) the occurrence of one or more defaults under any agreements, indentures or instruments under which the Company or any Restricted Subsidiary then has outstanding Indebtedness in excess of \$5.0 million in the aggregate and, if not already matured at its final maturity in accordance with its terms, such Indebtedness shall have been accelerated and such acceleration is not rescinded, annulled or cured within 10 days thereafter;

- (v) one or more judgments, orders or decrees for the payment of money in excess of \$5.0 million, either individually or in the aggregate, shall be entered against the Company or any Restricted Subsidiary or any of their respective properties and which judgments, orders or decrees are not paid, discharged, bonded or stayed or stayed pending appeal for a period of 60 days after their entry; or
- (vi) the Company or any Significant Subsidiary shall (A) commence a voluntary case or proceeding under any Bankruptcy Law with respect to itself, (B) consent to the entry of a judgment, decree or order for

relief against it in an involuntary case or proceeding under any Bankruptcy Law, (C) consent to the appointment of a Custodian of it or for substantially all of its property, (D) consent to or acquiesce in the institution of a bankruptcy or an insolvency proceeding against it, (E) make a general assignment for the benefit of its creditors, (F) admit in writing its inability to pay its debts as they become due, or (G) take any corporate action to authorize or effect any of the foregoing; or

(vii) a court of competent jurisdiction shall enter a judgment, decree or order for relief in respect of the Company or any Significant Subsidiary in an involuntary case or proceeding under any Bankruptcy Law which shall (A) approve as properly filed a petition seeking reorganization, arrangement, adjustment or composition in respect of the Company or any Significant Subsidiary, (B) appoint a Custodian of the Company or any Significant Subsidiary or for substantially all of its property or (C) order the winding-up or liquidation of its affairs; and such judgment, decree or order shall remain unstayed and in effect for a period of 60 consecutive days; or

(viii) any Guarantee ceases to be in full force and effect (except as contemplated by the terms of this Indenture) or any Guarantor denies or disaffirms its obligations under this Indenture or its Guarantee.]

The Company shall provide an Officers' Certificate to the Trustee within five days of the occurrence of any Default or Event of Default (provided, however, that pursuant to Section 4.6 hereof the Company shall provide such certification at least annually whether or not they know of any Default or Event of Default) that has occurred and, if applicable, describe such Default or Event of Default and the status thereof.

* * *

ARTICLE X GUARANTEES

SECTION 10.1 Unconditional Guarantee.

[Delete: Each Guarantor hereby unconditionally, jointly and severally, guarantees of a senior unsecured basis (such guarantee to be referred to herein as a "Guarantee") to each Holder of a Note authenticated and delivered by the Trustee and to the Trustee and its successors and assigns that: (i) the principal of, premium, if any, and interest on the Notes will be promptly paid in full when due, subject to any applicable grace period, whether at maturity, by acceleration or otherwise and interest on the overdue principal and interest on any overdue interest, to the extent lawful, of the Notes and all other Obligations of the Company to the Holders of the Notes or the Trustee hereunder or thereunder will be promptly paid in full or performed, all in accordance with the terms hereof and thereof; and (ii) in case of any extension of time of payment or renewal of any Notes or of any such other Obligations, the same will be promptly paid in full when due or performed in accordance with the terms of the extension or renewal, subject to any applicable grace period, whether at stated maturity, by acceleration or otherwise, subject, however, in the case of clauses (i) and (ii) above, to the limitations set forth in Section 10.4. Each Guarantor hereby agrees that its obligations hereunder shall be unconditional, irrespective of the validity, regularity or enforceability of the Notes or this Indenture, the absence of any action to enforce the same, any waiver or consent by any Holder of the Notes with respect to any provisions hereof or thereof, the recovery of any judgment against the Company, and action to enforce the same or any other circumstance which might otherwise constitute a legal or equitable discharge or defense of a guarantor. Each Guarantor hereby waives diligence, presentment, demand of payment, filing of claims with a court in the event of insolvency or bankruptcy of the Company, any right to require a proceeding first against the Company, protest, notice and all demands whatsoever and covenants that this Guarantee will not be discharged except by complete performance of the Obligations contained in the Notes, this Indenture and in this Guarantee. If any Holder of the Notes or the Trustee is required by any court or otherwise to return to the Company or any Guarantor, or any custodian, trustee, liquidator or other similar official acting in relation to the Company or any Guarantor, any amount paid by the Company or any Guarantor to the Trustee or such Holder, this Guarantee, to the extent theretofore discharged, shall be reinstated in full force and effect. Each Guarantor further agrees that, as between each Guarantor, on the one hand, and the Holders of the Notes and the Trustee, on the other hand, (x) the maturity of the obligations guaranteed hereby may be accelerated as provided in Article VI for the purposes of this

Guarantee, notwithstanding any stay, injunction or other prohibition preventing such acceleration in respect of the Obligations guaranteed hereby, and (y) in the event of any acceleration of such Obligations as provided in Article VI, such obligations (whether or not due and payable) shall forthwith become due and payable by each Guaranter for the purpose of this Guarantee.]

SECTION 10.2 Severability.

[Delete: In case any provision of this Article X or any Guarantee shall be invalid, illegal or unenforceable, the validity, legality, and enforceability of the remaining provisions hereof or thereof shall not in any way be affected or impaired thereby.]

SECTION 10.3 Successors and Assigns; Release of a Guarantor.

[Delete: This Article X shall be binding upon the Guarantors and their successors and assigns and shall enure to the benefit of the successors and assigns of the Trustee and the Holders and, in the event of any transfer or assignment of rights by any Holder or the Trustee, the rights and privileges conferred upon that party in this Indenture and in the Notes shall automatically extend to and be vested in such transferee or assignee, all subject to the terms and conditions of this Indenture.

If no Default exists or would exist under this Indenture, if all of the assets of any Guarantor or all of the Capital Stock of any Guarantor is sold or disposed of (including by merger, consolidation, issuance or otherwise) by the Company or any of the Restricted Subsidiaries to any person that is not an Affiliate of the Company or any of the Restricted Subsidiaries if a transaction constituting an Asset Sale (other than pursuant to a transaction subject to the provisions of clause (a) or (b) of Section 5.1), and if the Net Proceeds from such Asset Sale are used in accordance with Section 4.16, then (a) such Guarantor and each wholly-owned Restricted Subsidiary of such Guarantor that is also a Guarantor (in the event of a sale or other disposition of all of the Capital Stock of such Guarantor) or (b) the corporation or other entity acquiring such assets (in the event of a sale or other disposition of all or substantially all of the assets of such Guarantor) shall be released and discharged of its Guarantee obligations.

The Trustee shall deliver an appropriate instrument evidencing such release upon receipt of a request by the Company accompanied by an Officers' Certificate of the Company and Opinion of Counsel certifying as to the compliance with this Section 10.3. Any Guarantor not so released remains liable for the full amount of principal of, premium and interest on the Securities and other Obligations as provided in this Article X.]

SECTION 10.4 Limitation of Guarantor's Liability.

[Delete: Each Guarantor and by its acceptance hereof each Holder of Notes hereby confirms that it is the intention of all such parties that the guarantee by such Guarantor pursuant to its Guarantee not constitute a fraudulent transfer or conveyance for purposes of any Bankruptcy Law, the Uniform Fraudulent Conveyance Act, the Uniform Fraudulent Transfer Act or any similar Federal or state law. To effectuate the foregoing intention, the Holders of Notes and such Guarantor hereby irrevocably agree that the obligations of such Guarantor under its Guarantee shall be limited to the maximum amount as will, after giving effect to all other contingent and fixed liabilities of such Guarantor and after giving effect to any collections from or payments made by or on behalf of any other Guarantor in respect of the Obligations of such other Guarantor under its Guarantee or pursuant to Section 10.5, result in the obligations of such Guarantor under its Guarantee not constituting such fraudulent transfer or conveyance.]

SECTION 10.5 Contribution.

[Delete: In order to provide for just and equitable contribution among the Guarantors, the Guarantors agree, inter se, that in the event any payment or distribution is made by any Guarantor (a 'Funding Guarantor') under its Guarantee, such Funding Guarantor shall be entitled to a contribution from all other Guarantors in a pro rata amount based on the Adjusted Net Assets (as defined below) of each Guarantor (including the Funding Guarantor) for all payments, damages and expenses incurred by that Funding Guarantor in discharging the Company's obligations with respect to the Notes or any other Guarantor's obligations with respect to its Guarantee. ''Adjusted Net Assets'' of such Guarantor at any date shall mean the lesser of (x) the amount by which the fair value of the property of such Guarantor exceeds the total amount of liabilities, including, without

limitation, contingent liabilities (after giving effect to all other fixed and contingent liabilities incurred or assumed on such date (other than liabilities of such Guarantor under Indebtedness subordinated to such Guarantor's Guarantee)), but excluding liabilities under the Guarantee, of such Guarantor at such date and (y) the amount by which the present fair salable value of the assets of such Guarantor at such date exceeds the amount that will be required to pay the probable liability of such Guarantor on its debts (after giving effect to all other fixed and contingent liabilities incurred or assumed on such date and after giving effect to any collection from any Subsidiary of such Guarantor in respect of the obligations of such Subsidiary under its Guarantee, if any), excluding debt in respect of the Guarantee of such Guarantor, as they become absolute and matured.]

SECTION 10.6 Waiver of Subrogation.

[Delete: Until all Guarantee Obligations are paid in full, each Guarantor hereby irrevocably waives any claims or other rights which it may now or hereafter acquire against the Company that arise from the existence, payment, performance or enforcement of such Guarantor's obligations under its Guarantee and this Indenture, including, without limitation, any right of subrogation, reimbursement, exoneration, indemnification, and any right to participate in any claim or remedy of any holder of Notes against the Company, whether or not such claim, remedy or right arises in equity, or under contract, statute or common law, including, without limitation, the right to take or receive from the Company, directly or indirectly, in cash or other property or by set-off or in any other manner, payment or security on account of such claim or other rights. If any amount shall be paid to any Guarantor in violation of the preceding sentence and the Notes shall not have been paid in full, such amount shall have been deemed to have been paid to such Guarantor for the benefit of, and held in trust for the benefit of, the Holders of the Notes, and shall forthwith be paid to the Trustee for the benefit of such Holders to be credited and applied upon the Notes, whether matured or unmatured, in accordance with the terms of this Indenture. Each Guarantor acknowledges that it will receive direct and indirect benefits from the financing arrangements contemplated by this Indenture and that the waiver set forth in this Section 10.6 is knowingly made in contemplation of such benefits.]

SECTION 10.7 Execution of Guarantee.

[Delete: To evidence its guarantee to the Holders of Notes set forth in this Article X, each Guarantor hereby agrees to execute its Guarantee in substantially the form included in the Notes, which shall be endorsed on each Note ordered to be authenticated and delivered by the Trustee. Each Guarantor hereby agrees that its Guarantee set forth in this Article X shall remain in full force and effect notwithstanding any failure to endorse on each Note a notation of such Guarantee. Each such Guarantee shall be signed on behalf of each Guarantor by two Officers, or an Officer and an Assistant Secretary or one Officer shall sign and one Officer or an Assistant Secretary (each of whom shall, in each case, have been duly authorized by all requisite corporate actions) shall attest to such Guarantee prior to the authentication of the Notes on which it is endorsed, and the delivery of such Notes by the Trustee, after the authentication thereof hereunder, shall constitute due delivery of such Guarantee on behalf of such Guarantor. Such signatures upon the Guarantee may be by manual or facsimile signature of such officers and may be imprinted or otherwise reproduced on the Guarantee, and in case any such officer who shall have signed the Guarantee shall cease to be such officer before the Notes on which such Guarantee is endorsed shall have been authenticated and delivered by the Trustee or disposed of by the Company, such Notes nevertheless may be authenticated and delivered or disposed of as though the person who signed the Guarantee had not ceased to be such officer of the Guarantor.]

SECTION 10.8 Waiver of Stay, Extension or Usury Laws.

[Delete: Each Guarantor covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay or extension law or any usury law or other law that would prohibit or forgive each such Guarantor from performing its Guarantee as contemplated herein, wherever enacted, now or at any time hereafter in force, or which may affect the covenants or the performance of this Indenture; and (to the extent that it may lawfully do so) such Guarantor hereby expressly waives all benefit or advantage of any such law, and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.]

SECTION 10.9 Additional Guarantors.

[Delete: Concurrently with the creation or acquisition by the Company of any Subsidiary (other than a Foreign Subsidiary and other than an Unrestricted Subsidiary), the Company, such Subsidiary and the Trustee shall execute and deliver a supplement to this Indenture providing that such Subsidiary will be a Guarantor hereunder. Each such supplement shall be in a form reasonably satisfactory to the Trustee.]

SECTION 10.10 Modification.

[Delete: No modification, amendment or waiver of any provision of this Article X, nor the consent to any departure by the Guarantors therefrom, shall in any event be effective unless the same shall be in writing and signed by the Trustee, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice to or demand on the Guarantors in any case shall entitle the Guarantors to any other or further notice or demand in the same, similar or other circumstances.]

The exchange agent for the exchange offer is:



By Mail, Overnight Courier or Hand Delivery:

HSBC Bank USA
One Hanson Place
Lower Level
Brooklyn, New York 11243

By Facsimile (for Eligible Institutions only): (718) 488-4488

Confirm by Telephone: (718) 488-4475

Questions, requests for assistance and requests for additional copies of this prospectus and consent solicitation statement and related letter of transmittal may be directed to the information agent or the dealer manager at each of their addresses set forth below.

The information agent for the exchange offer is:

D.F. King & Co., Inc.

77 Water Street
20th Floor
New York, New York 10005
Banks and Brokerage Firms, Please Call: (212) 269-5550
All Others Call Toll-free: (800) 290-6430

The exclusive dealer manager for the exchange offer is:

Banc of America Securities LLC

100 North Tryon Street, 12th Floor Charlotte, North Carolina 28255 Attention: High Yield Special Products (888) 292-0070 (toll-free) (704) 388-4813 (collect)

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 20. Indemnification of Directors and Officers.

Reference is made to Section 102(b)(7) of the Delaware General Corporation Law, as amended (the "DGCL"), which enables a corporation in its original certificate or an amendment thereto to eliminate or limit the personal liability of a director for violations of the director's fiduciary duty, except (1) for any breach of the director's duty of loyalty to the corporation or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) pursuant to Section 174 of the DGCL (providing for liability of directors for unlawful payment of dividends or unlawful stock purchases or redemptions) or (4) for any transaction from which a director derived an improper personal benefit. The certificates of incorporation of the Registrants that are Delaware corporations contain provisions permitted by Section 102(b)(7) of the DGCL.

Reference also is made to Section 145 of the DGCL, which provides that a corporation may indemnify any persons, including officers and directors, who are, or are threatened to be made, parties to any threatened, pending or completed legal action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person was an officer, director, employee or agent of such corporation, or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such officer, director, employee or agent acted in good faith and in a manner he reasonably believed to be in or not opposed to the corporation's best interests and, for criminal proceedings, had no reasonable cause to believe that his conduct was unlawful. A Delaware corporation may indemnify officers and directors in an action by or in the right of the corporation under the same conditions, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him against the expenses (including attorneys' fees) which such officer or director actually and reasonably incurred. An indemnification made under Section 145, unless ordered by a court, shall be authorized upon a determination that indemnification of the director, officer, employee or agent is proper because the person has met the applicable standard of conduct required by this section. Such determination shall be made with respect to a person who is a director or officer at the time of such determination by a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, or by a committee of such directors designated by a majority vote of such directors, even though less than a quorum, or if there are no such directors, or if such directors so direct, by independent legal counsel, or by the stockholders.

In addition, reference is made to Section 1701.13(E) of the Ohio General Corporation Law, as amended (the "OGCL"), which provides that a corporation may indemnify or agree to indemnify any person who was or is a party, or is threatened to be made a party, to any threatened, pending, or completed action, suit, or proceeding, whether civil, criminal, administrative, or investigative, other than an action by or in the right of the corporation, by reason of the fact that he is or was a director, officer, employee, or agent of the corporation, or is or was serving at the request of the corporation as a director, trustee, officer, employee, member, manager, or agent of another corporation or other enterprise, against expenses, including attorney's fees, judgments, fines, and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit, or proceeding, if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, if he had no reasonable cause to believe his conduct was unlawful. An Ohio corporation may indemnify officers and directors in an action by or in the right of the corporation under the same conditions, except that no indemnification is permitted (1) without judicial approval if the officer or director is adjudged to be liable to the corporation, and (2) in connection with any action or suit in which the only liability

asserted against a director is pursuant to Section 1701.95 of the OGCL with respect to the making of an unlawful loan, dividend or other distribution. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him against the expenses which such officer or director actually and reasonably incurred.

Further Reference is made to Sections 1741 through 1750 of the Pennsylvania Business Corporation Law of 1988, as amended (the "PBCL"), which provides that a corporation may indemnify any person, including officers and directors, who are, or are threatened to be made, parties to any threatened, pending or completed legal action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person was a representative of the corporation, or is or was serving at the request of the corporation as a representative of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the corporation's best interests and, for criminal proceedings, had no reasonable cause to believe that his or her conduct was unlawful. A Pennsylvania corporation may indemnify any person, including officers and directors, in an action by or in the right of the corporation under the same conditions, except that no indemnification is permitted without judicial approval if such person is adjudged to be liable to the corporation. Where such a person is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him or her against the expenses (including attorneys' fees) that such representative actually and reasonably incurred. Unless ordered by a court, indemnification must be made by the corporation upon a determination that indemnification of the representative is proper because he or she has met the applicable standard of conduct required by the sections referred to above. This determination may be made by a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, or by a committee of such directors designated by the board of directors by a majority vote of a quorum consisting of directors who were not parties to the action or proceeding, or if such a quorum is not available or if obtainable and a majority vote of a quorum of disinterested directors so directs, by independent legal counsel in a written opinion, or by the shareholders of the corporation.

The certificates of incorporation of the Registrants that are Delaware corporations provide for the indemnification of directors and officers of those Registrants to the fullest extent permitted by the DGCL, the articles of incorporation of the Registrants that are Ohio corporations provide for the indemnification of directors and officers of those Registrants to the fullest extent permitted by the OGCL and the certificate of incorporation of the Registrants that is a Pennsylvania corporation provides for the indemnification of directors and officers of that Registrant to the fullest extent permitted by the PBCL. At present, there is no pending litigation or proceeding involving a director or officer of any Registrant as to which indemnification is being sought, and no Registrant is aware of any threatened litigation that may result in claims for indemnification by any officer or director.

The Registrants maintain an insurance policy that provides protection, within the maximum liability limits of the policy and subject to a deductible amount for each claim, to the Registrants under their respective indemnification obligations and to the directors and officers with respect to certain matters that are not covered by the Registrants' respective indemnification obligations.

The employment agreements of Ronald E. Weinberg and Norman C. Harbert with Hawk Corporation provide that each of them shall be indemnified to the fullest extent provided by the articles or certificate of incorporation and by-laws or code of regulations (or other governing document), as amended or restated from time to time, of Hawk Corporation and any of its wholly-owned subsidiaries. Mr. Weinberg is the Chairman of the Board and Chief Executive Officer, and a director, of the Registrants. Mr. Harbert is the Senior Chairman of the Board and Founder, and a director, of the Registrants.

Item 21. Exhibits and Financial Statement Schedules.

- (a) Exhibits: See the Exhibit Index following the signature pages to this Registration Statement.
- (b) *Financial Statement Schedules:* All schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instructions or are not applicable, and therefore have been omitted.

Item 22. Undertakings.

- (a) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrants pursuant to the foregoing provisions, or otherwise, the Registrants have been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrants of expenses incurred or paid by a director, officer or controlling person of the Registrants in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrants will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.
 - (b) The undersigned Registrants hereby undertake:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement.
 - (2) That, for the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
 - (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (c) The undersigned Registrants hereby undertake to respond to requests for information that is incorporated by reference into the prospectus pursuant to Items 4, 10(b), 11, or 13 of this Form, within one business day of receipt of such request, and to send the incorporated documents by first class mail or other equally prompt means. This includes information contained in documents filed subsequent to the effective date of the Registration Statement through the date of responding to the request.
- (d) The undersigned Registrants hereby undertake to supply by means of a post-effective amendment all information concerning a transaction, and the company being acquired involved therein, that was not the subject of and included in the Registration Statement when it became effective.

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cleveland, State of Ohio, on June 12, 2002.

HAWK CORPORATION

By: /s/ RONALD E. WEINBERG

Ronald E. Weinberg,

Chairman of the Board and

Chief Executive Officer

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS that each person whose signature appears below hereby constitutes and appoints Thomas A. Gilbride and Byron S. Krantz his true and lawful attorneys-in-fact, each acting alone, with full powers of substitution, and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any or all amendments, including any post-effective amendments, to this registration statement, and to file the same, with exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorneys-in-fact or their substitutes, each acting alone, may lawfully do or cause to be done by virtue hereof.

/s/ NORMAN C. HARBERT NORMAN C. Harbert	Senior Chairman of the Board, Founder and Director	June 12, 2002
/s/ RONALD E. WEINBERG Ronald E. Weinberg	Chairman of the Board, Chief Executive Officer and Director (principal executive officer)	June 12, 2002
/s/ Jeffrey H. Berlin Jeffrey H. Berlin	President, Chief Operating Officer and Director	June 12, 2002
/s/ THOMAS A. GILBRIDE Thomas A. Gilbride	Vice President – Finance and Treasurer (principal financial and accounting officer)	June 12, 2002
/s/ Byron S. Krantz Byron S. Krantz	Secretary and Director	June 12, 2002
/s/ PAUL R. BISHOP Paul R. Bishop	Director	June 12, 2002
/s/ DAN T. MOORE, III Dan T. Moore, III	Director	June 12, 2002
/s/ JACK KEMP Jack Kemp	Director	June 12, 2002

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cleveland, State of Ohio, on June 12, 2002.

ALLEGHENY CLEARFIELD, INC.

By: /s/ RONALD E. WEINBERG

Ronald E. Weinberg,

Chairman of the Board and

Chief Executive Officer

Power of Attorney

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Senior Chairman of the Board, Founder and Director	June 12, 2002
Chairman of the Board, Chief Executive Officer and Director (principal executive officer)	June 12, 2002
Vice President – Finance and Treasurer (principal financial and accounting officer)	June 12, 2002
Secretary and Director	June 12, 2002
Director	June 12, 2002
Director	June 12, 2002
Director	June 12, 2002
Director	June 12, 2002
	and Director Chairman of the Board, Chief Executive Officer and Director (principal executive officer) Vice President – Finance and Treasurer (principal financial and accounting officer) Secretary and Director Director Director

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cleveland, State of Ohio, on June 12, 2002.

FRICTION PRODUCTS CO.

By: /s/ RONALD E. WEINBERG

Ronald E. Weinberg,

Chairman of the Board and

Chief Executive Officer

Power of Attorney

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Senior Chairman of the Board, Founder and Director	June 12, 2002
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Secretary and Director	June 12, 2002
Director	June 12, 2002
Director	June 12, 2002
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	and Director Chairman of the Board, Chief Executive Officer and Director (principal executive officer) Vice President – Finance and Treasurer (principal financial and accounting officer) Secretary and Director Director Director

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cleveland, State of Ohio, on June 12, 2002.

HAWK BRAKE, INC.

By: /s/ RONALD E. WEINBERG

Ronald E. Weinberg,

Chairman of the Board and

Chief Executive Officer

Power of Attorney

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Senior Chairman of the Board, Founder and Director	June 12, 2002
Chairman of the Board, Chief Executive Officer and Director (principal executive officer)	June 12, 2002
Vice President – Finance and Treasurer (principal financial and accounting officer)	June 12, 2002
Secretary and Director	June 12, 2002
Director	June 12, 2002
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Director	June 12, 2002
	and Director Chairman of the Board, Chief Executive Officer and Director (principal executive officer) Vice President – Finance and Treasurer (principal financial and accounting officer) Secretary and Director Director Director

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HAWK MIM, INC.

By: /s/ RONALD E. WEINBERG

Ronald E. Weinberg,

Chairman of the Board and

Chief Executive Officer

Power of Attorney

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HAWK MOTORS, INC.

By: /s/ RONALD E. WEINBERG

Ronald E. Weinberg,

Chairman of the Board and

Chief Executive Officer

Power of Attorney

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/s/ NORMAN C. HARBERT Norman C. Harbert	Senior Chairman of the Board, Founder and Director	June 12, 2002
/s/ RONALD E. WEINBERG Ronald E. Weinberg	Chairman of the Board, Chief Executive Officer and Director (principal executive officer)	June 12, 2002
/s/ THOMAS A. GILBRIDE Thomas A. Gilbride	Vice President – Finance and Treasurer (principal financial and accounting officer)	June 12, 2002
/s/ Byron S. Krantz Byron S. Krantz	Secretary and Director	June 12, 2002
/s/ Jeffrey H. Berlin Jeffrey H. Berlin	Director	June 12, 2002
/s/ PAUL R. BISHOP Paul R. Bishop	Director	June 12, 2002
/s/ DAN T. MOORE, III Dan T. Moore, III	Director	June 12, 2002
/s/ JACK KEMP Jack Kemp	Director	June 12, 2002

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HAWK PRECISION COMPONENTS GROUP, INC.

By: /s/ RONALD E. WEINBERG

Ronald E. Weinberg,

Chairman of the Board and

Chief Executive Officer

Power of Attorney

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Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cleveland, State of Ohio, on June 12, 2002.

HELSEL, INC.

By: /s/ RONALD E. WEINBERG

Ronald E. Weinberg,

Chairman of the Board and

Chief Executive Officer

Power of Attorney

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/s/ NORMAN C. HARBERT NORMAN C. Harbert	Senior Chairman of the Board, Founder and Director	June 12, 2002
/s/ RONALD E. WEINBERG Ronald E. Weinberg	Chairman of the Board, Chief Executive Officer and Director (principal executive officer)	June 12, 2002
/s/ THOMAS A. GILBRIDE Thomas A. Gilbride	Vice President – Finance and Treasurer (principal financial and accounting officer)	June 12, 2002
/s/ Byron S. Krantz Byron S. Krantz	Secretary and Director	June 12, 2002
/s/ Jeffrey H. Berlin Jeffrey H. Berlin	Director	June 12, 2002
/s/ PAUL R. BISHOP Paul R. Bishop	Director	June 12, 2002
/s/ DAN T. MOORE, III Dan T. Moore, III	Director	June 12, 2002
/s/ JACK KEMP Jack Kemp	Director	June 12, 2002

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LOGAN METAL STAMPINGS, INC.

By: /s/ RONALD E. WEINBERG

Ronald E. Weinberg,

Chairman of the Board and

Chief Executive Officer

Power of Attorney

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Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cleveland, State of Ohio, on June 12, 2002.

NET SHAPE TECHNOLOGIES LLC

By:	/s/ Ronald E. Weinberg
	Ronald E. Weinberg,
	Chairman of the Board

Power of Attorney

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/s/ NORMAN C. HARBERT Norman C. Harbert	Senior Chairman of the Board, Founder and Manager	June 12, 2002
/s/ RONALD E. WEINBERG Ronald E. Weinberg	Chairman of the Board and Manager (principal executive officer)	June 12, 2002
/s/ Jeffrey H. Berlin Jeffrey H. Berlin	Chief Executive Officer and Manager	June 12, 2002
/s/ THOMAS A. GILBRIDE Thomas A. Gilbride	Vice President – Finance and Treasurer (principal financial and accounting officer)	June 12, 2002
/s/ Byron S. Krantz Byron S. Krantz	Secretary and Manager	June 12, 2002
/s/ PAUL R. BISHOP Paul R. Bishop	Manager	June 12, 2002
/s/ DAN T. MOORE, III Dan T. Moore, III	Manager	June 12, 2002
/s/ JACK KEMP Jack Kemp	Manager	June 12, 2002

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cleveland, State of Ohio, on June 12, 2002.

QUARTER MASTER INDUSTRIES, INC.

By: /s/ RONALD E. WEINBERG

Ronald E. Weinberg,

Chairman of the Board and

Chief Executive Officer

Power of Attorney

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	and Director Chairman of the Board, Chief Executive Officer and Director (principal executive officer) Vice President – Finance and Treasurer (principal financial and accounting officer) Secretary and Director Director Director

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cleveland, State of Ohio, on June 12, 2002.

S.K. Wellman Holdings, Inc.

By: /s/ RONALD E. WEINBERG

Ronald E. Weinberg,

Chairman of the Board and

Chief Executive Officer

Power of Attorney

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	and Director Chairman of the Board, Chief Executive Officer and Director (principal executive officer) Vice President – Finance and Treasurer (principal financial and accounting officer) Secretary and Director Director Director

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S.K. Wellman Corp.

By: /s/ RONALD E. WEINBERG

Ronald E. Weinberg,

Chairman of the Board and

Chief Executive Officer

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS that each person whose signature appears below hereby constitutes and appoints Thomas A. Gilbride and Byron S. Krantz his true and lawful attorneys-in-fact, each acting alone, with full powers of substitution, and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any or all amendments, including any post-effective amendments, to this registration statement, and to file the same, with exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorneys-in-fact or their substitutes, each acting alone, may lawfully do or cause to be done by virtue hereof.

/s/ NORMAN C. HARBERT Norman C. Harbert	Senior Chairman of the Board, Founder and Director	June 12, 2002
/s/ RONALD E. WEINBERG Ronald E. Weinberg	Chairman of the Board, Chief Executive Officer and Director (principal executive officer)	June 12, 2002
/s/ THOMAS A. GILBRIDE Thomas A. Gilbride	Vice President – Finance and Treasurer (principal financial and accounting officer)	June 12, 2002
/s/ Byron S. Krantz Byron S. Krantz	Secretary and Director	June 12, 2002
/s/ Jeffrey H. Berlin Jeffrey H. Berlin	Director	June 12, 2002
/s/ PAUL R. BISHOP Paul R. Bishop	Director	June 12, 2002
/s/ DAN T. MOORE, III Dan T. Moore, III	Director	June 12, 2002
/s/ JACK KEMP Jack Kemp	Director	June 12, 2002

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cleveland, State of Ohio, on June 12, 2002.

SINTERLOY CORPORATION

By: /s/ RONALD E. WEINBERG

Ronald E. Weinberg,

Chairman of the Board and

Chief Executive Officer

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS that each person whose signature appears below hereby constitutes and appoints Thomas A. Gilbride and Byron S. Krantz his true and lawful attorneys-in-fact, each acting alone, with full powers of substitution, and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any or all amendments, including any post-effective amendments, to this registration statement, and to file the same, with exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorneys-in-fact or their substitutes, each acting alone, may lawfully do or cause to be done by virtue hereof.

Senior Chairman of the Board, Founder and Director	June 12, 2002
Chairman of the Board, Chief Executive Officer and Director (principal executive officer)	June 12, 2002
Vice President – Finance and Treasurer (principal financial and accounting officer)	June 12, 2002
Secretary and Director	June 12, 2002
Director	June 12, 2002
Director	June 12, 2002
Director	June 12, 2002
Director	June 12, 2002
	and Director Chairman of the Board, Chief Executive Officer and Director (principal executive officer) Vice President – Finance and Treasurer (principal financial and accounting officer) Secretary and Director Director Director

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cleveland, State of Ohio, on June 12, 2002.

TEX RACING ENTERPRISES, INC.

By: /s/ RONALD E. WEINBERG

Ronald E. Weinberg,

Chairman of the Board and

Chief Executive Officer

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS that each person whose signature appears below hereby constitutes and appoints Thomas A. Gilbride and Byron S. Krantz his true and lawful attorneys-in-fact, each acting alone, with full powers of substitution, and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any or all amendments, including any post-effective amendments, to this registration statement, and to file the same, with exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorneys-in-fact or their substitutes, each acting alone, may lawfully do or cause to be done by virtue hereof.

Senior Chairman of the Board, Founder and Director	June 12, 2002
Chairman of the Board, Chief Executive Officer and Director (principal executive officer)	June 12, 2002
Vice President – Finance and Treasurer (principal financial and accounting officer)	June 12, 2002
Secretary and Director	June 12, 2002
Director	June 12, 2002
Director	June 12, 2002
Director	June 12, 2002
Director	June 12, 2002
	and Director Chairman of the Board, Chief Executive Officer and Director (principal executive officer) Vice President – Finance and Treasurer (principal financial and accounting officer) Secretary and Director Director Director

EXHIBIT INDEX

Exhibit	Description
1.1 [†]	Form of Dealer Manager Agreement by and between the Company and Banc of America Securities LLC
3.1	Form of the Company's Second Amended and Restated Certificate of Incorporation (Incorporated by reference to the Company's Registration Statement on Form S-1 as filed with the Securities and Exchange Commission (Reg. No. 333-40535))
3.2	The Company's Amended and Restated By-laws (Incorporated by reference to the Company's Current Report on Form 8-K dated March 2, 2000 as filed with the Securities and Exchange Commission)
4.1	Form of Rights Agreement between the Company and Continental Stock Transfer & Trust Company, as Rights Agent (Incorporated by reference to the Company's Registration Statement on Form S-1 as filed with the Securities and Exchange Commission (Reg. No. 333-40535))
4.2	Indenture, dated as of November 27, 1996, by and among the Company, Friction Products Co., Hawk Brake, Inc., Logan Metal Stampings, Inc., Helsel, Inc., S.K. Wellman Holdings, Inc., S.K.

- Wellman Corp., Wellman Friction Products U.K. Corp., Hutchinson Products Corporation, and Bank One Trust Company, NA, as Trustee (Incorporated by reference to the Company's Registration Statement on Form S-4 as filed with the Securities and Exchange Commission (Reg. No. 333-18433)) (omitting certain supplemental indentures adding certain Registrants as guarantors, which omitted supplements the Registrants undertake to furnish supplementally to the Securities and Exchange Commission upon request)
- 4.3 Agreement of Resignation, Appointment and Acceptance, dated as of April 25, 2002, by and among Bank One Trust Company, N.A., HSBC Bank USA and the Company (Incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2002, as filed with the Securities and Exchange Commission (Reg. No. 333-40535))
- 4.4 Specimen 10¹/₄% Senior Note due 2003 (Incorporated by reference to the Company's Registration Statement on Form S-4 as filed with the Securities and Exchange Commission (Reg. No. 333-18433))
- 4.5 Specimen Series B 10¹/₄% Senior Note due 2003 (Incorporated by reference to the Company's Registration Statement on Form S-4 as filed with the Securities and Exchange Commission (Reg. No. 333-18433))
- 4.6^{\dagger} Form of Supplemental Indenture for $10^{1/4}\%$ Senior Notes due 2003 by and among the Registrants and HSBC Bank of USA, as Trustee
- 4.7[†] Form of Indenture for % Senior Notes due 200 by and among the Registrants and HSBC Bank USA, as Trustee
- 4.8[†] Specimen % Senior Note due 200
- 4.9 Stockholders' Voting Agreement, effective as of November 27, 1996, by and among the Company, Norman C. Harbert, the Harbert Family Limited Partnership, Ronald E. Weinberg, the Weinberg Family Limited Partnership, Byron S. Krantz and the Krantz Family Limited Partnership (Incorporated by reference to the Company's Registration Statement on Form S-4 as filed with the Securities and Exchange Commission (Reg. No. 333-18433))
- 4.10 Letter agreement, dated January 5, 1998, amending the Stockholders' Voting Agreement, effective as of November 27, 1996, by and among the Company, Norman C. Harbert, the Harbert Family Limited Partnership, Ronald E. Weinberg, the Weinberg Family Limited Partnership, Byron S. Krantz and the Krantz Family Limited Partnership (Incorporated by reference to the Company's Registration Statement on Form S-1 as filed with the Securities and Exchange Commission (Reg. No. 333-40535))
- 5.1[†] Opinion of Kohrman Jackson & Krantz P.L.L. as to the validity of the new notes being registered
- 8.1[†] Opinion of Kohrman Jackson & Krantz P.L.L. as to the material U.S. federal income tax consequences to the holders of the securities being offered

Exhibit Description 10.1 Employment Agreement, dated as of November 1, 1996, between the Company and Norman C. Harbert (Incorporated by reference to the Company's Registration Statement on Form S-4 as filed with the Securities and Exchange Commission (Reg. No. 333-18433)) Form of Amended and Restated Wage Continuation Agreement between the Company and Norman 10.2 C. Harbert (Incorporated by reference to the Company's Registration Statement on Form S-1 as filed with the Securities and Exchange Commission (Reg. No. 333-40535)) Employment Agreement, dated as of November 1, 1996, between the Company and Ronald E. 10.3 Weinberg (Incorporated by reference to the Company's Registration Statement on Form S-4 as filed with the Securities and Exchange Commission (Reg. No. 333-18433)) 10.4 Amendment No. 1 to the Employment Agreement, dated as of October 24, 2000, between the Company and Norman C. Harbert (Incorporated by reference to the Company's Form 10-Q for the quarterly period ended March 31, 2001 as filed with the Securities and Exchange Commission) Amendment No. 1 to the Employment Agreement, dated as of October 24, 2000, between the 10.5 Company and Ronald E. Weinberg (Incorporated by reference to the Company's Form 10-Q for the quarterly period ended March 31, 2001 as filed with the Securities and Exchange Commission) Amended and Restated Employment Agreement, dated as of December 31, 2001, by and among the Company, Friction Products Co. and Ronald E. Weinberg (Incorporated by reference to the 10.6 Company's Form 10-K for the year ended December 31, 2001 as filed with the Securities and Exchange Commission) Amended and Restated Employment Agreement, dated as of December 31, 2001, by and among the 10.7 Company, Friction Products Co. and Norman C. Harbert (Incorporated by reference to the Company's Form 10-K for the year ended December 31, 2001 as filed with the Securities and Exchange Commission) 10.8 Amended and Restated Wage Continuation Agreement, dated as of December 31, 2001, by and among the Company, Friction Products Co. and Norman C. Harbert (Incorporated by reference to the Company's Form 10-K for the year ended December 31, 2001 as filed with the Securities and Exchange Commission) 10.9 Consultant Agreement, dated as of December 31, 2001, by and among the Company, Friction Products Co. and Norman C. Harbert (Incorporated by reference to the Company's Form 10-K for the year ended December 31, 2001 as filed with the Securities and Exchange Commission) 10.10 Letter agreement, dated as of March 26, 1998, amending the Employment Agreement and the Consulting Agreement, each dated July 1, 1994, between Helsel, Inc. and Jess F. Helsel (Incorporated by reference to the Company's Form 10-K for the year ended December 31, 1998 as filed with the Securities and Exchange Commission) Hawk Corporation 1997 Stock Option Plan (Incorporated by reference to the Company's 10.11 Registration Statement on Form S-1 as filed with the Securities and Exchange Commission (Reg. No. 333-40535)) 10.12 Hawk Corporation 2000 Long Term Incentive Plan (Incorporated by reference to the Company's Form 10-K for the year ended December 31, 2001 as filed with the Securities and Exchange Commission) 10.13 Hawk Corporation Annual Incentive Compensation Plan (Incorporated by reference to the Company's Form 10-K for the year ended December 31, 2001 as filed with the Securities and 10.14* Form of the Amended and Restated Promissory Notes, each dated December 31, 2001, issued by Norman C. Harbert and Ronald E. Weinberg to the Company Credit Agreement, dated as of May 1, 1998, among the Company and KeyBank National 10.15 Association, as Swing Line Lender, Administrative Agent and as Syndication Agent (Incorporated by reference to the Company's Form 10-Q for the quarterly period ended June 30, 1998 as filed

with the Securities and Exchange Commission)

Exhibit Description

10.16 Subsidiary Guaranty, dated as of May 1, 1998, among the subsidiaries of the Company, as guarantors, and KeyBank National Association, as Administrative Agent (Incorporated by reference to the Company's Form 10-Q for the quarterly period ended June 30, 1998 as filed with the Securities and Exchange Commission)

- 10.17 Amendment No. 1, dated as of November 22, 2000 to Credit Agreement among the Company and KeyBank National Association, as Lender, the Swing Line Lender, a Letter of Credit Issuer and as the Syndication Agent and the Administrative Agent (Incorporated by reference to the Company's Form 10-K for the year ended December 31, 2000 as filed with the Securities and Exchange Commission)
- 10.18 Amendment No. 2 to Credit Agreement, dated as of July 31, 2001, by and among the Company, the Lenders identified therein and KeyBank National Association, a national banking association, as the Administrative Agent under the Credit Agreement (Incorporated by reference to the Company's Form 10-Q for the quarterly period ended June 30, 2001 as filed with the Securities and Exchange Commission)
- 10.19 Form of Security Agreement, dated as of August 10, 2001, by and between KeyBank National Association, the Company and each of the following subsidiaries of the Company: Allegheny Powder Metallurgy, Inc., Clearfield Powdered Metals, Inc., Friction Products Co., Hawk Brake, Inc., Hawk MIM, Inc., Helsel, Inc., Hawk Motors, Inc., Logan Metal Stampings, Inc., Net Shape Technologies LLC, Quarter Master Industries, Inc., S.K. Wellman Corp., S.K. Wellman Holdings, Inc., Sinterloy Corporation, Tex Racing Enterprises, Inc. and Wellman Friction Products U.K. Corp (Incorporated by reference to the Company's Form 10-Q for the quarterly period ended June 30, 2001 as filed with the Securities and Exchange Commission)
- 10.20 Form of Pledge Agreement, dated as of August 10, 2001, by and between KeyBank National Association, the Company and each of the following subsidiaries of the Company: Allegheny Powder Metallurgy, Inc., Clearfield Powdered Metals, Inc., Friction Products Co., Hawk Brake, Inc., Hawk MIM, Inc., Helsel, Inc., Hawk Motors, Inc., Logan Metal Stampings, Inc., Net Shape Technologies LLC, Quarter Master Industries, Inc., S.K. Wellman Corp., S.K. Wellman Holdings, Inc., Sinterloy Corporation, Tex Racing Enterprises, Inc. and Wellman Friction Products U.K. Corp (Incorporated by reference to the Company's Form 10-Q for the quarterly period ended June 30, 2001 as filed with the Securities and Exchange Commission)
- 10.21 Form of Intellectual Property Security Agreement, dated as of August 10, 2001, by and between the Company and each of the following subsidiaries of the Company: Allegheny Powder Metallurgy, Inc., Clearfield Powdered Metals, Inc., Friction Products Co., Hawk Brake, Inc., Hawk MIM, Inc., Helsel, Inc., Hawk Motors, Inc., Logan Metal Stampings, Inc., Net Shape Technologies LLC, Quarter Master Industries, Inc., S.K. Wellman Corp., S.K. Wellman Holdings, Inc., Sinterloy Corporation, Tex Racing Enterprises, Inc. and Wellman Friction Products U.K. Corp. (Incorporated by reference to the Company's Form 10-Q for the quarterly period ended June 30, 2001 as filed with the Securities and Exchange Commission)
- 10.22 Form of Guaranty Agreement of Payment of Obligations, dated as of August 10, 2001, by and between KeyBank National Association and each of the following subsidiaries of the Company: Allegheny Powder Metallurgy, Inc., Clearfield Powdered Metals, Inc., Friction Products Co., Hawk Brake, Inc., Hawk MIM, Inc., Helsel, Inc., Hawk Motors, Inc., Logan Metal Stampings, Inc., Net Shape Technologies LLC, Quarter Master Industries, Inc., S.K. Wellman Corp., S.K. Wellman Holdings, Inc., Sinterloy Corporation, Tex Racing Enterprises, Inc. and Wellman Friction Products U.K. Corp. (Incorporated by reference to the Company's Form 10-Q for the quarterly period ended June 30, 2001 as filed with the Securities and Exchange Commission)
- 10.23 Form of Open Ended Ohio Mortgage, executed as of August 10, 2001, in favor of KeyBank National Association by each of the following subsidiaries of the Company: Friction Products Co., Logan Metal Stampings, Inc. and S.K. Wellman Corp. (Incorporated by reference to the Company's Form 10-Q for the quarterly period ended June 30, 2001 as filed with the Securities and Exchange Commission)

Exhibit	Description
10.24	Form of Open Ended Pennsylvania Mortgage, executed as of August 10, 2001, in favor of KeyBank National Association by each of the following subsidiaries of the Company: Allegheny Powder Metallurgy, Inc. and Clearfield Powdered Metals, Inc. (Incorporated by reference to the Company's Form 10-Q for the quarterly period ended June 30, 2001 as filed with the Securities and Exchange Commission)
10.25	Form of Mortgage, Assignment of Leases and Rents and Fixture Filing, executed as of August 10, 2001, in favor of KeyBank National Association by each of the following subsidiaries of the Company: Hawk Motors, Inc. and Helsel, Inc. (Incorporated by reference to the Company's Form 10-Q for the quarterly period ended June 30, 2001 as filed with the Securities and Exchange Commission)
10.26	Amendment No. 3 to Credit Agreement, dated as of November 9, 2001, by and among the Company, the Lenders identified therein and KeyBank National Association, a national banking association, as the Administrative Agent under the Credit Agreement (Incorporated by reference to the Company's Form 10-Q for the quarterly period ended September 30, 2001 as filed with the Securities and Exchange Commission)
10.27	Form of Pledge Agreement, dated as of November 9, 2001, by and between KeyBank National Association, the Company and each of the following subsidiaries of the Company: Allegheny Powder Metallurgy, Inc., Clearfield Powdered Metals, Inc., Friction Products Co., Hawk Brake, Inc., Hawk MIM, Inc., Helsel, Inc., Hawk Motors, Inc., Logan Metal Stampings, Inc., Net Shape Technologies LLC, Quarter Master Industries, Inc., S.K. Wellman Corp., S.K. Wellman Holdings, Inc., Sinterloy Corporation, Tex Racing Enterprises, Inc. and Wellman Friction Products U.K. Corp (Incorporated by reference to the Company's Form 10-Q for the quarterly period ended September 30, 2001 as filed with the Securities and Exchange Commission)
10.28	Amendment No. 4 to Credit Agreement, dated as of March 25, 2002, by and among the Company, the Lenders identified therein and KeyBank National Association, a national banking association, as the Administrative Agent under the Credit Agreement (Incorporated by reference to the Company's Form 10-K for the period ended December 31, 2001 as filed with the Securities and Exchange Commission)
12.1*	Computation of ratio of earnings to fixed charges
21.1*	Subsidiaries of the Company
23.1*	Consent of Ernst & Young LLP
23.2 [†]	Consent of Kohrman Jackson & Krantz P.L.L. (included in its opinion filed as Exhibit 5.1 and 8.1 hereto)
24.1*	Reference is made to the Signatures section of this Registration Statement for the Power of Attorney contained therein
25.1*	Form T-1 Statement of Eligibility and Qualification under the Trust Indenture Act of 1939 of HSBC Bank USA with respect to the % Senior Notes due 2
99.1*	Form of Consent and Letter of Transmittal
99.2*	Form of Notice of Brokers, Dealers, Commercial Banks, Trust Companies and other Nominees
99.3*	Form of Notice to Clients
99.4*	Form of Notice of Company Letter to Noteholders
99.5*	Guidelines for Certification of Taxpayer Identification Number on Substitute Form W-9

^{*} Filed herewith.

 $^{^{\}dagger}\,$ To be filed by amendment.