SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

	FORM	10-Q
(MARK ONE)	•	ANT TO SECTION 13 OR 15(d) OF THE COF 1934 [NO FEE REQUIRED]
	For the quarterly period	l ended June 29, 2003
		ANT TO SECTION 13 OR 15(d) OF THE C OF 1934 [NO FEE REQUIRED]
	For the transition period	from to
	Commission File N	(umber: 0-15930
		Southwall
	SOUTHWALL TEC	
	(Exact name of registrant a	s specified in its charter)
	DELAWARE (State or other jurisdiction of incorporation or organization)	94-2551470 (I.R.S. Employer Identification Number)
	st Bayshore Road, Palo Alto, California Idress of principal executive offices)	94303 (Zip Code)
	Registrant's telephone number, incl	uding area code: (650) 962-9111
15(d) of registrant	the Securities Exchange Act of 1934 during the	has filed all reports required to be filed by Section 13 or preceding 12 months (or for such shorter period that the been subject to such filing requirements for the past

As of August 1, 2003, there were 12,542,357 shares of the Registrant's Common Stock outstanding.

Act). Yes □ No ⊠

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Exchange

SOUTHWALL TECHNOLOGIES INC.

INDEX

	PART I—FINANCIAL INFORMATION	
Item 1	Financial Statements:	
	Condensed Consolidated Balance Sheets—June 29, 2003 (unaudited) and December 31, 2002	
	Unaudited Condensed Consolidated Statements of Operations—Three and six month periods ended June 29, 2003 and June 30, 2002	
	Unaudited Condensed Consolidated Statements of Cash Flows—Six month period ended June 29, 2003 and June 30, 2002	
	Notes to Unaudited Condensed Consolidated Financial Statements	
Item 2	Management's Discussion and Analysis of Financial Condition and Results of Operations	
Item 3	Quantitative and Qualitative Disclosures about Market Risk	
Item 4	Controls and Procedures	
	PART II—OTHER INFORMATION	
Item 1	Legal Proceedings	
Item 2	Changes in Securities and Use of Proceeds	
Item 3	Defaults upon Senior Securities	
Item 4	Submission of Matters to a Vote of Stockholders	
Item 5	Other Information	
Item 6	Exhibits and Reports on Form 8-K	
	Signatures	
	Certifications	

PART I FINANCIAL INFORMATION

Item 1—Financial Statements:

SOUTHWALL TECHNOLOGIES INC. CONDENSED CONSOLIDATED BALANCE SHEETS (in thousands, except per share data)

		June 29, 2003 (unaudited)		December 31, 2002
ASSETS				
Current assets:				
Cash and cash equivalents	\$	2,403	\$	1,998
Restricted cash		539		531
Accounts receivable, net of allow ance for bad debts of \$658				
and \$552 at June 30, 2003 and December 31, 2002, respectively		7,408		8,995
Inventories, net		6,224		8,537
Other current assets		3,424		4,310
Total current assets		19,998		24,371
Property, plant and equipment, net		50,983		50,251
Restricted loan proceeds		963		885
Other assets		967		1,075
Total assets	\$	72,911	\$	76,582
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Current portion term debt	\$	6,036	\$	7,499
Line of credit		3,003		
Accounts payable		5,100		9,244
Accrued compensation		1,451		1,254
Other accrued liabilities		7,126		5,886
Total current liabilities		22,716		23,883
Term debt		9,535		9,253
Government grants advanced		538		604
Other		1,762		2,368
Total liabilities		34,551		36,108
Commitments and contingencies (Note 8)				
Stockholders' equity:				
Common stock, \$0.001 par value, 20,000 shares authorized;				
issued and outstanding 12,542 and 12,527 at June 30, 2003				
and December 31, 2002		13		12
Capital in excess of par value		69,708		69,657
Notes receivable and accrued interest		, 		(126)
Other comprehensive income				· -/
Translation gain on subsidiary		2,113		1,032
Accumulated deficit		(33,474)		(30,101)
Total stockholders' equity		38,360		40,474
Total liabilities and stockholders' equity	\$	72,911	\$	
	·—		*	,

See accompanying notes to condensed consolidated financial statements.

SOUTHWALL TECHNOLOGIES INC. CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except per share data) (Unaudited)

		Three Months Ended				Six Months Ended			
		June 29,		June 30,	Ī	June 29,		June 30,	
		2003		2002		2003		2002	
Net revenues	\$	15,328	\$	19,676	\$	30,549	\$	38,945	
Cost of sales		12,405	_	12,954	_	24,588	_	25,379	
Gross profit	_	2,923	_	6,722	_	5,961	_	13,566	
Operating expenses									
Research and development		1,517		2,060		3,185		3,837	
Selling, general and administrative	_	3,000		2,997		5,811		6,742	
Total operating expenses		4,517		5,057		8,996		10,579	
Income (loss) from operations		(1,594)		1,665		(3,035)		2,987	
Interest expense, net		(217)		(526)		(509)		(992)	
Other income, net	_	274		89	_	363	_	467	
Income (loss) before provision for income taxes		(1,537)		1,228		(3,181)		2,462	
Provision (benefit) for income taxes	_	176	_	(166)	_	191	_	(113)	
Net income (loss)	\$_	(1,713)	\$_	1,394	\$_	(3,372)	\$_	2,575	
Net income (loss) per share:									
Basic	\$	(0.14)	\$	0.16	\$	(0.27)	\$	0.30	
Diluted	\$	(0.14)	\$	0.15	\$	(0.27)	\$	0.27	
Weighted average shares outstanding:									
Basic		12,532		8,624		12,530		8,521	
Diluted		12,532		9,552		12,530		9,417	

See accompanying notes to condensed consolidated financial statements.

SOUTHWALL TECHNOLOGIES INC. CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands) (Unaudited)

Increase (Decrease) in cash

		Six Mont	Ended	
		June 29, 2003		June 30, 2002
Cash flows provided by operating activities:	_		-	
Net income (loss)	\$	(3,372)	\$	2,575
Adjustments to reconcile net income (loss) to net				
cash provided by operating activities:				
Depreciation and amortization		3,307		2,867
Loss on disposal of capital equipment		133		
Stock-based compensation charge		33		
Interest on note receivable		(4)		(20)
Officer loan forgiveness		131		
Change in assets and liabilities:				
Accounts receivable, net		1,587		(762)
Inventories, net		2,313		(885)
Other current and non-current assets		969		182
Accounts payable, and accrued liabilities		(3,313)		(3,890)
Cash provided by operating activities		1,784	_	67
Cash flows used in investing activities:			-	
Restricted cash		(77)		615
Expenditures for property, plant and equipment				
and other assets		(2,247)		(3,180)
Net cash used in investing activities		(2,324)	-	(2,565)
Cash flows provided by financing activities:	_		-	
Principal payments on borrowings		(1,944)		(1,880)
Borrow ings on line of credit		3,003		412
Proceeds from foreign government grants				252
Proceeds from investment allow ances				1,044
Proceeds from stock options and employee stock				
purchases plan exercises		18		1,720
Net cash provided by financing activities	_	1,077	-	1,548
Effect of foreign exchange rate changes on cash		(132)	_	(851)
Net increase (decrease) in cash and cash equivalents		405	-	(1,801)
Cash and cash equivalents, beginning of year		1,998		3,362
Cash and cash equivalents, end of period	\$_	2,403	\$_	1,561
Supplemental each flow displacures:	_		-	
Supplemental cash flow disclosures:	\$	555	¢	622
Cash paid for interest		150	\$ \$	54
Cash paid for income taxes	\$	150	Ф	54
Supplemental schedule of non-cash investing				
and financing activities:	¢.		œ.	4.5
Notes receivable issued to exercise stock options	\$		\$	15

See accompanying notes to condensed consolidated financial statements.

SOUTHWALL TECHNOLOGIES INC. NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(in thousands) (Unaudited)

Note 1—Interim Period Reporting and Basis of Presentation:

While the information presented in the accompanying condensed consolidated financial statements is unaudited, it includes all adjustments (consisting only of normal recurring adjustments) which, in the opinion of management, are necessary to present fairly the Company's financial position and results of operations, changes in financial position as of the dates and for the periods indicated.

Certain information and footnote disclosures normally contained in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted. The Company suggests that these consolidated financial statements be read in conjunction with the consolidated financial statements and notes thereto contained in the Company's Form 10-K for the year ended December 31, 2002 filed with the Securities and Exchange Commission on March 31, 2003 (as amended by the Company's Form 10-K/A filed on April 9, 2003). The results of operations for the interim periods presented are not necessarily indicative of the operating results of the full year.

The Company has prepared its consolidated financial statements assuming the Company will continue as a going concern and meet its obligations as they become due. The Company has incurred a net loss in the first six months of 2003, and expects to incur net losses through all of 2003. These factors together with the Company's working capital position and its significant debt service and other contractual obligations at June 29, 2003, raise substantial doubt about its ability to continue as a going concern. If the Company is unable to obtain additional financing sources, it may be unable to satisfactorily meet all of its cash commitments required to fully implement its business plans.

In December 2002, the Company restructured its operations to reduce its cost structure by reducing the Company's work force in Palo Alto and vacating excess facilities after consolidating its operations in Palo Alto. These actions are expected to help improve the Company's operating results in 2003 but will continue to impact its operating cash flows until the Company's lease commitments for the excess facilities expire in December 2004. During the second quarter of 2003, the Company entered into a \$10.0 million receivable financing line of credit agreement with a financial institution (see Note 4 - Term Debt). The Company is in discussions with other potential lenders regarding additional financing. The Company cannot provide any assurance that alternative sources of financing will be available at all or on terms favorable to it.

The Company uses a 52-week fiscal year ending on December 31. The quarters ended June 29, 2003 and June 30, 2002 each included 13 weeks.

Note 2—Balance Sheet:

Restricted cash

Restricted cash consists of the unexpended portion of grants received from the Saxony government in Germany to co-finance the costs of the construction of the Company's Dresden facility. In the event the Company fails to meet certain conditions related to the grants, the Saxony government has the right to demand repayment of the grants (see Note 6 – Government Grants and Investment Allowances).

Inventories

Inventories are stated at the lower of cost (determined by the first-in, first-out method) or market. Cost includes materials, labor and manufacturing overhead. The Company establishes provisions for excess and obsolete inventories to reduce such inventories to their estimated net realizable value. Such provisions are charged to cost of sales. At June 29, 2003 and December 31, 2002, inventories consisted of the following:

		June 29,	[December 31,
Inventories		2003	_	2002
Raw materials	\$	2,682	\$	3,703
Work-in-process		2,272		3,432
Finished goods		1,270		1,402
Total inventories	\$_	6,224	\$	8,537

Government grants advanced and investment allowances

Government grants advanced and investment allowances consist of monies received from the Saxony government in Germany by the Company. Upon approval and receipt of the grants and investment allowances from the Saxony government, the funds are applied as a reduction of the costs of the Dresden facility. In the event the Company fails to meet certain conditions related to the grants and investment allowances, the Saxony government has the right to reclaim the grants and allowances (see Note 6 – Government Grants and Investment Allowances).

Note 3—Net Income (Loss) Per Share:

Basic net income (loss) per share is computed by dividing income (loss) available to common shareholders (numerator) by the weighted average number of common shares outstanding (denominator) for the period. Diluted net income (loss) per share gives effect to all dilutive potential common shares outstanding during the period. The computation of diluted earnings (loss) per share uses the average of the closing prices of the common stock during the period. At June 29, 2003, there were 12,532,000 shares outstanding which were used for the basic and dilutive earnings per share calculation. At June 30, 2002, there were 9,552,000 shares outstanding, including the dilutive stock options, which were used for the dilutive earnings per share calculation, and 8,624,000 shares for basic earnings per share. The total amount of the difference in the basic and diluted weighted average shares of common stock and common stock equivalents in the periods where there is net income is attributable to the effect of dilutive stock options. In net loss periods, the basic and diluted weighted average shares of common stock and common stock equivalents are the same because inclusion of stock options would not be dilutive. Accordingly, for the quarter and six months ended June 30, 2003, there was no difference between the denominators used for calculation of basic and diluted net income (loss) per share, and the number of shares used in the calculation was 12,532,000 and 12,530,000, respectively.

There were 2,065,000 options outstanding during the second quarter and first six months of 2003, which were excluded from the diluted net loss per share calculations as reported because they were anti-dilutive in view of the losses incurred by the Company in that period.

Note 4—Line of Credit:

On May 16, 2003, the Company entered into a \$10.0 million receivable financing line of credit agreements with a financial institution that expires on May 16, 2004 subject to automatic one-year renewals unless terminated at any time by either party. The line of credit bears an annual interest rate of 7% above the financial institution's Base Rate (which was 4% at June 29, 2003), and is calculated based on the average daily accounts receivable against which the Company has borrowed. Half of the \$10.0 million line of credit is represented by a \$5.0 million credit line, guaranteed by the United States Export-Import Bank ("EXIM"). Availability under the EXIM line is limited to 90% of eligible foreign receivables acceptable to the lender. The remaining \$5.0 million portion of the \$10.0 million credit line is supported by domestic receivables. Availability under the domestic line of credit is limited to 70% of eligible domestic receivable acceptable to the lender. The financial institution reserves the right to lower the 70% and 90% of eligible receivable standards for borrowings under the credit agreements. In connection with the line of credit, the Company granted to the bank a lien upon and security interest in, and right of set off with respect to all of the Company's right, title and interest in all personal property and other assets, but not in certain of the Company's Dresden property or assets. The borrowing arrangements require the Company to comply with financial covenants to maintain minimum net tangible net worth of \$33.0 million, current ratio of at least 0.70, and revenues equal to or greater than 80% of revenues projected. As part of the agreements, the Company incurred and paid a one-time commitment fee of \$0.1 million in the second quarter of 2003, which will be amortized over the term of the agreements. As of June 29, 2003, the Company had approximately \$3.0 million of borrowings outstanding and \$1.8 million of availability under the line of credit. The Company was in compliance with all financial covenants at June 29, 2003.

Note 5—Term Debt:

The Company's term debt consists of the following:

		Balance at June 29,	Remaining Due in
Description	Rate	2003	2003
Term debt:			
Japanese bank loan guaranteed by Teijin	2.25 %(1)	\$ 1,250	\$ 1,250
German bank loan dated May 12, 1999	6.13 %(2)	2,531	195
German bank loan dated May 28, 1999	7.10 %(3)	2,857	
German bank loan dated May 28, 1999	3.75 %	1,142	326
German bank loan dated July 25, 2000	7.15 %(4)	1,953	135
German bank loan dated August 14, 1999 (due June 30, 2009)	5.75 %	1,926	
German bank loan dated June 29, 2000	5.75 %	146	97
German bank loan dated July 10, 2000	7.10 %	146	97
German bank loan dated December 18, 2000	7.50 %	148	49
German bank loan dated December 19, 2000	7.50 %	133	46
Other equipment financings		72	33
Total term debt		12,304	2,228
Capital leases:			
Sales-leaseback dated July 19, 1999	13.00 %	2,321	2,321
Sales-leaseback dated October 19, 1999	13.00 %	946	946
Total capital leases		3,267	3,267
Total term debt and capital leases		15,571	\$ 5,495
Less current portion		6,036	
Term debt, non current		\$ 9,535	

⁽¹⁾ The interest rate is reset semi-annually at LIBOR plus 1.0%. As of June 29, 2003, the interest rate on this loan was 2.25%.

The Japanese bank loan, dated May 6, 1997, is guaranteed by Teijin Limited (Teijin), a Japanese company. Teijin is a stockholder of and supplier of substrate materials to the Company. In consideration of the guarantee, Teijin also received warrants in 1997 to purchase 158,000 shares of Southwall's common stock at \$9.0 per share. These warrants were not exercised and expired on May 30, 2000. The Teijin guarantee is collateralized by certain equipment located in Southwall's Tempe manufacturing facility and inventory, to the extent necessary to provide 120% net book value coverage of the outstanding loan balance. The interest rate on the loan is re-set semi-annually at LIBOR plus 1.0%, (2.25% at June 29, 2003). The Company is also subject to certain financial covenants under the guarantee relating to minimum quick ratio, tangible net worth, and maximum debt/tangible net worth. The Company pays Teijin semi-annually a loan guarantee service fee equal to 0.5625% of the outstanding balance. The loan required semi-annual payments of interest only during the first four years, followed by semi-annual installments of principal plus interest, beginning in May 2001, for the remaining three and one half year term. At December 31, 2002, the Company was not in compliance with certain of the financial covenants with Teijin pertaining to this promissory note. Southwall has received a waiver from Teijin and the Japanese bank of any defaults that may exist through and including September 30, 2003 arising out of its failure to comply with the financial covenants of the guarantee agreement relating to minimum quick ratio, tangible net worth and maximum debt/tangible net worth. The waiver was conditioned on the Company's

⁽²⁾ Interest rate will be reset to the then prevailing market rate in 2004.

⁽³⁾ Interest rate will be reset to the then prevailing market rate in 2009.

⁽⁴⁾ Interest rate will be reset to the then prevailing interest rate in 2005.

agreement to prepay \$2.5 million of the debt from the proceeds of its public offering completed in July 2002. The Company paid \$2.5 million, in addition to the scheduled principal payment of \$1.25 million, on November 6, 2002. The Company paid the scheduled installment of \$1.25 million on May 6, 2003. All payments due on the loan have been paid when due. The Company has classified the remaining outstanding balance of \$1.25 million, which is due on November 6, 2003, as current debt on the balance sheet at June 29, 2003.

During 1999, Southwall entered into two sale-leaseback agreements under a master equipment sale-leaseback agreement with a leasing company ("lessor"). Because the Company has an option to purchase the equipment at a price to be determined between Southwall and the lessor at the end of the lease periods, the sale-leaseback agreements have been treated as financing leases. One lease has a lease term of three years and the other lease has an initial lease term of two years with an option to extend it for an additional year. At June 29, 2003, the Company had a total of \$3.3 million outstanding and due under these leases. The leased equipment and certain other production equipment owned by the Company collateralize the sale-leaseback agreements. The effective interest rate of both is approximately 13% per annum and the leases are repayable over the lease term commencing in May 2000. The Company is in dispute with the lessor over interpretation of certain terms of the lease agreement and has withheld lease payments due since March 2001. The lessor has notified the Company that it considers the Company to be in default and in January 2002 drew down on a letter of credit in the amount of \$0.5 million that collateralized the Company's obligations. In May 2002, a suit was filed against the Company demanding payment of unpaid lease payments and alleged residual values (see Note 8 – Contingencies). The Company classified the \$3.3 million due under the leases, net of a \$1.0 million holdback not funded by the lessor, as a current liability in the accompanying balance sheet at June 29, 2003.

On May 12, 1999, the Company entered into a loan agreement with a German bank that provides for borrowings up to €3.1 million (\$3.5 million). Under the terms of this agreement, the funds were used solely for the purpose of capital investment by Southwall's German subsidiary. The term of the loan is for a period of 10 years and the principal is repayable in euros after the end of one year in 36 quarterly payments. The loan bears interest at 6.125% per annum for the first five years, and will be revised to the prevailing rate at the end of the fifth year. Of the \$2.5 million in borrowings outstanding under this bank loan at June 29, 2003, \$2.1 million was classified as noncurrent in the accompanying balance sheet.

On May 28, 1999, the Company entered into a general loan agreement with a German bank. Under the terms of the loan agreement, funds were made available in three tranches, and were used solely for the purpose of capital investment by the Company's German subsidiary. The agreement contains various covenants with which the Company was in compliance at March 30, 2003. The Company is current with respect to all principal and interest payments due under the loan agreement. Under the first tranche, the Company borrowed €2.5 million (\$2.9 million) for a term of twenty years beginning on May 28, 1999. The principal is repayable in euros beginning after ten years in ten equal, semi-annual payments. The loan bears fixed interest of 7.1% per annum for the first ten years, after which time the rate will be adjusted to a current prevailing rate. At June 29, 2003, the amount outstanding under this first tranche was \$2.9 million, of which all \$2.9 million was classified as noncurrent in the accompanying balance sheet. Under the second tranche, the Company borrowed €1.7 million (\$1.9 million) for a term of seven years beginning May 28, 1999. The principal is repayable after one year in twelve equal semi-annual payments. The loan bears fixed interest at 3.75% per annum for the period of seven years. At June 29, 2003, the amount outstanding under this second tranche was \$1.1 million, \$0.8 million of which was classified as a noncurrent liability in the accompanying balance sheet. Under the third tranche, the Company borrowed €.1 million (\$2.4 million) for a term of ten years beginning on July 25, 2000. The principal is repayable after one year in thirty-six equal quarterly payments. The loan bears fixed interest of 7.15% per annum for the first five years, after which time the rate will be adjusted to a current prevailing market rate. At June 29, 2003, the amount outstanding under the third tranche was \$2.0 million, of which \$1.7 million was classified as noncurrent in the accompanying balance sheet.

On August 14, 1999, the Company entered into a loan agreement with a German bank that provides for borrowings up to $\[\in \]$ million (\$1.9 million). As required by this agreement, the funds were used solely for the purpose of capital investment by the Company's German subsidiary. The principal balance is due in a single payment on June 30, 2009 and bears interest at a rate of 5.75% per annum. The interest is payable quarterly in euros. Fifty percent of the loan proceeds are restricted in an escrow account for the duration of the loan period and are classified as non-current "Restricted Loan Proceeds" in the accompanying balance sheet. The amount due under this bank loan at June 29, 2003 was \$1.9 million, which was classified as noncurrent in the accompanying balance sheet.

On June 29, 2000, the Company entered into a loan agreement with a German bank that provides for borrowings up to 0.5 million (0.6 million). As required by this agreement, the funds were used solely for the purpose

of capital investment by the Company's German subsidiary. The principal balance is repayable in 12 quarterly payments beginning June 2001 and bears interest at a rate of 5.8% per annum. The interest is payable quarterly in euros. The agreement contains various covenants with which the Company was in compliance at June 29, 2003. The amount due under this bank loan was \$0.2 million at June 29, 2003, all of which was classified as current in the accompanying balance sheet.

On July 10, 2000, the Company entered into a loan agreement with a German bank that provides for borrowings up to €0.5 million (\$0.6 million). As required by this agreement, the funds were used solely for the purpose of capital investment by the Company's German subsidiary. The principal balance is repayable in 12 quarterly payments beginning June 2001 and bears interest at a rate of 7.10% per annum. The interest is payable quarterly in euros. The amount due under this bank loan was \$0.2 million at June 29, 2003, all of which was classified as current in the accompanying balance sheet.

On December 18, 2000, the Company entered into a loan agreement with a German bank that provides for borrowings up to €0.3 million (\$0.3 million). As required by this agreement, the funds were used solely for the purpose of capital investment by the Company's German subsidiary. The principal balance is repayable in nine quarterly payments beginning March 2002 and bears interest at a rate of 7.5% per annum. The interest is payable quarterly in euros. At June 29, 2003, the amount outstanding under this bank loan was \$0.2 million, of which \$0.05 million was classified as noncurrent in the accompanying balance sheet.

On December 19, 2000, the Company entered into a loan agreement with a German bank that provides for borrowings up to €0.3 million (\$0.3 million). As required by this agreement, the funds were used solely for the purpose of capital investment by the Company's German subsidiary. The principal balance is repayable in 12 quarterly payments beginning March 2002 and bears interest at a rate of 7.5% per annum. The interest is payable quarterly in euros. At June 29, 2003, the amount outstanding under this bank loan was \$0.1 million, of which \$0.05 million was classified as noncurrent in the accompanying balance sheet.

The preceding German bank loans are collateralized by the production equipment, building and land owned by the Company's German subsidiary. The dollar equivalent value for the preceding German bank loans has been calculated using the euro exchange rate as of June 29, 2003.

Other term debt consists of capitalized leases related primarily to certain computer equipment used by the Company.

Scheduled principal reductions of term debt as of June 29, 2003 for the balance of 2003, and for the next four years and thereafter, are as follows:

Year	_	Amount
2003	\$	5,495
2004		1,308
2005		985
2006		822
2007		659
Thereafter	_	6,302
Total	\$_	15,571

The Company incurred total interest expense of \$0.2 million and \$0.5 million in the second quarter of 2003 and 2002, respectively. The Company did not capitalize any portion of these amounts as part of the costs related to the construction of new production machines and facilities.

Note 6—Government Grants and Investment Allowances:

The Company has an agreement to receive cash grant awards (the "Grant"), which was approved by the Saxony government in May 1999. As of June 29, 2003, the Company had received approximately €.6 million (\$6.4 million) under this Grant and accounted for the Grant by applying the proceeds received to reduce the cost of fixed assets of the Dresden manufacturing facility. Additionally, as of June 29, 2003, the Company has a balance of unused funds

remaining from the government grants received in May 1999 of €0.5 million (\$0.6 million), which has been recorded as an advance and held as restricted cash until the Company receives approval from the Saxony government to apply the funds to reduce its capital expenditures.

After giving effect to an amendment of the terms of the Grant in 2002, the Grant is subject to the following requirements:

- (a) The Grant was earmarked to co-finance the costs of the construction of a facility to manufacture XIR® film for the automotive glass industry;
- (b) The construction period for the project is from March 15, 1999 to June 30, 2006;
- (c) The total investment during the construction period should be at least €47.0 million (\$53.7 million); and
- (d) The project must create at least 143 permanent jobs and 7 apprenticeships by June 30, 2006.

If the Company fails to meet the above requirements, the Saxony government has the right to demand repayment of the Grant.

In addition to the Grant, the Company is eligible for cash investment allowances from the Saxony government based on the total projected capital investment by the Company in its Dresden facility of €17.0 million (\$53.7 million). The investment allowances are also subject to European Union regulatory approval. During 2000, the Company received €1.2 million (\$1.4 million) in investment allowances from the Saxony government, which proceeds were applied to reduce the capitalized construction cost of the Dresden facility. The Company received an additional €2.5 million (\$2.9 million) in investment allowances from the Saxony government in 2001, which proceeds were applied to reduce the capitalized construction cost of the Dresden facility. The Company received approximately €1.2 million (\$1.4 million) in investment allowances in the second quarter of 2002, which were also applied to reduce the capitalized construction cost of the Dresden facility. These investment allowances are subject to the following requirements:

- (a) The movable and immovable assets, the acquisition costs of which are taken into account in determining the investment allowance, shall be employed within the subsidized territory for a period of at least five years following the acquisition or production of such assets; and
- (b) The movable assets, the acquisition costs of which are taken into account in determining the increased investment allowance, shall remain in a business that is engaged in the processing industry, or in a similar production industry, for a period of at least five years following the acquisition or production of such assets.

If the Company fails to meet the above requirements, the Saxony government has the right to demand repayment of the allowances.

The Grants and investment allowances, if any, that the Company is entitled to seek from the Saxony government varies from year to year based upon the amount of capital expenditures that meet the above requirements. Generally, Southwall is not eligible to seek total investment grants for any year in excess of 33% of its eligible capital expenditures for that year. The Company cannot guarantee that it will be eligible for or receive additional grants or allowances in the future.

The dollar equivalent value for the preceding grants and investment allowances has been calculated using the euro exchange rate as of June 29, 2003.

Note 7—Segment Reporting:

Southwall reports segment information using the management approach to determine segment information. The management approach designates the internal organization that is used by management for making operating decisions and assessing performance as the source of its reportable segments. The Company is organized on the basis of products and services. The total net revenues for the automotive glass, electronic display, and architectural product lines were as follows:

		Three Months Ended				Six Months Ended			
		June 29,		June 30,		June 29,		June 30,	
		2003	_	2002	_	2003	_	2002	
Automotive glass \$	\$	6,641	\$	6,918	\$	12,698	\$	13,921	
Electronic display		6,090		7,628		12,692		15,553	
Architectural		2,597	_	5,130	_	5,159	_	9,471	
Total net revenues	\$_	15,328	\$_	19,676	\$_	30,549	\$_	38,945	

The following is a summary of net revenues by geographic area (based on the location of the Company's customers) for the second quarter and first six months of 2003 and 2002, respectively:

	Three Mor	s Ended	_	Six Months Ended				
	June 29,		June 30,		June 29,		June 30,	
	2003	_	2002	_	2003		2002	
United States\$	1,256	\$	3,458	\$	2,770	\$	6,168	
Japan	5,783		6,863		11,606		14,463	
France	2,199		3,820		5,274		7,854	
Pacific Rim	1,090		3,088		3,226		4,944	
Germany	2,658		1,175		4,521		2,695	
Rest of w orld	2,342	_	1,272	_	3,152		2,821	
Total net revenues\$	15,328	\$_	19,676	\$_	30,549	\$_	38,945	

The Company's five largest customers accounted for net revenues equal to the following percentages of the Company's total net revenue for the second quarter and first six months of 2003 and 2002, respectively:

	Three Month	s Ended	Six Months	Ended
	June 29,	June 30,	June 29,	June 30,
Customer	2003	2002	2003	2002
A	14.3 %	19.4 %	16.9 %	20.2 %
B	14.7 %	15.2 %	13.2 %	18.0 %
C	22.3 %	17.2 %	23.7 %	15.9 %
D	17.3 %	7.6 %	14.2 %	9.2 %
E	3.7 %	10.9 %	7.3 %	8.2 %
Total	72.3 %	70.3 %	75.3 %	71.5 %

Note 8—Contingencies:

In July 2002, the Company was served with a complaint in a lawsuit captioned "Hurricane Glass v. Southwall Technologies Inc. and V-Kool, Inc." filed in the Circuit Court of the Twelfth Judicial Circuit in and for Sarasota County, Florida. The complaint alleges that Hurricane was a distributor of the Company's "Solis" product, that Hurricane's customers experienced various problems and failures with the product and that, as a result, Hurricane was required to perform repairs and replacements under its warranty provisions. The complaint alleges approximately \$0.4 million in damages against both defendants. The Company filed a motion to dismiss based on improper venue, which was denied. On June 4, 2003, the Court of Appeals overturned the lower court's order and granted the Company's motion to dismiss.

The Company has been named as a defendant, along with Bostik, Inc., in an action entitled "WASCO Products, Inc. v. Southwall Technologies Inc. and Bostik, Inc.", Civ. Action No. C 02-2926 CRB, which was filed in Federal District Court for the Northern District of California on June 18, 2002. The Company was served with the complaint in this matter on July 1, 2002. The plaintiff has filed the matter as a purported class action on behalf of all entities and individuals in the United States who manufactured and/or sold and warranted the service life of insulated glass units manufactured between 1989 and 1999 which contained the Company's Heat Mirror film, and were sealed with a specific type of sealant manufactured by the co-defendant. The plaintiff alleges that the sealant provided by the

co-defendant was defective, resulting in elevated warranty replacement claims and costs, and asserts claims against the Company for misrepresentation, negligence, unfair business practices and false or misleading business practices. The plaintiff seeks recovery of \$100.0 million for damages on behalf of the class allegedly resulting from elevated warranty replacement claims, restitution, injunctive relief, and non-specified compensation for lost profits. The Company believes all of the claims to be without merit and intends to defend the action vigorously. The plaintiff filed its Third Amended Complaint on June 27, 2003. The Company has tendered the defense of this matter to its insurers, who have agreed to pay a percentage of the Company's defense costs under reservation of rights. The Company believes they are also obligated to pay any resulting settlement or judgment. The action is in the early stages, thus an estimate of the Company's loss exposure cannot be made.

The Company is a defendant in an action entitled "Portfolio Financial Servicing Company v. Southwall Technologies Inc.," which was filed in state court in Utah on May 22, 2002. This action arises out of sale-leaseback agreements, which the Company entered into with an entity formerly known as Matrix Funding Corporation, or Matrix, in 1999 in connection with the acquisition of two of the Company's production machines. Matrix thereafter filed bankruptcy proceedings. Plaintiffs in the action are Bank of America, which alleges that it is the successor in interest to Matrix, and Portfolio Financial Servicing Company which claims to be an agent of the successor to Matrix. The plaintiffs demand payment of \$6.5 million, which they allege constitute unpaid lease payments, plus the alleged residual value of the equipment, less monies that Matrix owes to Southwall. The Company asserts that Matrix violated certain material terms of the lease and intends to defend the action vigorously. The Company and the plaintiffs entered into a settlement agreement on July 31, 2003, pursuant to which this claim will be extinguished by payment from the Company to the plaintiffs of \$2.5 million. The settlement agreement is subject to the satisfaction of certain conditions, which must be fulfilled on or before October 1, 2003, including the payment of the settlement amount, a significant portion of which the Company may need to borrow. There can be no assurance that the Company will be able to borrow the amount it needs to pay the settlement. Pursuant to the settlement agreement, the Company has paid the plaintiffs \$250,000, which will be applied against the settlement amount if the conditions to settlement are satisfied and which will be applied against the alleged unpaid lease obligations if the conditions are not satisfied. If the conditions to the settlement are not fulfilled, the matter will continue to be litigated.

The Company is a defendant in an action filed on April 5, 1996 entitled "Four Seasons Solar Products Corp. vs. Black & Decker Corp., Bostik, Inc. and Southwall Technologies Inc.," No. 5 CV1695, pending in the United States District Court for the Eastern District of New York. Plaintiff is a manufacturer of insulated glass units, which incorporate the Company's Heat Mirror film. Plaintiff alleges that a sealant provided by the co-defendant is defective, asserts causes of action for breach of contract, unfair competition, and fraudulent concealment, and seeks monetary damages of approximately \$36.0 million for past and future replacement costs, loss of customer goodwill, and punitive damages against all defendants. The Court has dismissed all claims against the Company. The plaintiff has filed a Notice of Appeal. The Company's insurance carrier under reservation of rights is paying a percentage of its defense costs.

The insurance carriers in some of the litigation related to alleged product failures and defects in window products manufactured by others in which the Company was a defendant paid the defense and settlement costs related to such litigation. Those insurance carriers reserved their rights and have expressed their intent to proceed against the Company to recover a portion or all of such payments. As a result, those insurance carriers could seek from the Company up to an aggregate of \$12.9 million plus defense costs, although any such recovery would be restricted to claims that were not covered by the Company's insurance policies. The Company intends to vigorously defend any attempts by these insurance carriers to seek reimbursement. The Company is not able to estimate the likelihood that these insurance carriers will seek to recover any such payments, the amount, if any, they might seek, or the outcome of such attempts.

In addition, the Company is involved in certain other legal actions arising in the ordinary course of business. The Company believes, however, that none of these actions, either individually or in the aggregate, will have a material adverse effect on the Company's business, the Company's consolidated financial position, results of operations or cash flows.

Note 9—Stock-Based Compensation:

Southwall has stock option plans that reserve shares of its common stock for issuance to employees, officers, directors and consultants. The Company applies APB Opinion 25 and related interpretations in accounting for its plans. Accordingly, no compensation cost is recognized for grants at fair market value. Southwall adopted the disclosure-only

provisions of SFAS No. 123, Accounting for Stock-Based Compensation. Had compensation cost for the Company's stock option plans and stock purchase plans been determined based on the fair value at the grant date for awards granted in the second quarter and the first six months of 2003 and 2002 consistent with the provisions of SFAS No. 123 and 148, net income (loss) and net income (loss) per share would have been increased to the pro forma amounts indicated below:

	_	Three Months Ended				Six Mont	Ended	
		June 29, 2003	_	June 30, 2002	_	June 29, 2003	_	June 30, 2002
Net income (loss):								
As reported	\$	(1,713)	\$	1,394	\$	(3,372)	\$	2,575
Add: stock-based employee compensation included								
in reported net income (loss), net of tax						33		
Less: stock-based compensation expense determined								
using fair value method, net of tax		(262)		(466)	_	(499)	_	(738)
Pro forma	\$_	(1,975)	\$_	928	\$_	(3,838)	\$_	1,837
Net income (loss) per share:								
As reported-besic	\$	(0.14)	\$	0.16	\$	(0.27)	\$	0.30
Pro forma-basic	\$	(0.16)	\$	0.11	\$	(0.31)	\$	0.22
As reported-diluted	\$	(0.14)	\$	0.15	\$	(0.27)	\$	0.27
Pro forma-diluted	\$	(0.16)	\$	0.10	\$	(0.31)	\$	0.20

For the stock option plans, the fair value of each option grant is estimated on the date of grant using the Black-Scholes option-pricing model for the multiple option approach. The following weighted average assumptions were used for grants in the second quarter of 2003 and 2002: expected volatility of 96% in both the second quarter of 2003 and 2002; risk-free interest rate of 2.1% and 4.2% in the second quarter of 2003 and 2002, respectively; and expected lives from vesting date of 3.04 and 3.07 years in the second quarter of 2003 and 2002, respectively. Southwall has not paid dividends and assumed no dividend yield. The weighted average fair value of stock options granted in the second quarter of 2003 and 2002 was \$0.58 and \$6.30 per share, respectively. The Company granted 95,000 options and 219,000 options during the second quarter of 2003 and 2002, respectively.

For the employee stock purchase plans, the fair value of each purchase right is estimated at the beginning of the offering period using the Black-Scholes option-pricing model with the following weighted average assumptions used in the second quarter of 2003 and 2002: expected volatility of 96% in both the second quarter of 2003 and 2002; risk-free interest rate of 2.5% and 4.1% in the second quarter of 2003 and 2002, respectively; and expected lives of 0.5 year in each of the second quarter of 2003 and 2002. The Company has not paid dividends and assumed no dividend yield. The weighted-average fair value of those purchase rights granted in the second quarter of 2003 and 2002 was \$0.56 and \$2.65 per share, respectively.

Note 10 – Related Party Transactions:

During 1998, 1999, 2000, 2001 and 2002, the Company lent \$43,875, \$25,313, \$0, \$18,750 and \$14,700, respectively, to Thomas G. Hood, President and Chief Executive Officer and a director, to permit him to exercise stock options that were about to expire at a time when he was not able to sell the shares issuable upon exercise to pay the exercise price. The indebtedness was represented by full recourse notes payable to the Company, which were due on June 30, 2003 each bearing interest at the rate of 7% per annum. The largest amount of indebtedness outstanding under these notes at any time during 2003 was \$130,731, including interest. While the board of director's intention was to enforce collection of the notes, on June 30, 2003, the Company's board of directors forgave all of the outstanding loans including interest, in lieu of a bonus earned which otherwise would have been paid in cash. The Company recorded this transaction as compensation expense during the second quarter of 2003.

Note 11 – Restructuring:

The Company implemented a reduction in force at its Palo Alto location in December 2002, and elected to vacate certain buildings in Palo Alto. As result of these actions, the Company incurred a restructuring charge of \$2.6 million in 2002 relating to employee severance packages and the remaining rents due on excess facilities in Palo Alto no longer occupied. During the first quarter of 2003, the Company recorded an accounting adjustment in the amount of \$65,000 as a reduction to its restructuring accrual. The adjustment was the result of modifications to the severance packages of certain employees. In the second quarter of 2003, the Company implemented a reduction in force in its Tempe and Palo Alto locations. As a result of the reduction in force during the second quarter, the Company incurred a charge and made cash payments of \$0.1 million relating to employee severance packages. The charge of \$0.1 million is reflected in cost of sales in the Company's condensed consolidated statements of operations.

The remaining outstanding obligations related to the above described restructuring at June 29, 2003 are:

	Workforce	Excess	
	Reduction	Facilities	Total
Balance at December 31, 2002	\$ 122	\$ 2,281	\$ 2,403
Provision	101		101
Adjustments to reserve	(65)		(65)
Cash payments	(151)	(225)	(376)
Balance at June 29, 2003	\$ 7	\$ 2,056	\$ 2,063

Item 2—Management's Discussion and Analysis of Financial Condition and Results of Operations:

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and notes thereto appearing elsewhere in this report. This discussion and analysis contains forward-looking statements that involve risks and uncertainties, including those discussed below under "Forward-Looking Statements" and "Risk Factors" and in our Annual Report on Form 10-K for the year ended December 31, 2002. You should not place undue reliance on these forward-looking statements. Actual results may differ materially from those anticipated in the forward-looking statements. These forward-looking statements represent our judgment as of the date of the filing of this Form 10-Q.

Overview

We are a global developer, manufacturer and marketer of thin film coatings for the automotive glass, electronic display and architectural markets. We have developed a variety of products that control sunlight in automotive glass, reduce light reflection and improve image quality in electronic display products and conserve energy in architectural products. Our products consist of transparent solar-control films for automotive glass; anti-reflective films for computer screens, including flat panel displays, and plasma displays; and transparent conductive films for use in touch screen and liquid crystal displays; energy control films for architectural glass; and various other coatings.

From our founding in 1979 through the early 1990s, we developed and produced thin film coated substances primarily for residential and commercial building applications, and for military applications. In the early 1990s, we began to develop products for the automotive and electronic display markets. In 1996, we realized our first material revenue from the automotive and electronic display markets. In 2002, automotive glass products accounted for approximately 37% of our revenues, electronic display products accounted for approximately 39% of our revenues, and architectural products accounted for approximately 24% of our revenues. In the first six months of 2003, approximately 42% of our revenues came from the automotive glass market, approximately 41% of our revenues came from the electronic display market, and approximately 17% of our revenues came from the automotive glass market. In the first six months of 2002, approximately 36% of our revenues came from the automotive glass market, approximately 40% of our revenues came from the electronic display market, and approximately 24% of our revenues came from the architectural products market. Revenues from international customers accounted for 85%, 87%, 85% and 91% of our net revenues in 2000, 2001, 2002, and the first six months of 2003 respectively.

Historical Factors Affecting Our Financial Condition and Results of Operations

As described in more detail below, our financial condition and results of operations are affected by a number of factors, including our financing arrangements, expansion of our manufacturing capacity, demand for our customers' products, the mix of products that we sell, our relationships with customers and suppliers, product warranty claims, fluctuations in our selling, general and administrative expenses, and restructuring costs. Over the past several years, these factors have contributed to volatility in our results of operations and cash flows and have significantly affected our financial position.

Our financing arrangements. We incurred net losses from operating activities in 1998, 1999, 2000, 2002 and the first six months of 2003. As a result of net losses, together with the restatement in 2000 of our financial statements for prior periods and the suspension of trading of our common stock on NASDAQ in 2000, we were in default, as of December 31, 2000, under our German bank loans, our sale-leaseback agreements and our Japanese bank loan and the guarantee by Teijin of that loan. As a result, we reclassified all of the debt under those arrangements as current liabilities as of December 31, 2000. Accordingly, there was substantial doubt about our ability to continue as a going concern at December 31, 2000.

As of December 31, 2001, December 31, 2002, and June 29, 2003, we had made all principal and interest payments, that were required to be made through those dates under our German bank loans and our Japanese bank loan guaranteed by Teijin. At June 29, 2003 we were in default with respect to the financial covenants under the Teijin guarantee. However, we have received waivers from Teijin and the Japanese bank of such defaults for all periods through September 30, 2003. Because the entire remaining balance under the Japanese bank loan is due in 2003 in accordance with the scheduled maturity, the entire balance of \$1.25 million has been classified as a current liability at June 29, 2003. We are in compliance with all of the covenants of the German bank loans, and we have classified \$9.5 million outstanding under the German bank loans as a long-term liability at June 29, 2003.

During 1999, we entered into a sale-leaseback agreement for two of our production machines with an equipment leasing company. The leasing company has filed bankruptcy proceedings. Because we have an option to purchase the machines at the end of the lease periods, we treat these sale-leaseback arrangements as financings. During 2001, a dispute arose between us and an agent purporting to act on behalf of the leasing company. The agent filed suit against us in 2002 to recover the unpaid lease payments and alleged residual value of the machines. As a result, we have classified \$3.3 million as short-term liabilities (\$4.3 million outstanding under the sale-leaseback agreement, less \$1.0 million of the amounts due from the leasing company that was not funded).

Expansion of our manufacturing capacity. The expansion of our manufacturing capacity has affected our results of operations, cash flows and financial position. As of June 29, 2003, we had invested \$58.9 million in new production capacity in Tempe and Dresden since 1997. The expansion has been financed by a combination of term loans, investment incentive grants from the government of the State of Saxony, in Germany, short-term borrowings, and cash flows from operating activities. Our results of operations, profitability, cash flows, stockholders' equity and financial position were adversely affected by initial start up costs and the lower production yields we generally experience before our new production machines reach commercial production levels. As a result, our financial position has been weakened by reduced liquidity and higher leverage.

Demand for our customers' products. Volatility in our customers' markets affects our results of operations. Demand for our customers' products has changed rapidly from time to time in the past and may do so in the future. For example, partly as a result of changing demand in the personal computer industry from 1999 through 2002, our electronic display revenues rose from \$16.0 million in 1999 to \$47.7 million in 2000 then declined to \$29.6 million in 2001 and \$26.6 million in 2002. Similarly, our revenues from our automotive segment rose from \$20.2 million in 2000, to \$37.4 million in 2001, and declined to \$25.7 million in 2002, because of competition from alternative technology solutions. Demand for our products can also be affected when the markets for the products in which our films are used evolve to new technologies, such as the evolution from cathode ray tubes, or CRTs, to flat panel displays. Consequently, as result of the volatility in our customers' markets, our results of operations and cash flows can vary significantly from quarter to quarter.

Product mix. Product mix affects our gross margins on the products we sell. Our product mix is determined by new products and applications that we have developed, end-customer market demand for products which use our applications, the availability of our production capacity and the allocation of our resources to meet demand for our products in markets we target. Generally, our gross margins on sales of electronic display film are lower than automotive and architectural products due to the additional costs of the outside processing required for electronic display film.

Our customer and supplier relationships. We derive significant benefits from our relationships with a few large customers and suppliers. Our revenues and gross profit can increase or decrease rapidly reflecting underlying demand for the products of one or a small number of our customers. In addition, a customer relationship may become unprofitable for a variety of reasons such as a reduction in our selling price. We may also be unable to replace a customer when a relationship ends or demand for our product declines as a result of evolution of our customer's products. In 1999, we began our relationship with Mitsubishi Electric Company, or Mitsubishi, which accounted for 21%, 18% and 13% of our total revenues in 2001, 2002 and the first six months of 2003, respectively. In 1999, we expanded our relationship with customers in the automotive glass market, including Pilkington PLC, Saint Gobain Sekurit and Globamatrix Holdings Pte. Ltd., or Globamatrix, which collectively accounted for approximately 46% of our total revenues in 2001, 37% in 2002 and 31% in the first six months of 2003. In July 2003, we entered into a new manufacturing and supply agreement with Mitsui Chemicals, Inc.

In addition, Teijin, one of our suppliers, has guaranteed our loan from a Japanese bank in the original principal amount of \$10.0 million, the proceeds of which we used to fund capital expenditures. Teijin and Globamatrix are investors in us, over time having purchased a total of 1.1 million shares of our common stock and, as of June 29, 2003, continue to hold approximately 1.1 million shares, or approximately 9% of the outstanding stock. In addition, to assist us with our short-term liquidity needs, some of our key vendors, such as Teijin and Lintec Inc. have, from time to time, extended the amount of time in which we are required to repay amounts owed to them.

Product warranty claims. Our gross margins and profitability have been adversely affected from time to time by product quality claims. From 2000 to 2002, our warranty provision has averaged approximately 4% of net revenues. In 2002, we had certain quality claims with respect to products produced for Globamatrix, which reduced our gross profit by approximately \$1.5 million.

Fluctuations in our selling, general and administrative expenses. Our selling, general and administrative expenses increased significantly in 2002 from 2001 due to nonrecurring professional fees associated with certain legal defenses, additional reporting requirements associated with the recently enacted Sarbanes-Oxley Act, and the evaluation of a potential acquisition target. In prior years, we have also incurred costs related to legal settlements.

Restructuring costs. Based on lower revenue expectations, we have decided to transfer more of our product manufacturing from our Palo Alto manufacturing site to our Tempe and Dresden manufacturing facility, which have a lower cost base. As a consequence of this decision, we implemented a reduction in force at our Palo Alto location in December 2002, and elected to consolidate our Palo Alto facilities. As a result of these actions, we incurred a restructuring charge of \$2.6 million in 2002 relating to employee severance packages and the remaining rents due on excess facilities in Palo Alto that will not be occupied after July 2003. Approximately \$0.2 million of the restructuring costs were paid prior to December 31, 2002. During the first quarter of 2003, the Company recorded an accounting adjustment in the amount of \$65,000 as a reduction to its restructuring accrual. The adjustment was the result of modifications to the severance packages of certain employees. In the second quarter of 2003, the Company implemented a reduction in force in its Tempe and Palo Alto locations. As a result of the reduction in force during the second quarter, the Company incurred a charge and made cash payments of \$0.1 million relating to employee severance packages. The charge of \$0.1 million is reflected in cost of sales in the Company's condensed consolidated statements of operations.

Three Months Ended June 29, 2003 compared with Three Months Ended June 30, 2002

Net revenues. Our net revenues decreased \$4.4 million, or 22%, from \$19.7 million for the second quarter of 2002 to \$15.3 million for the second quarter of 2003. Sales to the automotive glass market decreased by \$0.3 million, or 4%, from \$6.9 million in the first second quarter of 2002 to \$6.6 million in the second quarter of 2003. The decline in automotive glass sales was primarily due to lower unit sales volume. We believe the decline was a result of increased competition from coated glass manufacturers, which we feel has adversely affected revenues from our automotive customers. Sales to the electronic display market decreased by \$1.5 million, or 20%, from \$7.6 million in the second quarter of 2002 to \$6.1 million in the second quarter of 2003. The decrease in our electronic display revenues resulted primarily from a decrease in revenues from cathode ray tube, or CRT, film products was primarily due to lower selling prices, which we believe is a result of the decline of CRT technology as the primary technology used in computer monitors. The decrease in our revenue from CRT film products was partially offset by increased sales of our reflective film products used in liquid crystal displays, or LCDs, which provide backlighting for laptop computers, and our plasma display film product, or PDP, which provides electronic and infrared shielding for the PDP market. Our sales to the architectural market decreased \$2.5 million, or 49%, from \$5.1 million in the second quarter of 2002 to \$2.6 million in the second quarter of 2003. The decrease was primarily attributable to a reduction in orders of our Heat Mirror® product from several architectural customers, which we believe was partially caused by the effect of the SARS epidemic in countries located in the Pacific Rim, and the loss of a major architectural customer. As a result of the proceeding factors, we do not anticipate quarterly revenue for the remainder of 2003 to exceed the results achieved in the second quarter of 2003.

Cost of sales. Cost of sales consists primarily of materials and subcontractor services, labor and manufacturing overhead. Cost of sales decreased \$0.6 million, or 5%, from \$13.0 million in the second quarter of 2002, to \$12.4 million in the second quarter of 2003. The higher manufacturing costs in the second quarter of 2002 were primarily due to higher cost of materials and outside processing costs. In the second quarter of 2003, we incurred a charge of \$0.1 million for employee severance packages as a result of a reduction in force in our Tempe and Palo Alto facilities. Cost of sales as a percentage of net revenue increased from 66% in the second quarter of 2002, to 81% for the same period in 2003. Facility costs, depreciation expense and labor costs comprise the majority of our manufacturing expenses. These costs are relatively fixed and do not fluctuate proportionately with net revenues. As a result of these fixed costs, the increase in cost of sales as a percentage of revenue was primarily the result of lower revenues in the second quarter of 2003 as compared to the same period last year.

Gross profit and gross margin. Our gross profit decreased \$3.8 million, or 57%, from \$6.7 million in the second quarter of 2002, to \$2.9 million in the second quarter of 2003. Our gross margin declined from 34% in the second quarter of 2002, to 19% in the second quarter of 2003. The decreases in gross profit and gross margin in the 2003 period from the 2002 period were due to decreased revenues and relatively fixed manufacturing expenses.

Research and development. Research and development spending decreased \$0.6 million, or 29%, from \$2.1 million in the second quarter of 2002, to \$1.5 million in the second quarter of 2003. Research and development expenses decreased to 10% of net revenues in the second quarter of 2003 from 11% of net revenues in the second quarter of 2002. The decrease in our research and development spending during the second quarter of 2003 was primarily attributable to lower labor and occupancy costs, which were partially offset by an increase in materials that were used in on-going research and development activities.

Selling, general and administrative. Selling, general and administrative expenses were relatively the same, \$3.0 million, in the second quarter of 2002 and 2003. Selling, general and administrative expenses, as a percentage of revenue, increased from 15% in the second quarter of 2002, to 206% in the second quarter of 2003. The increase in our selling, general and administrative expense as a percentage of revenues was primarily the result of lower revenues in the second quarter of 2003. In addition, we forgave an officer loan, including interest in lieu of a bonus earned in the amount of \$0.1 million.

Income (loss) from operations. Income from operations decreased \$3.3 million from \$1.7 million in the second quarter of 2002, to a loss of \$1.6 million for the same period in 2003. The decline was due to lower revenues and relatively fixed manufacturing expenses, which were partially offset by lower research, selling, general and administrative expenses.

Interest expense. Interest expense decreased \$0.3 million, or 60%, from \$0.5 million in the second quarter of 2002, to \$0.2 million in the first quarter of 2003. The reduction in interest expense was primarily attributable to lower interest rates and the reduction of \$5.7 million in our term debt and the amount outstanding in our line of credit from \$24.3 million at June 30, 2002 to \$18.6 million at June 29, 2003.

Other income, net. Other income, net includes interest income and foreign exchange transaction gains and losses. Other income, net increased \$0.2 million from \$0.1 million in the second quarter of 2002, to \$0.3 million in the second quarter of 2003. The increase in other income, net was primarily attributable to foreign currency fluctuations. Some of our transactions with foreign suppliers are denominated in foreign currencies, principally the Japanese yen, and revenue from certain customers is denominated in euros. As exchange rates fluctuate relative to the U.S. dollar, exchange gains and losses occur.

Income (loss) before provision for income taxes. We recorded a pre-tax profit of \$1.2 million in the second quarter of 2002, compared to a pre-tax loss of \$1.5 million in the second quarter of 2003. The decline in the 2003 period from the 2002 period was due to lower revenues and relatively fixed manufacturing expenses during the 2003 period, which was partially offset by lower research and development expenses, lower interest expense and higher other income.

Provision (benefit) for income taxes. Income taxes increased \$0.4 million, or 200%, from a benefit of \$0.2 million in the second quarter of 2002, to a provision of \$0.2 million in the second quarter of 2003. The increase in income taxes was primarily attributable to a provision to accrue foreign income tax of \$0.2 million during the second quarter of 2003. In addition, during 2002 the federal government enacted legislation that established a tax holiday on alternative minimum tax obligations for 2001 and 2002 for which we received a refund during the second quarter of 2002.

Six Months Ended June 29, 2003 compared with Six Months Ended June 30, 2002

Net revenues. Our net revenues decreased \$8.4 million, or 22%, from \$38.9 million for the first six months of 2002 to \$30.5 million for the first six months of 2003. Sales to the automotive glass market decreased by \$1.2 million, or 9%, from \$13.9 million in the first six months of 2002 to \$12.7 million in the first six months of 2003. The decline in automotive glass sales was primarily due to lower unit sales volume and reductions in our selling prices as a result of increased competition from coated glass manufacturers, and a slowdown in sales by several European automobile manufacturers to which we sell our products. Sales to the electronic display market decreased by \$2.9 million, or 19%, from \$15.6 million in the first six months of 2002 to \$12.7 million in the first six months of 2003. The decrease in our electronic display revenues resulted primarily from a decrease in revenues from cathode ray tube, or CRT, film products was primarily due to lower selling prices, which we believe is a result of the decline of CRT technology as the primary technology used in computer monitors. The decrease in our revenue from CRT film products was partially offset by increased sales of our reflective film products used in liquid crystal displays, or LCDs, which provide backlighting for laptop computers, and our plasma display film product, or PDP, which provides electronic and infrared shielding for the

PDP market. Our sales to the architectural market decreased \$4.3 million, or 45.3%, from \$9.5 million in the first six months of 2002 to \$5.2 million in the first six months of 2003. The decrease was primarily attributable to a reduction in orders of our Heat Mirror® product from several architectural customers, which we believe was partially caused by the effect of the SARS epidemic in countries located in the Pacific Rim, and the loss of a major architectural customer.

Cost of sales. Cost of sales decreased \$0.8 million, or 3%, from \$25.4 million in the first six months of 2002, to \$24.6 million in the first six months of 2003. Cost of sales as a percentage of net revenues increased from 65% of net revenues in the first six months of 2002, to 81% of net revenues for the same period in 2003. The higher manufacturing costs in the second quarter of 2002 in dollars were primarily due to higher cost of materials and outside processing costs. Facility costs, depreciation expense and labor costs comprise the majority of our manufacturing expenses. These costs are relatively fixed and do not fluctuate proportionately with net revenues. As a result of these fixed costs, the increase in cost of sales as a percentage of revenue was primarily the result of lower revenues in the first six months of 2003 as compared to the same period last year.

Gross profit and gross margin. Our gross profit decreased \$7.6 million, or 56%, from \$13.6 million in the first six months of 2002, to \$6.0 million in the first six months of 2003. Our gross margin declined from 35.0% in the first six months of 2002, to 20% in the first six months of 2003. The decreases in gross profit and gross margin in the 2003 period from the 2002 period were due to decreased revenues and relatively fixed manufacturing expenses.

Operating Expenses

Research and development. Research and development spending decreased \$0.6 million, or 16%, from \$3.8 million in the first six months of 2002, to \$3.2 million in the first six months of 2003. Research and development expenses increased from 10% of net revenues in the first six months of 2002, to 11% of net revenues in the first six months of 2003. The decrease in our research and development spending during the first six months of 2003 was primarily attributable to lower labor and occupancy costs, which were partially offset by an increase in materials that were used in on-going research and development activities. The increase in our research and development as a percentage of revenues was primarily the result of lower revenues in the first six months of 2003 as compared to the same period last year.

Selling, general and administrative. Selling, general and administrative expenses decreased \$0.8 million, or 12%, from \$6.7 million in the first six months of 2002, to \$5.9 million in the first six months of 2003. Selling, general and administrative expenses, as a percentage of revenue, increased from 17% in the first six months of 2002, to 19% in the first six months of 2003. The decrease in expenses in the first six months of 2003 was mainly the result of lower employment compensation costs. The increased in our selling, general and administrative expense as a percentage of revenues was primarily the result of lower revenues in the first six months of 2003.

Income (loss) from operations. Income from operations decreased \$6.0 million from \$3.0 million in the first six months of 2002, to a loss of \$3.0 million for the same period in 2003. The decline was due to lower revenues and relatively fixed manufacturing expenses, which were partially offset by lower research, selling, general and administrative expenses.

Interest expense. Interest expense decreased \$0.5 million, or 50%, from \$1.0 million in the first six months of 2002, to \$0.5 million in the first six months of 2003. The reduction in interest expense was primarily attributable to lower interest rates and the reduction of \$5.7 million in our term debt and the amount outstanding in our line of credit, from \$24.3 million at June 30, 2002 to \$18.6 million at June 29, 2003.

Other income, net. Other income, net, decreased \$0.1 million from \$0.5 million in the first six months of 2002, to \$0.4 million in the first six months of 2003. The decrease in other income, net was primarily attributable to foreign currency fluctuations. Some of our transactions with foreign suppliers are denominated in foreign currencies, principally the Japanese yen, and revenue from certain customers is denominated in euros. As exchange rates fluctuate relative to the U.S. dollar, exchange gains and losses occur.

Income (loss) before provision for income taxes. We recorded a pre-tax profit of \$2.5 million in the first six months of 2002, compared to a pre-tax loss of \$3.2 million in the first six months of 2003. The decline in the 2003 period from the 2002 period was due to lower revenues and relatively fixed manufacturing expenses during the 2003 period, which was partially offset by lower research and development expenses, lower interest expense, and higher other

income.

Provision (benefit) for income taxes. Income taxes increased \$0.3 million, or 300%, from a benefit of \$0.1 million in the first six months of 2002, to a provision of \$0.2 million in the first six months of 2003. The increase in income taxes was primarily attributable to a provision to accrue foreign income tax of \$0.2 million during the second quarter of 2003. In addition, during 2002 the Federal government enacted legislation that established a tax holiday on alternative minimum tax obligations for 2001 and 2002 for which we received a refund during the second quarter of 2002.

Liquidity and Capital Resources

Liquidity:

Our cash and cash equivalents increased by \$0.4 million from \$2.0 million at December 31, 2002, to \$2.4 million at June 29, 2003. Cash provided by operating activities for the first six months of 2003 increased by \$1.7 million, from \$0.07 million provided during the first six months of 2002, to \$1.8 million provided during the first six months of 2003. The increase in cash provided by operating activities was primarily the result of a decrease in accounts receivable and inventory, and partially offset by a reduction in accounts payable and accrued liabilities. The cash used in investing activities decreased by \$0.3 million, from \$2.6 million during the first six months of 2002, to \$2.4 million during the first six months of 2003. The decrease in cash used in investing activities was primarily the result of lower capital expenditures and a reduction in restricted cash. Cash generated from financing activities decreased by \$0.5 million, from \$1.6 million during the first six months of 2003. The decrease was primarily attributable to significantly less cash received through the exercise of employee stock options, partially offset by additional borrowings from our lines of credit during the first six months of 2003.

We entered into an agreement with the Saxony government in May 1999 under which we receive investment grants. Since 1999 through June 29, 2003, we had received \$6.4 million cumulatively of the grants and accounted for these grants by applying the proceeds received to reduce the cost of our fixed assets of our Dresden manufacturing facility. If we fail to meet certain requirements in connection with these grants, the Saxony government has the right to demand repayment of the grants (see Note 6 - Government Grants and Investment Allowances, in the notes to condensed consolidated financial statements included herewith). Since 1999 through June 29, 2003, we had also received \$5.7 million in investment allowances, which are reimbursements for capital expenditures, from the Saxony government and those proceeds were also applied to reduce the cost of our fixed assets of our Dresden manufacturing facility. We expect to receive approximately \$1.0 million in investment allowances in the second half of 2003, based on investments made during 2002. The funds received have been applied to reduce the cost of our fixed assets of our Dresden manufacturing facility. Additionally, we have received \$0.5 million of Saxony government grants that as of June 29, 2003 were recorded as an advance until we earn the grant through future expenditures. The total annual amount of investment grants and investment allowances that we are entitled to seek varies from year to year based upon the amount of our capital expenditures that meet certain requirements of the Saxony government. Generally, we are not eligible to seek total investment grants and allowances for any year in excess of 33% of our eligible capital expenditures for that year. We expect to continue to finance a portion of our capital expenditures in Dresden with additional grants from the Saxony government and additional loans from German banks, some of which may be guaranteed by the Saxony government. However, we cannot guarantee that we will be eligible for or will receive additional grants in the future from the Saxony government. Under the terms of our grant agreement with the Saxony government, we are required to meet investment and hiring targets by June 30, 2006. If we fail to meet those targets, the Saxony government is permitted to require us to repay all grants and investment allowances previously received by us from the Saxony government.

Borrowing arrangements:

On May 16, 2003, the Company entered into a \$10.0 million receivable financing line of credit agreements with a financial institution that expires on May 16, 2004, subject to automatic one-year renewals unless terminated at any time by either party. The line of credit bears an annual interest rate of 7% above the financial institution's Base Rate (which was 4% at June 29, 2003), and is calculated based on the average daily accounts receivable against which the Company has borrowed. Half of the \$10.0 million line of credit is represented by a \$5.0 million credit line, guaranteed by the United States Export-Import Bank ("EXIM"). Availability under the EXIM line is limited to 90% of eligible foreign receivables acceptable to the lender. The remaining \$5.0 million portion of the \$10.0 million credit line is supported by domestic receivables. Availability under the domestic line of credit is limited to 70% of eligible

domestic receivable acceptable to the lender. The financial institution reserves the right to lower the 70% and 90% of eligible receivable standards for borrowings under the credit agreements. In connection with the line of credit, the Company granted to the bank a lien upon and security interest in, and right of set off with respect to all of the Company's right, title and interest in all personal property and other assets, but not certain of the Company Dresden assets and properties. The borrowing arrangements require the Company to maintain minimum net tangible net worth of \$33.0 million, current ratio of at least 0.70, and revenues equal to or greater than 80% of revenues projected. As part of the agreements, the Company incurred and paid a one-time commitment fee of \$0.1 million in the second quarter of 2003, which will be amortized over the life of the agreements. As of June 29, 2003, the Company had approximately \$3.0 million of borrowings outstanding and \$1.8 million of availability under the line of credit. The Company was in compliance with all financial covenants as of June 29, 2003.

At December 31, 2001 and 2002, we were not in compliance with certain of the covenants of the guarantee by Teijin of the Japanese bank loan. Teijin and the Japanese bank waived the defaults under Teijin's guarantee of the loan that may exist for any measurement period through and including September 30, 2003 arising out of our failure to comply with the minimum quick ratio, tangible net worth and maximum debt/tangible net worth covenants. The waiver was conditioned on our agreement to prepay \$2.5 million of the debt out of the proceeds of our follow-on public offering, which prepayment of \$2.5 million along with a scheduled principal payment of \$1.25 million was made on November 6, 2002. On May 6, 2003, we made a scheduled payment of \$1.25 million. Under the terms of the loan agreement, the remaining balance of \$1.25 million outstanding under this loan at June 29, 2003 is due on November 6, 2003. Accordingly, we have classified it as current.

Our borrowing arrangements with various German banks as of June 29, 2003 are described in Note 5 – Term Debt in the condensed consolidated financial statements. We are in compliance with all of the covenants of the German bank loans, and we have classified \$9.5 million outstanding under the German bank loans as a long-term liability at June 29, 2003.

We are in default under a master sale-leaseback agreement with respect to two of our production machines. We have withheld lease payments in connection with a dispute with the leasing company. An agent purporting to act on behalf of the leasing company has recently filed suit against us to recover the unpaid lease payments and the alleged residual value of the machines, totaling \$6.5 million in the aggregate. The leasing company holds a security interest in the production machines and may be able to repossess them. As a result, we have classified all \$3.3 million outstanding under those agreements as short-term capital lease liabilities as of June 29, 2003.

Capital expenditures:

We anticipate spending approximately \$4.0 million in capital expenditures in 2003, approximately \$1.2 million of which will consist of progress payments for a production machine (PM 10) in Dresden, approximately \$1.5 million of which will be used to install a new enterprise resource planning system, and approximately \$1.3 million of which will be used to maintain and upgrade our production facilities in Palo Alto and Tempe. For the first six months of 2003, we incurred \$2.2 million in capital expenditures, compared to \$3.2 million in capital expenditures for the same period in 2002.

Financing needs:

We have prepared our consolidated financial statements assuming we will continue as a going concern and meet our obligations as they become due. We incurred a net loss in the first six months of 2003, and expect to incur net losses through the remainder of 2003. These factors together with our working capital position and our significant debt service and other contractual obligations at June 29, 2003 raise substantial doubt about our ability to continue as a going concern. We will continue to look for additional financing to fund our operations. However, we cannot provide any assurance that alternative sources of financing will be available at all or on terms acceptable to us. If we are unable to obtain additional financing sources, we may be unable to satisfactorily meet all our cash commitments required to fully implement our business plans.

In December 2002, we restructured our operations to reduce our cost structure by reducing our work force in Palo Alto and vacating excess facilities after consolidating our operations in Palo Alto. These actions are expected to help improve our operating results in 2003 but will continue to impact our operating cash flows until our lease commitments for the excess facilities expire in December 2004.

Item 3—Quantitative and Qualitative Disclosures about Market Risk

We are exposed to the impact of interest rate changes, foreign currency fluctuations, and changes in the market values of its investments.

Financing risk: Our exposure to market rate risk for changes in interest rates relates primarily to our term loan, specifically our loan from Sanwa Bank, which is tied to the London Interbank Offered Rate, and our line of credit which bears an interest rate equal to 7% above the bank Base Rate (which was 4% at June 29, 2003) and is calculated based on the average daily balance of the accounts receivable against which we have borrowed. In addition, the interest rate on one of our German loans will be reset to the prevailing market rate in 2004 and on another of our German loans will be reset to the prevailing market rate in 2009. Fluctuations or changes in interest rates may adversely affect our expected interest expense. The effect of a 10% fluctuation in the interest rate on our loan from Sanwa Bank and our line of credit would have had an effect of less than \$6,000 on our interest expense for the first six months of 2003. The effect of interest rate fluctuations during the first six months of 2003 was not material.

Investment risk: We invest our excess cash in money market accounts and, by practice, limit the amount of exposure to any one institution. Investments in both fixed rate and floating rate interest earning instruments carry a degree of interest rate risk. Fixed rate securities may have their fair market value adversely affected due to a rise in interest rates, while floating rate securities may produce less income than expected if interest rates fall. The effect of a 10% fluctuation in the interest rate of any floating rate securities would have had an adverse effect of less than \$35,000 million for the first six months of 2003.

Foreign currency risk: International revenues (defined as sales to customers located outside of the United States) accounted for approximately 91% of our total sales in the first six months of 2003. Approximately 41% of our international revenues was denominated in euros relating to sales from our Dresden operation. The other 59% of our international sales were denominated in US dollars. In addition, certain transactions with foreign suppliers are denominated in foreign currencies (principally Japanese Yen). The effect of a 10% fluctuation in the euro exchange rate would have had an effect of less than \$1.1 million on net revenues for the first six months of 2003 and the effect on expenses of a 10% fluctuation in the Yen exchange rate would have been less than \$0.7 million for the first six months of 2003.

FORWARD-LOOKING STATEMENTS

This Quarterly Report contains forward-looking statements, as that term is defined in the Private Securities Litigation Reform Act of 1995, which are subject to a number of risks and uncertainties. All statements other than statements of historical facts are forward-looking statements. These statements are identified by terminology such as "may," "will," "could," "should," "expects," "plans," "intends," "seeks," "anticipates," "believes," "estimates," "potential," or "continue," or the negative of such terms or other comparable terminology, although not all forward-looking statements contain these identifying words. Forward-looking statements are only predictions and include statements relating to:

- our strategy, future operations and financial plans, including, without limitation, our plans to install and commercially produce products on new machines;
- our projected need for, and ability to obtain, additional borrowings and our future liquidity;
- our competition;
- our expectations with respect to future grants, investment allowances and bank guarantees from the Saxony government;
- anticipated revenues under contracts with our customers;
- pending and threatened litigation and its outcome; and
- our projected capital expenditures.

You should not place undue reliance on our forward-looking statements. Actual events or results may differ

materially. In evaluating these statements, you should specifically consider various factors, including the risks outlined below under "Risk Factors." These factors may cause our actual results to differ materially from any forward-looking statement. Although we believe the expectations reflected in our forward-looking statements are reasonable as of the date they are being made, we cannot guarantee our future results, levels of activity, performance, or achievements. Moreover, neither we nor any other person assumes responsibility for the future accuracy and completeness of these forward-looking statements.

Risk Factors

Financial Risks

Our working capital position, financial commitments and historical performance may prevent us from obtaining additional financing.

We have prepared our consolidated financial statements assuming we will continue as a going concern and meet our obligations as they become due. We incurred a net loss and negative cash flows from operations in 2002 and the first six months of 2003 and expect to incur net losses through the rest of 2003. These factors together with our working capital position and our significant debt service and other contractual obligations at June 29, 2003, raise substantial doubt about our ability to continue as a going concern without restoring profitable operations, generating cash flow from operating activities and obtaining additional financing. These and other factors related to our business during recent years, including the restatement in 2000 of our financial statements for prior periods, operating losses in 1998, 1999, 2000, 2002, and the first six months of 2003, our past failure to comply with covenants in our financing agreements and suspension of trading of our common stock on NASDAQ in 2000 may make it difficult for us to secure additional borrowings on favorable terms or at all. We intend to seek additional borrowings, or alternative sources of financing and difficulties in borrowing money or raising financing could have a material adverse effect on our operations, planned capital expenditures, ability to comply with the terms of government grants and future growth.

Covenants or defaults under our credit agreements may prevent us from borrowing or force us to curtail our operations.

As of June 29, 2003, we had total outstanding obligations under our credit agreements of \$18.6 million. Our inability to make timely payments of interest or principal under these facilities could materially adversely affect our ability to borrow money under existing credit facilities, to secure additional borrowings or to function as a going concern. Our current credit facilities contain financial covenants that will require us to meet certain financial performance targets and operating covenants that limit our discretion with respect to business matters. Among other things, these covenants restrict our ability to borrow additional money, create liens or other encumbrances, and make certain payments including dividends and capital expenditures. Many of these loans contain provisions that permit the lender to declare the loans immediately due if there is a material adverse change in our business. These credit facilities also contain events of default that could require us to pay off indebtedness before its maturity. The restrictions imposed by these credit facilities or the failure of lenders to advance funds under these facilities could force us to curtail our operations or have a material adverse effect on our liquidity.

Our ability to borrow is limited by the nature of our equipment and some of our accounts receivable.

Our equipment is custom designed for a special purpose. In addition, a large portion of our accounts receivable are from foreign sales, which are often more difficult to collect than domestic accounts receivable. As a result of the nature of our equipment and accounts receivable, lenders will generally allow us to borrow less against these items as collateral than they would for other types of equipment or domestic accounts receivable, or require us to provide additional credit enhancements.

If we default under our secured credit facilities and financing arrangements, the lenders could foreclose on the assets we have pledged to them requiring us to significantly curtail or even cease our operations.

In connection with our current borrowing facilities and financing arrangements, we have granted security interests in and liens on substantially all of our assets, including our production machines and our Dresden facility, to secure the loans. We are currently being sued under a master sale-leaseback agreement with respect to two of our production machines because we have withheld lease payments in connection with a dispute with the leasing company. The leasing company holds a security interest in the production machines and may be able to repossess those machines.

If the leasing company were to repossess one or more of those machines, our ability to produce product would be materially impaired. Our revenues, gross margins and operating efficiency would also be materially adversely affected. Our obligations under our secured credit facilities contain cross-default and cross-acceleration provisions and provisions that allow the lenders to declare the loans immediately due if there is a material adverse change in our business. If we default under the credit facilities or financing arrangements the lenders could declare all of the funds borrowed there under, together with all accrued interest, immediately due and payable. If we are unable to repay such indebtedness, the lenders could foreclose on the pledged assets. If the lenders foreclose on our assets, we would be forced to significantly curtail or even cease our operations.

Our quarterly revenue and operating results are volatile and difficult to predict. If we fail to meet the expectations of public market analysts or investors, the market price of our common stock may decrease significantly.

Our quarterly revenue and operating results have varied significantly in the past and will likely vary significantly in the future. Our revenue and operating results may fall below the expectations of securities analysts or investors in future periods. Our failure to meet these expectations would likely adversely affect the market price of our common stock.

Our quarterly revenue and operating results may vary depending on a number of factors, including:

- fluctuating customer demand, which is influenced by a number of factors, including market acceptance of our products and the products of our customers and end-users, changes in product mix, and the timing, cancellation or delay of customer orders and shipments;
- the timing of shipments of our products by us and by independent subcontractors to our customers;
- manufacturing and operational difficulties that may arise due to, among other things, quality control, capacity utilization of our production machines, unscheduled equipment maintenance, and the hiring and training of additional staff;
- our ability to introduce new products on a timely basis; and
- competition, including the introduction or announcement of new products by competitors, the adoption of competitive technologies by our customers, the addition of new production capacity by competitors and competitive pressures on prices of our products and those of our customers.

We expect to be subject to increased foreign currency risk in our international operations.

Approximately 15% and 37% of our total revenues in 2002 and the first six months of 2003, respectively, were denominated in euros, primarily related to sales from our Dresden operation, including sales to one of our largest customers, a European automotive glass manufacturer. As a result, our operating results and cash flows may vary due to fluctuations of the euro against the dollar. In addition, other customers may request to make payments in foreign currencies. Also, certain transactions with foreign suppliers are denominated in foreign currencies, primarily yen.

The majority of our international sales are currently invoiced and collected in U.S. dollars. A strengthening in the dollar relative to the currencies of those countries in which we do business would increase the prices of our products as stated in those currencies and could hurt our sales in those countries. Significant fluctuations in the exchange rates between the U.S. dollar and foreign currencies could cause us to lower our prices and thus reduce our profitability and cash flows. These fluctuations could also cause prospective customers to cancel or delay orders because of the increased relative cost of our products.

Operational Risks

We depend on a small number of customers for nearly all of our sales, and the loss of a large customer could materially adversely affect our revenues or operating results.

Our ten largest customers accounted for approximately 85%, 85%, 84% and 86% of net sales in 2000, 2001, 2002, and the first six months of 2003 respectively. We have contracts extending past 2003 with only three of these

customers. We expect to continue to derive a significant portion of our net sales from this relatively small number of customers. Accordingly, the loss of a large customer could materially hurt our business, and the deferral or loss of anticipated orders from a large customer or a small number of customers could materially reduce our revenue and operating results in any period. Some of our largest automotive glass customers have used a technology—direct-to-glass sputtering—as an alternative to our window films, which in 2002 resulted in a decrease in orders from these customers. The continued or expanded use of this technology by our automotive glass customers would have a material adverse effect on our results of operations and financial position.

We must continue to develop new products or enhance existing products on a timely basis to compete successfully in a rapidly changing marketplace.

Our future success depends upon our ability to introduce new products, improve existing products and processes to keep pace with technological and market developments, and to address the increasingly sophisticated and demanding needs of our customers, especially in the electronic display and automotive markets. Technological changes, process improvements, or operating improvements that could adversely affect us include:

- the development of competing technologies to our anti-reflective and silver reflector films for liquid crystal displays in the flat panel display industry;
- changes in the way coatings are applied to alternative substrates such as tetra acetate cellulose, or TAC;
- the development of new technologies that improve the manufacturing efficiency of our competitors;
- the development of new materials that improve the performance of products that could compete with our products; and
- improvements in the alternatives to the sputtering technology we use to produce our products, such as plasma enhanced chemical vapor deposition, or PECVD.

Our research and development efforts may not be successful in developing products in the time, or with the characteristics, necessary to meet customer needs. If we do not adapt to technological changes, or process or operating improvements, our competitive position, operations and prospects would be materially adversely affected.

Our ability to successfully identify suitable target companies and integrate acquired companies or technologies may affect our future growth.

A potential part of our continuing business strategy is to consider acquiring companies, products, and technologies that complement our current products, enhance our market coverage, technical capabilities or production capacity, or offer other growth opportunities. Our ability to successfully complete acquisitions requires that we identify suitable target companies, agree on acceptable terms, and obtain acquisition financing on acceptable terms. In connection with these acquisitions, we could incur debt, amortization expenses relating to identified intangibles, impairment charges relating to goodwill, or merger related charges, or could issue stock that would dilute our current shareholders' percentage of ownership. The success of any acquisitions will depend upon our ability to integrate acquired operations, retain and motivate acquired personnel, and increase the customer base of the combined businesses. We cannot assure you that we will be able to accomplish all of these goals. Any future acquisitions would involve certain additional risks, including:

- difficulty integrating the purchased operations, technologies, or products;
- unanticipated costs, which would reduce our profitability;
- diversion of management's attention from our core business;
- potential entrance into markets in which we have limited or no prior experience; and
- potential loss of key employees, particularly those of the acquired business.

Failure to meet the volume requirements of our customers may result in a loss of business or contractual penalties.

Our long-term competitive position will depend to a significant extent on our manufacturing capacity. The failure to have sufficient capacity, to fully utilize capacity when needed or to successfully integrate and manage additional capacity in the future could adversely affect our relationships with customers and cause customers to buy similar products from our competitors if we are unable to meet their needs. For example, we believe that we lost substantial potential architectural products sales in 2001 because we did not have the capacity to manufacture the required amounts of products. Also, our failure to produce required amounts of products under some of our contracts will result in price reductions on future sales under such contracts or penalties under which we would be required to reimburse the customer for the full cost of any product not delivered in a timely manner, either of which would reduce our gross margins.

We depend on our OEM customers for the sale of our products.

We sell a substantial portion of our products to a relatively small number of original equipment manufacturers, or OEMs. The timing and amount of sales to these customers ultimately depend on sales levels and shipping schedules for the OEM products into which our products are incorporated. We have no control over the volume of products shipped by our OEM customers or shipping dates, and we cannot be certain that our OEM customers will continue to ship products that incorporate our products at current levels or at all. We currently have long-term contracts with only two of our OEM customers. Failure of our OEM customers to achieve significant sales of products incorporating our products and fluctuations in the timing and volume of such sales could be harmful to our business. Failure of these customers to inform us of changes in their production needs in a timely manner could also hinder our ability to effectively manage our business.

We rely upon our OEM customers for information relating to the development of new products so that we are able to meet end-user demands.

We rely on our OEM customers to inform us of opportunities to develop new products that serve end-user demands. If our OEM customers do not present us with market opportunities early enough for us to develop products to meet end-user needs in a timely fashion, or if the OEMs fail to anticipate end-user needs at all, we may fail to develop new products or modify our existing products for the end-user markets for our products. In addition, if our OEM customers fail to accurately anticipate end-user demands, we may spend resources on products that are not commercially successful.

We depend on a distributor for the sale of our after-market products.

We primarily use one independent distributor to sell our after-market products. We have a distribution agreement with Globamatrix Holdings Pte. Ltd., or Globamatrix, under which we granted an exclusive worldwide license to distribute our after-market applied film in the automotive and architectural glass markets. Failure of Globamatrix to achieve significant sales of products incorporating our products and fluctuations in the timing and volume of such sales could be harmful to our business. We believe that the success of our after-market products will continue to depend upon this distributor.

We face intense competition, which could affect our ability to increase our revenue, maintain our margins and increase our market share.

The market for each of our products is intensely competitive and we expect competition to increase in the future. Competitors vary in size and in the scope and breadth of the products they offer. We compete both with companies using technology similar to ours and companies using other technologies or developing improved technologies. Direct-to-glass sputtering represents the principal alternative technology to our sputter-coated film products. Direct-to-glass is a mature, well-known process for applying thin film coatings directly to glass, which is used by some of our current and potential customers to produce products that compete with our products. This technology is commonly used to manufacture products that conserve energy in buildings and automobiles. Many of our current and potential competitors have significantly greater financial, technical, marketing and other resources than we have. In addition, many of our competitors have well-established relationships with our current and potential customers and have extensive knowledge of our industry.

We may not be able to expand our manufacturing capacity efficiently which could lead to lower gross margins.

Our newest production machine (PM 10) is at our Dresden manufacturing facility, and it began commercial production in the first quarter of 2003. In addition, we anticipate that PM 7 in our Tempe facility will be available for limited commercial production during 2003. PM 7 is currently being used in customer paid, research projects to develop future products, which will utilize plasma enhanced chemical vapor disposition, or PECVD, technology. The PECVD technique uses a gas rather than a solid target as the base material for sputter coating onto film. During the processes of bringing PM 7 and PM 10 up to commercial production levels, we expect to have decreased manufacturing yields and higher costs, which will lower our gross margins.

We are dependent on key suppliers of materials, which may prevent us from delivering product in a timely manner.

We manufacture all of our products using materials procured from third-party suppliers. We do not have long-term contracts with our third-party suppliers, except for an agreement with a third-party supplier to purchase Indium metal through the second quarter of 2003. Certain of the materials we require are obtained from a limited number of sources. Delays or reductions in product shipments could damage our relationships with customers. Further, a significant increase in the price of one or more of the materials used in our products could have a material adverse effect on our cost of goods sold and operating results.

We are dependent on a few qualified subcontractors to add properties to some of our products.

We rely on third-party subcontractors to add properties, such as adhesives, to some of our products. There are only a limited number of qualified subcontractors that can provide some of the services we require and we do not have long-term contracts with any of those subcontractors. Qualifying alternative subcontractors could take a great deal of time or cause us to change product designs. The loss of a subcontractor could adversely affect our ability to meet our scheduled product deliveries to customers, which could damage our relationships with customers. If our subcontractors do not produce a quality product, our yield will decrease and our margins will be lower. Further, a significant increase in the price charged by one or more of our subcontractors could force us to raise prices on our products or lower our margins, which could have a material adverse effect on our operating results.

We are dependent on key suppliers of production machines, which may prevent us from delivering an acceptable product on a timely basis and limit our capacity for revenue growth.

Our production machines are large, complex and difficult to manufacture. It can take up to a year from the time we order a machine until it is delivered. Following delivery, it can take us, with the assistance of the manufacturer, up to six additional months to test and prepare the machine for commercial production. There are a very limited number of companies that are capable of manufacturing these machines. Our inability in the future to have new production machines manufactured and prepared for commercial production in a timely manner would prevent us from delivering product on a timely basis and limit our capacity for revenue growth.

Fluctuations or slowdowns in the overall electronic display industry have and may continue to adversely affect our revenues.

Our business depends in part on sales by manufacturers of products that include electronic displays. The markets for electronic display products are highly cyclical and have experienced periods of oversupply resulting in significantly reduced demand for our products. For example, due to the deteriorating economic environment, sales by flat cathode ray tube manufacturers decreased in 2001 and further in 2002, contributing to our electronic display product revenues declining by 38% 2001, and another 11% for 2002. Mitsubishi Electric is the only CRT manufacturer that buys our anti-reflective ("AR") film and it has decided to consolidate all of its manufacture of this product to Japan. In connection with that consolidation, Mitsubishi expects to cease production of the 17" AR product in its Mexico plant by the third quarter of 2003. We expect to continue to produce AR product in the 22" and 19" sizes for Mitsubishi Electric. We expect a reduction in revenues of the AR product in 2003 and a further reduction in succeeding years. If the flat display and other electronic display markets in which we sell our products do not recover or experience further slowdowns in the future, it could cause revenues from our electronic display products to decrease further.

Performance, reliability or quality problems with our products may cause our customers to reduce or cancel their orders.

We manufacture our products based on specific, technical requirements of each of our customers. We believe that future orders of our products will depend in part on our ability to maintain the performance, reliability and quality standards required by our customers. If our products have performance, reliability or quality problems, then we may experience:

- delays in collecting accounts receivable;
- higher manufacturing costs;
- additional warranty and service expenses; and
- reduced or cancelled orders.

For example, in 1998, our operating results were materially adversely affected by quality problems associated with the electronic display film produced by us for one of our largest customers.

If we fail to recruit and retain a significant number of qualified technical personnel we may not be able to develop, enhance and introduce our products on a timely basis, and our business will be harmed.

We require the services of a substantial number of qualified technical personnel. Intense competition and aggressive recruiting, as well as a high-level of employee mobility characterize the market for skilled technical personnel. These characteristics make it particularly difficult for us to attract and retain the qualified technical personnel we require. We have experienced, and we expect to continue to experience, difficulty in hiring and retaining highly skilled employees with appropriate technical qualifications. It is especially difficult for us to recruit qualified personnel to move to the location of our Palo Alto, California offices because of the high-cost of living. If we are unable to recruit and retain a sufficient number of qualified technical employees, we may not be able to complete the development of, or enhance, our products in a timely manner. As a result, our business may be harmed and our operating results may suffer.

We may be unable to attract or retain the other highly skilled employees that are necessary for the success of our business.

In addition to our dependence on our technical personnel, our success also depends on our continuing ability to attract and retain other highly skilled employees. We depend on the continued services of our senior management, particularly Thomas G. Hood, our President and Chief Executive Officer. We do not have employment contracts with any of our officers or key person life insurance covering any officer or employee. Our officers have technical and industry knowledge that cannot easily be replaced. Competition for similar personnel in our industry where we operate is intense. We have experienced, and we expect to continue to experience, difficulty in hiring and retaining highly skilled employees with appropriate qualifications. If we do not succeed in attracting or retaining the necessary personnel, our business could be adversely affected.

If we are unable to adequately protect our intellectual property, third parties may be able to duplicate our products or develop functionally equivalent or superior technology.

Our success depends in large part upon our proprietary technology. We rely on our know-how, as well as a combination of patent, trademark and trade secret protection, to establish and protect our intellectual property rights. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our products or to obtain and use information that we regard as proprietary. Policing unauthorized use of our products is difficult. Our means of protecting our proprietary rights may not be adequate. In addition, the laws of some foreign countries do not protect our proprietary rights to as great an extent as do the laws of the United States. During 2001, one of our U.S. patents relating to our architectural products expired. In the next three years, two more U.S. patents will expire. Expiration of these patents or our failure to adequately protect our proprietary rights may allow third parties to duplicate our products or develop functionally equivalent or superior technology. In addition, our competitors may independently develop similar technology or design around our proprietary intellectual property.

Our business is susceptible to numerous risks associated with international operations.

We have expanded our operations and hired additional personnel to address international markets for the thin

film coatings industry. International revenues amounted to approximately 85%, 87%, 85% and 91% of our net revenues during 2000, 2001, 2002, and the first six months of 2003 respectively. The distance between all three of our manufacturing locations creates logistical and communications challenges. In addition, to achieve acceptance in international markets, our products must be modified to handle a variety of factors specific to each international market as well as local regulations. We may also be subject to a number of other risks associated with international business activities. These risks include:

- unexpected changes in and the burdens and costs of compliance with a variety of foreign laws and regulatory requirements;
- potentially adverse tax consequences; and
- global economic turbulence and political instability.

If we fail to comply with environmental regulations, our operations could be suspended.

We use hazardous chemicals in producing our products and have air and water emissions that require controls. As a result, we are subject to a variety of local, state and federal governmental regulations relating to the storage, discharge, handling, emission, generation, manufacture and disposal of toxic or other hazardous substances used to manufacture our products, compliance with which is expensive. Our failure to comply with current or future regulations could result in the imposition of substantial fines on us, suspension of production, alteration of our manufacturing processes, increased costs or cessation of operations.

We rely on our domestic sales representatives, without whom our architectural product sales may suffer.

We use independent sales representatives to promote our Heat Mirror products to architects in the United States. If some or all of our sales representatives experience financial difficulties, or otherwise become unable or unwilling to promote our products, our business could be harmed. These sales representatives could reduce or discontinue promotion of our products. They may not devote the resources necessary to provide effective marketing support to us. In addition, we depend upon the continued viability and financial resources of these representatives, many of which are small organizations with limited working capital. These representatives, in turn, depend substantially on general economic conditions and other factors affecting the markets for the products they promote. We believe that our success in this market will continue to depend upon these sales representatives.

We may experience unanticipated warranty or other claims with respect to our products which may lead to extensive litigation costs and expenses.

In the ordinary course of business, we have periodically become engaged in litigation principally as a result of disputes with customers of our architectural products. We have settled some of these suits and others are pending. We may become engaged in similar or other lawsuits in the future. For example, we have recently received a letter that threatens litigation based upon the allegation that a sealant provided by a third party and used with our film was defective, and as a result the plaintiff has suffered elevated warranty replacement claims and costs. Some of our products that have been the basis for lawsuits against us could be the basis for future lawsuits. An adverse outcome in the defense of a warranty or other claim could subject us to significant liabilities to third parties. Any litigation, regardless of the outcome, could be costly and require significant time and attention of key members of our management and technical personnel.

We may face extensive damages or litigation costs if our insurance carriers seek to have us indemnify them for settlements of past and outstanding litigation.

Several of our insurance carriers have reserved their rights to seek indemnification from us for substantial amounts paid to plaintiffs by the insurance carriers as part of settlements of litigation relating to our architectural products. Our insurance carriers in a case in which the plaintiff alleged we were responsible for defects in window products manufactured by others have advised us that they intend to seek reimbursement for settlement and defense costs. Any claims, with or without merit, could require significant time and attention of key members of our management and result in costly litigation.

Item 4—Controls and Procedures

As of June 29, 2003, the Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Chief Executive Officer and the Chief Financial Officer of the Company, of the effectiveness of the design and operation of the Company's disclosure controls and procedures pursuant to Exchange Act Rule 13a-15. Based upon that evaluation, the Chief Executive Officer and the Chief Financial Officer of the Company concluded that as of the date of such evaluation, the Company's disclosure controls and procedures were effective in timely alerting them to material information relating to the Company (including its consolidated subsidiaries) required to be included in the Company's periodic filings with the Securities and Exchange Commission. The Company notes, however, that the design of any system of controls is based in part upon certain assumptions about the likelihood of future events, and the Company cannot assure you that any system of internal controls will succeed in achieving its stated goals under all potential future conditions, regardless of how remote. There have been no changes in the Company's internal control over financial reporting that occurred during the quarter ended June 29, 2003 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting subsequent to the date of their evaluation.

PART II—OTHER INFORMATION

Item 1—Legal Proceedings

The Company was a defendant in an action filed on April 5, 1996 entitled "Four Seasons Solar Products Corp. vs. Black & Decker Corp., Bostik, Inc. and Southwall Technologies Inc.," No. 5 CV1695, pending in the United States District Court for the Eastern District of New York. By order dated April 8, 2003 the Court dismissed the remaining claim for breach of contract and ordered that judgment be entered for Southwall. The plaintiff has filed a Notice of Appeal.

The Company has been named as a defendant, along with Bostik, Inc., in an action entitled "WASCO Products, Inc. v. Southwall Technologies Inc. and Bostik, Inc.," Civ. Action No. C 02-2926 CRB, which was filed in Federal District Court for the Northern District of California on June 18, 2002. The Company has filed a Motion to Dismiss and has filed an Opposition to Class Certification. The Motion to Dismiss was granted to the Company on May 29, 2003. The plaintiff filed its Third Amended Complaint on June 27, 2003.

The Company is a defendant in an action entitled "Portfolio Financial Servicing Company v. Southwall Technologies Inc.," which was filed in state court in Utah on May 22, 2002. The Company and the plaintiffs entered into a settlement agreement on July 31, 2003, pursuant to which this claim will be extinguished by payment from the Company to the plaintiffs of \$2.5 million. The settlement agreement is subject to the satisfaction of certain conditions, which must be fulfilled on or before October 1, 2003, including the payment of the settlement amount, a significant portion of which the Company may need to borrow. There can be no assurance that the Company will be able to borrow the amount it needs to pay the settlement. Pursuant to the settlement agreement, the Company has paid the plaintiffs \$250,000, which will be applied against the settlement amount if the conditions to settlement are satisfied and which will be applied against the alleged unpaid lease obligations if the conditions are not satisfied. If the conditions to the settlement are not fulfilled, the matter will continue to be litigated.

Other litigation filed against the Company was described under Item 3 in the Company's Form 10-K filed on March 31, 2003. No other material developments have occurred with respect to the litigation described therein.

In addition, the Company is involved in certain other legal actions arising in the ordinary course of business. The Company believes, however, that none of these actions, either individually or in the aggregate, will have a material adverse effect on the Company's business, its consolidated financial position, its results of operations, or its operating cash flows.

Item 2—Changes in Securities and Use of Proceeds

Not applicable.

Item 3—Defaults upon Senior Securities

Not applicable.

Item 4—Submission of Matters to a Vote of Stockholders

On May 22, 2003, we held our Annual Meeting of Stockholders. The following matters were voted upon:

Our stockholders elected William A. Berry, Thomas G. Hood, Bruce M. Jaffe, Jami K. Nachtsheim, Noriyuki Nakamura, Joseph B. Reagan, Walter C. Sedgwick, and Robert C. Stempel as directors to serve for the ensuing year.

The vote for each director was as follows:

Director	For	Withheld
William A. Berry	10,725,811	222,504
Thomas G. Hood	10,116,304	832,011
Bruce M. Jaffe	10,734,311	214,004

Jami K. Nachtsheim	10,735,311	213,004
Noriyuki Nakamura	10,122,710	825,605
Joseph B. Reagan	10,737,066	211,249
Walter C. Sedgwick	10,737,066	211,249
Robert C. Stempel	10,737,066	211,249

There were no votes abstaining, nor were there any broker non-votes, in the selection of directors.

 Our stockholders ratified the appointment by the board of directors of PricewaterhouseCoopers LLP as independent accountant to audit our financial statements for the fiscal year ending December 31, 2003 with 10,771,721 votes "FOR", 169,574 votes "AGAINST", no votes "WITHHELD", 7,020 votes "ABSTAINING", and no broker non-votes.

Item 5—Other Information

None.

Item 6—Exhibits and Reports on Form 8-K

(a) Exhibits

Exhibit <u>Number</u>	Item
	_
10.123	Domestic Factoring Agreement dated May 16, 2003, between Pacific Business Funding and the Company.
10.123.1	Amendment to the Domestic Factoring Agreement dated June 16, 2003, between Pacific Business Funding and the Company.
10.124	Intellectual Property Security Agreement dated May 16, 2003, between Pacific Business Funding and the Company.
10.125	Export-Import Working Capital Guarantee Program Borrower Agreement, between Pacific Business Funding and the
	Company.
10.126	Export-Import Factoring Agreement dated May 16, 2003, between Pacific Business Funding and the Company.
10.126.1	Amendment to the Export-Import Factoring Agreement dated June 16, 2003, between Pacific Business Funding and the
	Company.
10.127	Manufacturing and Supply Agreement between the Company and Mitsui Chemicals, Inc. dated July 19, 2003 (portions of this
	exhibit have been omitted based on a request for confidential treatment; the non-public information has been filed with the
	Commission).
31.1	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the
	Sarbanes-Oxley Act of 2002.
32.2	Certification Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the
	Sarbanes-Oxley Act of 2002.

(b) Reports on Form 8-K

On July 31, 2003, the Company filed a Current Report on Form 8-K, disclosing under Item 12 a press release announcing the Company's earnings results for the second quarter of 2003, which contained the condensed consolidated Income Statement for the second quarter and six months ended June 29, 2003 and June 30, 2002 and Statements of Cash Flows for the quarters ended June 29, 2003 and June 30, 2002, and the condensed consolidated Balance Sheet for the periods ended June 29, 2003 and December 31, 2002.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Dated: August 14, 2003

By: /s/ Thomas G. Hood Thomas G. Hood

President and Chief Executive Officer

By: /s/ Michael E. Seifert

Michael E. Seifert

Sr. Vice President and Chief Financial Officer

CERTIFICATION

I, Thomas G. Hood, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of Southwall Technologies Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 14, 2003	By:		
	/s/ Thomas G. Hood		
	Thomas G. Hood		
	Chief Executive Officer		

CERTIFICATION

I, Michael E. Seifert, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of Southwall Technologies Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weakness in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 14, 2003

By:

/s/ Michael E. Seifert

Michael E. Seifert

Chief Financial Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the accompanying Quarterly Report on Form 10-Q of Southwall Technologies Inc.(the "Company"), for the quarter ended June 29, 2003, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Thomas G. Hood, the Chief Executive Officer of the Company, hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- 1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

August 14, 2003	By:	/s/ Thomas G. Hood	
		Thomas G. Hood	
		Chief Executive Officer	

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

In accordance with Item 601 of Regulation S-K, this certification is being "furnished" as Exhibit 32.1 to the Company's quarterly report and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as expressly set forth by specific reference in such a filing.

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the accompanying Quarterly Report on Form 10-Q of Southwall Technologies Inc.(the "Company"), for the quarter ended June 29, 2003, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael E. Seifert, the Chief Financial Officer of the Company, hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- 1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

August 14, 2003 By: /s/ Michael E. Seifert
Michael E. Seifert
Chief Financial Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

In accordance with Item 601 of Regulation S-K, this certification is being "furnished" as Exhibit 32.2 to the Company's quarterly report and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as expressly set forth by specific reference in such a filing.