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# Nematron Corporation

## 2001

### Annual Report



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# **Nematron**

*Open Minds. Open Systems. Real Solutions.*

# Nematron

Open minds. Open systems. Real solutions.

To our valued shareholders:

The past year was a difficult year for many industrial controls companies, and Nematron was no exception. The year 2001 was characterized by reductions in customer capital spending from the levels in 1999 and 2000 and by delays in planned capital projects. This trend was felt across all of our product lines, from application support to repair services to sales of industrial control products.

The capital spending slowdown came at a time when we had successfully fulfilled our obligations and shipping commitments under a significant Automotive Controls project in mid-2000. During 2001 we determined that our internal hardware and software product development activities had to continue at a relatively high level to keep abreast of the changing marketplace. We reached this decision in order that we would emerge from the controls market slowdown with a broad, flexible and exciting product portfolio that would launch future growth.

In early 2001 it became apparent that our sales channel representative firms and distributors needed a broader product line, especially in the low-end of our product offering. Responding to that need, we acquired Optimization, Inc. of Huntsville, Alabama in March 2001. Optimization, a leading provider of PC-based industrial communications and display products for industrial automation, had developed a strong reputation as the price leader in industrial displays and in Ethernet networked input/output devices. The acquisition of Optimization has been an important step in our "solutions strategy" as we transform our business around innovative control and information technologies. Since its acquisition, Optimization has continued its history of operating profitably and creating positive cash flow. Also of significance to positioning for higher revenue in 2002 and thereafter, was the direction and extent of Optimization's product development activities that were in process when we acquired the company. Our ability to enhance the consolidated product offering with a combination of Nematron software products and Optimization's knowledge and experience with embedded products, has been demonstrated in the last eight months. We are now in the process of designing and testing new products that combine the technologies and strengths of both companies' products. We believe that this effort will result in new products that are on target for the Controls marketplace as it emerges from its current slowdown.

Our product development and expansion continued in other areas as well. Late in 2001 we introduced the Delta series of industrial computers. This product line has been well received in the marketplace as a lower cost and higher performance alternative to competing products. Our product development, engineering and purchasing staffs should be commended for this successful product introduction with its favorable pricing structure. Additionally, our sales organization worked diligently to get these new products introduced in our sales channel, and customer acceptance has been the highest of any of our product introductions during the last five years.

In June 2001 we introduced two new cost effective ICCs – the Shoebox bench-top ICC and the RackMount ICC, both of which have been embraced by our channel. That same month we also introduced the m-Series ICC, a small, competitively priced screenless industrial computer that is ideal for embedded control solutions. We believe that the m-Series ICCs will become increasingly important to a broad segment of the market for which our product line was not previously available.

# Nematron

Open minds. Open systems. Real solutions.

Just as we have focused on the technology side of the business, we have also spent considerable resources and energy in improving and expanding our sales channel. We consolidated all sales activities under the direction of James King, a seasoned veteran of the controls market who joined us in March 2001. Under Jim's direction, we have signed up several new industrial control representative firms throughout North America. By the end of 2001 we had over 100 sales staff actively calling on customers and distributors with Nematron products and services as a centerpiece of a control solution.

In addition, our sales efforts in Europe and Asia have become more focused as we have established important new relationships on both continents. As the Industrial Controls marketplace becomes more competitive and increasingly influenced by price and office-grade (white-box) solutions, we are actively planning for and engaged in ventures and activities foreign to us as recently as two years ago. We are now assembling certain products in the Czech Republic through a contract manufacturer, we are accomplishing some software development at offshore locations, and we are purchasing products and components from lower cost sources in Asia. We will continue to bring down the costs of our products through these global initiatives and through other local efforts as we continue to respond to an increasingly price-sensitive marketplace.

We incurred a significant loss in 2001. Our revenues were off by over 14% from the year earlier level as we were negatively impacted by the general decrease in capital spending in the Industrial Controls marketplace. The decline of automation purchases in the automotive sector, Nematron's traditional stronghold, was especially severe. Revenue from bundled system sales and from Nematron's in-plant application engineering services, both derived primarily from automotive customers, fell by almost 60% as these customers cancelled existing projects and delayed new projects until mid to late 2002. Additionally, revenues from our A-OK Controls-based applications engineering service group declined over 25% on an annualized basis as customer installations of new control projects were put on hold and certain manufacturers implemented price cuts for services rendered under existing contracts. Although we were able to control costs and expenses to a large degree, we were unable to recover the lost gross margin resulting from these significant revenue declines. Adding these effects to the cash needed for product development, for the acquisition of Optimization, and for debt service, and compounded by the financial situation resulting from our 2000 financial results, the first year of the recession in the Industrial Controls marketplace, our cash situation became a cause of great concern.

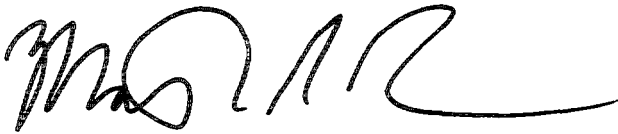
Our cash loss was significantly less than the \$7.1 million net loss reported in 2001. Non-cash charges for the write down of capitalized software costs, depreciation, amortization, and non-cash interest totaled \$4.9 million. The decision to write down capitalized software by \$1.9 million was made based upon the recent and current market which has been slow to adopt the superior benefits of flowchart-based direct machine control. Although this write down will save future charges to income, it will not diminish our efforts to lead the market's migration to software-based direct machine control and to the tremendous advantages that PC-based control offers over PLC-based technology.

Despite our \$2.2 million cash loss from operations, we were able to raise \$1.8 million in 2001 through the private placement of subordinated notes and common stock. These funds were used primarily to repay \$1.5 million in maturing bank debt, with the remaining amount used to acquire Optimization and to fund product development and general operations. Given all of our cash requirements, the funds raised were not sufficient to accomplish all the development we had

scheduled, nor sufficient to solidify our working capital position. We have had to continue with private placements in the first part of 2002, and we hope to complete a much larger offering yet this year in order to execute our strategies for the remaining months of 2002 and beyond.

We remain optimistic about our future, given our planned product introductions, our expanding product portfolio, our improving sales channel, our staff and our customer base. We believe that with some improvement in the economy and a return to historical capital spending levels in our marketplace, Nematron is well positioned to exploit the marketplace. We fully expect that the marketplace will loosen its purse strings and, as we ship more products and provide additional services, our margins will improve. We also expect to continue with cost containment initiatives that we implemented in 2000 and 2001.

We at Nematron are proud of our staff and proud of the high quality reputation of our products and services. As we expand our product offering in 2002 and bring new and exciting products to a demanding marketplace, we will continue to improve our sales representation and distribution channels. We believe that the results of these initiatives will be an opportunity to return to profitability in the later part of 2002 and to achieve sustainable growth for all our stakeholders.



Matthew S. Galvez  
President and Chief Executive Officer

### Safe Harbor Statement

Certain statements in this annual report may be “forward-looking statements” within the meaning of the Securities Exchange Act of 1934, including the Company’s expectation as to 2002 and future revenue, operating results, the impact of the Company’s cost reduction initiatives and potential equity infusions. The Company assumes no obligation for updating any such forward-looking statements to reflect actual results, changes in assumptions or changes in other factors affecting forward-looking statements. Actual results could differ materially from those in the forward-looking statements due to a number of uncertainties, including, but not limited to, those set forth on pages 20 and 21 of the attached Form 10-KSB under “Item 6 – Management’s Discussion and Analysis or Plan of Operations – Uncertainties Relating to Forward-Looking Statements”.

**Annual Report on Form 10-KSB**

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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**FORM 10-KSB**

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934

For the fiscal year ended **December 31, 2001** or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number: **0-21142**

**NEMATRON CORPORATION**  
(Name of small business issuer in its charter)

**Michigan**  
(State or other jurisdiction of incorporation or organization)

**38-2483796**  
(I.R.S. Employer Identification No.)

**5840 Interface Drive, Ann Arbor, Michigan 48103**  
(Address of principal executive offices) (Zip Code)

**(734) 214-2000**  
(Issuer's telephone number)

Securities registered under Section 12(b) of the Exchange Act:

<u>Title of Each Class</u>	<u>Name of Exchange on Which Registered</u>
Common Stock, no par value	The American Stock Exchange

Securities registered under Section 12(g) of the Exchange Act: **None**

Check whether the issuer (1) filed all reports required to be filed by section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.  Yes  No

Check if disclosure of delinquent filers in response to Item 405 of Regulation S-B is not contained in this form, and no disclosure will be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-KSB or any amendment to this Form 10-KSB.  Yes  No

Issuer's revenues for its most recent fiscal year: \$17,541,766

The aggregate market value of the voting stock held by non-affiliates as of March 29, 2002, computed by reference to the closing price of such stock on such date as quoted on The American Stock Exchange, was approximately \$2,981,000. For purposes of this computation only, all executive officers, directors and beneficial owners of more than 5% of the outstanding Common Stock are assumed to be affiliates.

The number of shares outstanding of the issuer's Common Stock on March 29, 2002 was 15,744,625.

TRANSITIONAL SMALL BUSINESS DISCLOSURE FORMAT  Yes  No

**DOCUMENTS INCORPORATED BY REFERENCE**

Document  
Portions of Definitive Proxy Statement  
for the 2002 Annual Meeting of Shareholders  
(the "2002 Proxy Statement")

Part of Form 10-KSB Into  
Which the Document is Incorporated

Part III

**Item 1. Description of Business.**

This item contains forward-looking statements that involve uncertainties. Actual results could differ materially from those in the forward looking statements due to a number of uncertainties, including, but not limited to those discussed below and in Part II, Item 6 "Management's Discussion and Analysis or Plan of Operation - Uncertainties Relating to Forward Looking Statements."

**Corporate History**

Nematron Corporation ("Nematron" or the "Company") was incorporated in Michigan in October 1983. In 1986, the Company became a wholly owned subsidiary of Interface Systems, Inc. ("Interface"). On February 26, 1993, the Company became an independent publicly-traded company as a result of a spin-off from Interface, which was effected by the distribution of 100% of the shares of the Company on a pro rata basis to Interface's shareholders. Between the years 1995 and 1997, the Company acquired four closely held software development companies.

On June 30, 2000, the Company acquired A-OK Controls Engineering, a Michigan-based company that provides control systems design and integration services to the industrial controls marketplace. On March 30, 2001, the Company acquired Optimization, Inc., an Alabama-based company that develops, produces and markets industrial communications and display products for industrial automation.

The Company's principal executive offices are located at 5840 Interface Drive, Ann Arbor, Michigan 48103, and its telephone number is (734) 214-2000.

**General Overview**

Nematron designs, manufactures and markets factory automation products, including computer hardware and software products. Its industrial computers and terminals are called Industrial Control Computers<sup>TM</sup> ("ICCs") and Industrial Workstations<sup>TM</sup> ("IWSs"), which are "ruggedized" computers with built-in displays, keyboards or other forms of operator interface. ICCs and IWSs are used by operators in industrial processing and in factory floor environments to monitor and control machine and cell level operations. Nematron's software products are sold to industrial users for direct machine control, supervisory control, operator interface and data acquisition and transmission.

The primary focus of ICC and IWS products is on control applications where the extremes of temperature, shock, vibration, high humidity, airborne contaminants, physical abuse or hard use require the use of equipment that has been specially designed to operate more reliably than office-grade equivalents. The Company's industrial computer products are used in industrial manufacturing and process automation, specifically relating to direct machine control and operator-machine interface applications. The Company incorporates electronic technology and software in its ICCs and IWSs to satisfy a broad variety of customer applications. The applications may range from the replacement of traditional hardwired push buttons, lights and gauges that can be used with a single machine or local process, to advanced industrial computer-based systems that provide supervisory control, direct control and networking capabilities over a large number of machines.

The Company has five main software products, all of which were developed by the Company or acquired in the past five years. These products, used in the industrial and factory automation workplace, are marketed under the following trade names: OpenControl<sup>TM</sup>, Hyperkernel®, Paragon<sup>TM</sup>, FloPro® and AutoNet<sup>TM</sup>. Additionally, most of the Company's IWS products contain proprietary software embedded in the products as firmware that is not sold separately. All five shrink-wrap products can be run on Nematron's computers or those of most other manufacturers.

The Company's OpenControl software product allows operators to leverage PC-based software packages, such as Windows NT and many popular Supervisory Control and Data Acquisition ("SCADA") and Human-Machine Interface ("HMI") programs. OpenControl allows the use of standard networking products and connectivity to the Internet or corporate-wide Intranet systems using a modular approach for open control architecture applications. Hyperkernel allows software developers to integrate highly deterministic real-time applications into Microsoft's Windows NT operating system and enables devices such as robots, process controllers and motion control systems to be configured as application servers on any standard network system. The Company's Paragon software product is a SCADA package, which regulates control and management of process information. The Company's FloPro software product is a flowchart programming and direct machine control

software product. The Company's AutoNet software product is a test and measurement server which allows for data acquisition and real time processing of data and for performing multiple functions at high speed.

The Company has five primary locations - four in the United States and one in Europe. The Company's corporate headquarters are in Ann Arbor, Michigan and employees located there are responsible for computer assembly, software reproduction, software development, customer service, product development, administration, finance, accounting, personnel, purchasing, marketing, corporate-wide sales and international business development. Certain of the Company's products are assembled by staff in Huntsville, Alabama, as are the marketing and accounting functions for these products. The Company's control design and integration business is headquartered in Auburn Hills, Michigan. Personnel located in Auburn Hills are responsible for the design of automation control systems and for integration of control systems at its customers' facilities. The Company's software development is conducted primarily at its Foxboro, Massachusetts office. Software engineers and technical support staff located in Foxboro are responsible for software product development, enhancement, maintenance, and customer technical support. The Company's sales and support operations for the European marketplace are conducted in Waterlooville, Hampshire, The United Kingdom, through its Nematron Limited subsidiary. Located south of London, its principal functions are European sales, distribution management, application engineering, technical support and customer service. Nematron Limited is primarily operated as a cost center since allocation of gross product margins and operating and administrative expenses cannot be reasonably allocated to that entity or by region. The Company also maintains control system design and integration offices in Saginaw and Lansing, Michigan.

### **Products, Market and Competition**

#### **Industrial Computers and Hardware Products**

The Company designs and manufactures operator terminals for reliable performance in harsh industrial environments. Its products range from simple and inexpensive programmable logic controllers and push button interfaces to sophisticated industrial control computers. Each operator terminal provides a display that shows the status of the process and a keyboard or a touch screen that allows personnel to control the process. These terminals all come in a rugged package that withstands extremes of temperature, humidity, vibration, shock, and electrical interference. Each product class includes a range of display options, prices, and capabilities.

Virtually all of the Company's newer products use "flat panel" displays that offer considerable space savings and increased reliability and clarity than the older technology CRT displays. These products also provide immunity to shock, vibration and electromagnetic interference. They are particularly well suited for applications with physical space limitations and with hazardous environments such as chemical plants, as well as in the presence of high electrical currents such as in aluminum and steel processing applications.

While price and features can be important factors in a customer's purchase decision, reliability consistently ranks the highest. As a result, the Company expends significant effort on design verification and testing of new products and purchased components and assembled products. In addition, management believes the Company is able to price its products competitively because of their higher quality, and hence lower warranty and repair work is required after the sale.

Management believes, based on market research and reports of various research analysts, that a large segment of the existing PLC market will over many years migrate to PC-based control and operator interface solutions that replace the PLC. The resulting market for industrial PC-based products should expand significantly. In response to this evaluation of the market, the Company will place substantial emphasis on further enhancements to IWS and ICC products as cost-effective replacements for existing, lower functionality, products that complement as well as replace PLCs.

Many competitors participate in the industrial PC product market, most notably IBM, Allen-Bradley, Siemens and smaller companies, including low-cost producers in Asia. Many segments in this market are highly price-sensitive, especially in environments where desktop type products perform adequately. As the market expands, numerous competitive offerings will probably appear, putting downward pressure on prices and gross profit margins. The Company intends to continue providing industrial PC products with unique and valued features for reliable operation in factories and other harsh environments.

#### ***Industrial PC Products and Industrial Control Computer Products***

***The ICC Family of Products.*** The ICC product family was designed and developed by the Company in the last five years and they continue to be enhanced to keep abreast with the changing marketplace. ICC products offer Intel Celeron® and Pentium III® processors, display options from 10.4", 12.1" and 15.0" as well as a screenless version, plus a motherboard featuring PCI/ISA bus architecture. The front panels of these units have integrated



keypads and are rated UL Type 4/4X/12 (watertight and dust-tight) construction. Each model is UL safety rated and is certified to the CE Mark. Several unique and innovative features have been designed into the ICC family of products. These features include Nematron's patented hinged chassis and a system that automatically tracks product and application use variables that provides information concerning maintenance cycles and environmental usage. These units range in price from \$4,500 to \$10,000, varying primarily on the choice of display, processors, features and bundled software.

***The e-Series Products.*** The e-Series industrial PCs gives users all the power of an Intel Celeron® and Pentium III® processor with the reliability, stability and fast boot-up of embedded system technology. These e-Series products use non-rotating solid-state memory, allowing the products to be used without a hard disk or other moving parts. These products run the Windows NT embedded operating system, and they may be bundled with Nematron or third party software products. These state-of-the-art embedded products feature an innovatively hinged chassis with downward facing connections for easy cable routing and cabinet mounting. Additionally, Ethernet connectivity is standard and this allows seamless integration with other plant floor installations.

***The Delta Series Products.*** The Delta Series is a line of compact touch-only industrial PCs and flat panel monitors. These units, introduced in 2001, are available in PCI, PC/104 and monitor-only configurations, and each can be configured with 10.4", 12.1" or 15.0" integral displays. The Delta PC and Delta PC/104 computers feature a selection of Intel Celeron® and Pentium III® processors chosen from Intel's Embedded Architecture list. If the environment is too harsh for rotating media, the standard hard drive can be replaced with up to 512 MB of solid-state flash memory. If space is tight, it can be ordered as a screenless node computer with a separate monitor. And if an application requires two operator stations, the PC's integral display can be mirrored on a remote touchscreen monitor, thereby eliminating the need for a separate HMI panel. These units range in price from \$3,000 to \$4,000, varying primarily on the choice of display, processors, features and bundled software.

***Industrial Monitors.*** The 17" SXGA flat panel monitor is engineered for harsh industrial environments. The monitor, available with optional touchscreen and stainless steel bezel, is ideal for both factory floor and control room applications. The analog video signal remains strong and clear up to 75 feet from the computer using the included video cable. The monitor features a patent-pending hinged chassis that can be quickly and easily removed for maintenance and backlight replacement. The monitors are NEMA 4/4X12 rated when properly mounted, and have the customary UL, cUL and CE certifications for use worldwide. These products range in price from \$2,000 to \$4,500 depending upon options selected.

***ShoeBox and RackMount Industrial PCs.*** ShoeBox and RackMount industrial computers combine practical design with all the processing power of Intel Celeron® and Pentium III® processors. These processors are complimented with built-in Ethernet, USB communications, hot-swapping cooling fans, external audio output and front access keyport and mouse ports. The popular form factor of the desktop ShoeBox offers five full length slots, while the 4U RackMount is designed for applications which require up to ten option boards. The innovative chassis design focuses on ease of installation and maintenance, as well as system flexibility to provide a high quality multi-purpose platform. These products range in price from \$2,000 to \$3,500 depending upon options selected.

Revenues from the sale of industrial PC products and ICC products amounted to approximately 24% and 41% of consolidated revenue in 2001 and 2000, respectively. The Company expects that revenue from this product category in 2002 will approximate the same percentage of total revenue as in 2001. No other single model or family of products accounted for more than 15% of the Company's revenues during these periods.

#### ***Character-Based PLC Workstations and Remote Message Unit Products***

Character-based programmable logic controller ("PLC") workstations and remote message unit products economically replace electro-mechanical push buttons, while also providing message display and alarm annunciation functions. All products in this class include flat panel displays. The Company internally developed the proprietary software for the products in the lower price range of this class of product. Most of these products are used with small PLCs for simple machine control, such as packaging equipment and small fabricating machines. Products in this class range in price from less than \$500 to \$2,000.

Most of the Company's competitors in this segment are small companies with limited resources and market share. A few competitors, such as Allen-Bradley, Cutler-Hammer and GE Fanuc, have substantially greater resources than the Company and offer competitive products in the upper end of the price range.

Sales of character-based PLC workstations and remote message unit products in each of 2001 and 2000 amounted to less than 10% of consolidated revenue. The Company expects a slow growth rate in this market segment in the next year based upon its market research. The growth rate could accelerate if the market embraces

the concept of small footprint operating systems and languages that can communicate with Windows NT-based control software. The Company plans to increase its efforts to develop and market new embedded software products, enhance existing products and if appropriate, acquire existing product lines from third parties.

### ***Industrial Graphics Terminals and Programmable Operator Interface Products***

Nematron's operator interface workstations ("IWS"), produced in some fashion since 1983, are used for push button replacement and PLC interface applications. The IWS products are low-cost units featuring alphanumeric displays and keypad. These workstations connect with the most popular PLCs and PCs of most manufacturers. One of the IWS models features a graphical user interface that can be used to create push buttons, message and numeric displays, indicators, and bar and trend graphs. All of the IWS product's front panels are NEMA 4/4X12 rated for use in harsh industrial environments.

Nematron's operator interface terminals marketed under the OptiMate® brand name include a family of fifteen operator panels. These panels interface to any controller with a user-controlled serial port and to most major PLCs. They can be used individually or in a combination, and are configurable and adaptable to nearly any application. These products deliver high performance at a low price point in the marketplace. The OptiMate product line was acquired in connection with the Company's acquisition of Optimization on March 30, 2001.

Nematron's OptiLogic Remote Terminal Unit™ provides point of use I/O and operator panel capabilities with a high-speed link to a PC. OptiLogic delivers the highest levels of flexibility, ease of use and performance at the lowest cost of any PC-based distributed I/O subsystem on the market. The OptiLogic RTU is modular in design, allowing the engineer to plug together any combination of analog and digital inputs and outputs that will fit in available slots. The card cage base snaps onto a standard DIN rail for back panel mounting, and if an operator panel is required, the base snaps onto a variety of available OptiLogic operator panels which in turn can be panel mounted. The Ethernet connection provides a base 10BaseT connection to the network. The OptiLogic product line was acquired in connection with the Company's acquisition of Optimization on March 30, 2001.

Because several dozen large and small companies offer competing products in this market, competition is intense. Every major PLC company competes in this market, either with its own designs or with private-labeled products. Significant competitors include Allen-Bradley, Siemens and Cutler-Hammer, as well as dozens of smaller entities.

Sales of industrial graphics terminals and programmable operator interface products in each of 2001 and 2000 amounted to less than 10% of consolidated revenue. The Company expects that this segment will increase in 2002 as new products in this category are developed and released next year.

### **Computer Hardware Parts and Service**

The Company maintains an inventory of spare parts and service stock and employs trained service technicians and support personnel whose functions include technical advice regarding product applications, service and repair of returned hardware products.- Revenues from the service and repair of industrial hardware products in each of 2001 and 2000 amounted to less than 10% of consolidated revenue. The Company expects that revenue from computer parts and service will represent less than 10% of consolidated revenues in 2002.

### **Software Products**

The software products described below, all of which were acquired or developed by the Company since 1995, represent the cornerstone of the Company's shift in its strategic focus. Prior to 1995, the Company relied solely on sales of IWS products. Since 1995 the Company's strategy has been to position itself as a high value-added provider of bundled industrial PC hardware and Microsoft operating system-based software solutions. With the following software products and their continued enhancements, the Company now offers leading-edge industrial automation software. The Company's software products are used in the industrial and factory automation workplace around the world in a variety of unique and proven applications. Additionally, many of the IWS hardware products discussed above contain proprietary software embedded in the products as firmware that is not sold as a separate product. All shrink-wrap products may be run on Nematron's computers or on computers of most other manufacturers.

Several large and small companies offer competing software products in this market and competition is intense. Many competitors market their own products or with private-labeled products, and such products perform the same functions as certain of the Company's products. Significant competitors include Intellution, Siemens and Wonderware.

Revenues derived from software product sales, including associated training and maintenance agreements, in each of 2001 and 2000 amounted to approximately 9% of consolidated revenue. The Company expects that revenue from software products will represent approximately 10% of consolidated revenues in 2002.

**Logic Control.** OpenControl™ is Nematron's software product for programming and debugging machine control logic. It allows users to replace proprietary PLC technology with an open, Windows-based system that enables enterprise-wide access to plant floor data. With a high degree of flexibility, intuitive programming and advanced troubleshooting features, OpenControl allows manufacturers and OEMs to significantly reduce development time and minimize life cycle costs. Because OpenControl operates on PCs, users can leverage commercial applications and third party technology to improve price/performance ratios and to utilize a workforce increasingly literate in PC technology. OpenControl utilizes intuitive flowchart programming tools that are a natural and visual way of describing and documenting machine control procedures. This approach encourages program simplicity and readability while offering users flexibility, greater machine throughput, reduced machine downtime and the ability to share factory data enterprise-wide or over the Internet to suppliers and customers. With the introduction of a ladder logic editor in 2000, PLC users are able to transition easily to the latest direct machine control technology.

OpenControl competes with several products offered by other companies in the soft-logic marketplace, some of which are much larger than Nematron. The soft-logic marketplace is an emerging market that is expected to grow significantly in the next several years as PCs and soft-logic software programs replace PLCs and cumbersome ladder logic software. Several of the Company's competitors license the technology upon which OpenControl is based. Management believes that the OpenControl product has many advantages over its competitors: self-documenting, more efficient programming methods, less costly than many other products, utilizes open PC architecture, fast execution times and it reduces plant down time through diagnostic messages. When OpenControl is bundled with a Nematron ICC, bundled pricing is especially attractive compared to systems supplied by multiple vendors. OpenControl is in use at several automotive component manufacturing facilities and controls thousands of machines involved in the manufacture of engines and transmissions.

**Real-Time Subsystem:** Hyperkernel® is Nematron's software product that allows software developers to integrate highly deterministic real-time applications into the Microsoft Windows NT operating system. This real-time subsystem enables devices, such as robots, process controllers and motion control systems, to be configured as application servers on any standard network system to ensure performance and reliability on mission-critical applications. Hyperkernel includes features such as high-speed timers, memory management, interrupt handlers, inter-process communication, file system services, task scheduling and prioritization.

The technology provides true client/server capabilities for complex software applications. The Hyperkernel RTSS for the Microsoft Windows NT operating system utilizes a sophisticated message-passing architecture for inter-process communications, which is the key difference between Hyperkernel and similar products developed to operate under DOS or the Microsoft Windows 3.1 operating system.

With the Hyperkernel product, development in a mainstream operating system architecture is now practical. Hyperkernel is offered as a stand-alone product directly on Nematron's web site and is also an integral part of the OpenControl software product.

**HMI/SCADA:** Paragon® is Nematron's software product for HMI (human-machine interface) and SCADA (supervisory control and data acquisition). Along with powerful HMI capabilities, Paragon performs very sophisticated control and management of process information, delivering high performance and reliability in networked applications with a scaleable database design. The open modular design and dynamic connectivity of Paragon simplify the integration into enterprise-wide networks. Paragon supports seamless cross-platform communication among operating systems from Windows NT to Windows 95 and OS/2 on the same network.

**Flowchart Programming and Control.** The Company's soft-logic software is called FloPro. FloPro is a flowchart programming system that executes from personal computers. FloPro is based upon the technology in Patent Number 4,852,047 "Continuous Flow Chart, Improved Data Format and Debugging System for Programming and Operation of Machines." The programming system is used to create, debug, document and execute control applications in an open architecture environment. Its open system architecture allows operators to interface it concurrently with many different input/output systems, motion controllers, message units and RF tag/bar code systems. FloPro simplifies machine control system development by allowing the use of multiple flowcharts, each one handling a relatively simple task, thus allowing for the concurrent development of applications by a team of control engineers. These flowcharts communicate with each other in a multi-tasking environment, which means that the control application is easy to create and understand. Additionally, FloPro is self-documenting in that it is a

programming language based on the flowcharts; there is no need to translate the flowcharts to ladder logic. The use of FloPro and a PC replaces the need for PLCs and ladder logic for machine control applications. FloPro is in use at several automotive component manufacturing facilities and controls thousands of machines involved in the manufacture of engines and transmissions.

***Test and Measurement.*** The Company's AutoNet™ software product, a test and measurement software, is sold to commercial and industrial companies and public sector institutions and agencies primarily for use in a test cell environment. AutoNet allows for data acquisition and real time processing of high-speed data while performing multiple functions. AutoNet graphically displays real time information through a wide variety of configurable graphic instruments, trends and Cartesian plots. AutoNet performs real-time mathematical, statistical and trigonometric calculations for control, test sequencing, filtering and batch management of data. It features color-coded annunciation of alarm information, diagnostic files and automatic time stamps, and presents stored data in report, historical graphics or ad hoc queries. AutoNet competes with products offered by other companies, most notably Hewlett Packard and National Instruments. The AutoNet product is unique in that it is a real time operating system, which operates at a higher performance level than competitive products.

#### **System Design and Integration Services**

The Company provides a variety of services, including control system consulting and design services, application engineering and control system integration services, information technology integration and program support and management directly and through its A-OK Controls subsidiary. The Company's engineers are experienced in a range of projects, from single-cell applications to large-scale global control system implementations. In addition to its own staff, the Company contracts with certified system integrators and third parties with industry specialists to supplement Nematron's staff as necessary. Revenues derived from system integration services, amounted to 45% and 30% of the Company's consolidated revenue in 2001 and 2000, respectively. The Company expects that revenue from system integration services will represent approximately 30% of consolidated revenues in 2002. A-OK Controls competes with many other locally based system integrators of similar or smaller size and capabilities.

#### **Sales Channels**

Through 2000, the Company used three sales channels. The Company's primary sales channels were a network of high-tech industrial distributors and a corporate sales staff focused on major original equipment manufacturers ("OEMs") of industrial processing systems and machines and to other major end users. To a lesser extent, the Company markets certain products to private-label accounts that remarket Nematron's products primarily through their own networks of industrial electrical distributors. Beginning in 2001, the Company began to sell its Nematron-brand products through manufacturer representative firms, and with the acquisition of Optimization in March 2001, the Company began marketing its Optimization-brand products, OptiLogic and OptiMate, through catalogs, direct marketing and the Internet.

One distributor accounted for 4% and 13% of consolidated revenues in 2001 and 2000, respectively. This distributor resells products primarily to the automotive industry, OEMs and machine tool builders. No other private label, direct customer, or distributor accounted for more than 10% of total Company sales in 2001 or 2000. The ICC product family, including ICC products bundled with software products, accounted for approximately 15% and 18% of consolidated revenues in 2001 and 2000, respectively. No other single model or product family accounted for more than 15% of the Company's revenues during those periods.

The Company's distributors are typically companies with non-exclusive written agreements that purchase inventory and resell it to their customers. In addition, distributors typically provide varying amounts of customer training, application engineering, and support. The Company has approximately 40 domestic distributor branches and approximately 25 distributor branches in 8 countries internationally. Prior to 2001, the Company employed regional sales managers covering major geographic regions of the United States and Europe and several sales managers who concentrate on key accounts nationwide. Beginning in 2001, the Company switched from a direct sales approach to one using approximately 15 manufacturing representation companies, in addition to other sales channels discussed above. The Company continues to employ strategic account sales staff to sell to major customers.

#### **Manufacturing, Assembly and Supply**

The Company performs final assembly and testing for most of its hardware products. The assembly process encompasses the assembly of sheet metal or plastic parts, keypads, displays, electronic circuit boards and other component parts into finished products. In addition, the Company performs some limited cable manufacturing

and wave soldering, and assembles engineering prototypes for new products. In 2000, the Company began subcontracting certain of the material acquisition and some of the assembly of certain high volume – low mix ICC products to a subcontractor located in the Czech Republic. In 2001 and 2000, less than 10% of consolidated revenues were derived from sales of products assembled by the subcontractor. For products assembled in-house, the Company purchases substantially all components. It uses a number of independent firms for these purchases and is not materially dependent upon any third party that performs these services. Some specialized components used in the Company's products are currently purchased from single or limited sources of supply. The Company believes that the loss of one or more suppliers of standard components would not have a material long-term impact on its operations, as standard components may be obtained from a number of sources. For its specialized and unique components, the loss of one or more suppliers of standard specialized and unique components would have a near-term impact on operations and would cause some production delays.

The Company owns and utilizes a variety of assembly and test equipment to reduce the cost of and ensure the quality of the designed and assembled products and components. The Company employs environmental chambers and electronic instrumentation to certify that its products meet the severe industrial environments for which they are intended.

### **Product Development**

The Company maintains an active product development program and continues to supplement existing research and development capabilities through its technical personnel and the continuing development of new proprietary technology. The Company's product development staff includes electrical, application, mechanical and software engineers, product managers and directly associated staff members involved in technical documentation and product support. The Company also periodically employs third-party contract engineering companies on an as-needed basis. The Company also has assigned certain of its engineers to quality control to assure the long term quality and reliability of the Company's products. The Company conducts its software development activities in both Ann Arbor, Michigan and Foxboro, Massachusetts, and it conducts its hardware development and quality control and testing activities testing in Ann Arbor, Michigan.

The Company emphasizes product development and quality and the employment of highly skilled and motivated individuals in the product development and quality assurance areas. Management believes that its product development staff is an important factor in the Company's ability to compete in the markets in which its products are sold. During 2001 and 2000, the Company expended approximately \$1.6 million and \$1.9 million, respectively, for direct hardware and software product development and product design quality, including those costs capitalized under Statement of Financial Accounting Standards No. 86. The Company sponsored all of such costs. These amounts represent approximately 9% of consolidated revenues in both 2001 and 2000.

### **Intellectual Property**

The Company's FloPro software product, which is sold as a separate product but is also the underlying technology incorporated into the Company's OpenControl product, is based upon the technology specified in a 20-year patent issued in 1989 for continuous flow chart, improved data formatting and a debugging system for programming and operations of machines. In 1997, the Company received a 20-year patent for a chassis hinged mechanism used on its ICC and certain other products. In 1999, the Company received a 20-year patent for a unique and effective method of logging and retrieving computer system parameters to assist with examining environmental variables, operating times and temperature ranges. In 2000, the Company received a 20-year patent for a front mounted chassis assembly for a display screen. The Company filed a patent application for its Hyperkernel real-time extension to Windows NT during fiscal 1996. The Company has an active technology committee that meets regularly with its patent counsel to review trademark and patent potential.

In addition to trademarks on the trade names under which the Company does or did business, including Nematron, NemaSoft, Optimization, Imagination Systems and Universal Automation, the Company also owns trademarks on certain of its products, including Industrial Workstation, OpenControl, OptiMate, OptiLogic, Industrial Control Computers, Hyperkernel, Paragon, FloPro, AutoNet and PowerVIEW, FlexBox and QuickShip.

The Company's software products are sold under licenses to use the products as specified in the underlying contract. Certain of the licenses for the use of the FloPro software product are site licenses for unlimited use of the master copy of the product in a specified building, plant or group of plants. Revenue from site licenses has not been a significant source of revenue to the Company in the last two years. The Company has licensed its soft-logic technology to several unrelated companies under royalty arrangements and licenses. These arrangements and licenses also have not been a significant source of revenue.

## **Employees**

The Company employed 144 full time employees as of December 31, 2001, including 124 in Michigan, 5 in Foxboro, Massachusetts, 8 in Huntsville, Alabama and 7 in the United Kingdom. None of the Company's employees are represented by a collective bargaining unit, and the Company believes its employee relations are good.

## **Environmental Compliance**

The Company's products comply with federal, state and/or local laws and regulations that have been enacted or adopted relating to the discharge of materials into the environment, or otherwise relating to the protection of the environment. The Company believes that continuing efforts and expenditures incurred to maintain compliance with such laws and regulations will not have a material effect on capital expenditures, earnings or the competitive position of the Company.

## **Item 2. Description of Properties.**

The Company's headquarters and principal assembly facility is in Ann Arbor, Michigan in a two-story building containing a total of approximately 51,000 square feet of space. Of this space, approximately 6,400 square feet remain unfinished and available for future office or assembly expansion. This facility, located on approximately five acres of land, has been designed such that further expansion of up to 20,000 square feet may be accommodated. The Ann Arbor facility was designed and built to the Company's specifications and is owned by the Company. A mortgage on the property comprises a portion of the security for the Company's bank line of credit and term loans from LaSalle Business Credit, Inc. All other properties are leased, as follows:

<u>Location</u>	<u>Square Feet</u>	<u>Lease Expiration</u>	<u>Building Type</u>
Auburn Hills, Michigan	50,000	May 2008	Single tenant
Foxboro, Massachusetts	1,200	January 2003	Multi-tenant
Huntsville, Alabama	7,300	July 2002	Multi-tenant
Saginaw, Michigan	5,000	January 2009	Multi-tenant
Lansing, Michigan	1,550	March 2003	Multi-tenant
Waterloo, United Kingdom	2,100	December 2009	Multi-tenant

## **Item 3. Legal Proceedings.**

The Company is not involved in any legal proceedings other than routine, non-material litigation incidental to the business.

## **Item 4. Submission of Matters to a Vote of Security Holders**

Not applicable.

## PART II

### Item 5. Market for Common Equity and Related Stockholder Matters

The Company's Common Stock has been listed on The American Stock Exchange (the "AMEX") under the symbol NMN since November 22, 1999. The following table sets forth, for the periods indicated, the closing price on the AMEX.

<u>2001</u>	<u>High</u>	<u>Low</u>
First Quarter	\$0.85	\$0.52
Second Quarter	1.13	0.50
Third Quarter	0.60	0.24
Fourth Quarter	0.39	0.18
<u>2000</u>	<u>High</u>	<u>Low</u>
First Quarter	\$1.97	\$1.00
Second Quarter	3.13	2.00
Third Quarter	4.72	2.00
Fourth Quarter	4.50	2.38

There are approximately 825 holders of record of the Company's Common Stock as of March 25, 2002.

The Company has never paid cash dividends and does not expect to pay cash dividends in the foreseeable future. Certain Company bank financing covenants prohibit the payment of dividends. See the Long-Term Debt footnote of the Notes to Consolidated Financial Statements.

In April 2001, the Company issued 41,329 shares of its Common Stock in a private placement transaction exchange for services valued at \$28,000. The Company issued the Common Stock to a financial advisor that assisted the Company in placing in March 2001 a total of \$1,200,000 of convertible subordinated promissory notes and warrants to purchase Common Stock. The Company issued the Common Stock without registration under the Securities Act of 1933, as amended (the "Act"), in reliance upon Section 4(2) of the Act and Regulation D promulgated thereunder. The Company relied upon this exemption based upon the limited number of purchasers, the provision of financial and other information concerning the Company to the purchasers, investment representations made by the purchasers, the lack of general solicitation, and actions taken by the Company to restrict resale of the securities without registration, including the placement of restrictive legends on the share certificates.

In June 2001, the Company issued 250,000 shares of its Common Stock in a private placement transaction exchange for a total of \$250,000 in cash. The Company issued the Common Stock to an accredited investor without registration under the Securities Act of 1933, as amended (the "Act"), in reliance upon Section 4(2) of the Act and Regulation D promulgated thereunder. The Company relied upon this exemption based upon the limited number of purchasers, the provision of financial and other information concerning the Company to the purchasers, investment representations made by the purchasers, the lack of general solicitation, and actions taken by the Company to restrict resale of the securities without registration, including the placement of restrictive legends on the share certificates.

### Item 6. Management's Discussion and Analysis of Operations

The following discussion and analysis contains a number of "forward looking statements" within the meaning of the Securities Exchange Act of 1934, as amended, with respect to expectations for future periods which are subject to various uncertainties explained herein and in "Management's Discussion and Analysis or Plan of Operation - Uncertainties Relating to Forward Looking Statements."

#### Overview

Management's operating strategy is to incorporate its software products into the Company's hardware product offerings and to vertically integrate its product offerings to include both hardware and software products used in the industrial automation marketplace. Additionally, the Company intends to expand its product offerings to include additional design and system integration services as well as products complimentary to its existing product offerings. The Company's marketing and sales efforts to existing and new customers include stand-alone computers, software products, bundled products and automation design and integration services. The Company intends to continue its shift of business away from dominance by computer hardware sales, and will pursue the development of

new software products and the enhancement of current software products. Additionally, the Company has identified new markets for its products, and will pursue new business from customers that offer the greatest likelihood of large unit volume. Management anticipates significant growth in the industrial software marketplace and intends, through concentrated development and aggressive marketing and sales efforts, to capture an increasing percentage of that market.

The results of operations include the operations of A-OK Controls beginning June 30, 2000 and of Optimization beginning March 30, 2001, the dates of acquisition of these entities by Nematron.

### **Results of Operations - Year Ended December 31, 2001 Compared to Year Ended December 31, 2000**

#### *Revenues*

Net revenues decreased to \$17,542,000 in 2001 compared to \$20,421,000 in 2000. This represents a decrease of \$2,879,000, or 14.1%, compared to the 2000 level. Net revenues decreased primarily resulting from sales declines related to computer hardware, software and repair services, offset in part by revenue increases from control design and system integration services. Sales of bundled system and hardware products declined by \$3,736,000, including a decline of \$1,061,000 in program sales (98% decline in program business) and \$2,675,000 in other Nematron-branded products (28% decline in non-program business). Offsetting these decreases was a total of \$1,157,000 of revenues attributed to sales of Optimization-branded products during the nine-month period from March 31 to December 31, 2001, the period following the date of Optimization's acquisition by Nematron. Sales of software products and from repair services declined by \$262,000 and \$574,000 in 2001 compared to 2000, respectively. These declines are attributable primarily to the decline in demand from customers in the industrial controls marketplace who postponed or canceled capital spending plans. Revenues from integration services increased \$1,693,000, primarily resulting from including a full year of operations of A-OK Controls in 2001 compared to including operations of A-OK Controls for a six month period in 2000 from the June 30, 2001 date of its acquisition by Nematron, offset in part by less services rendered under the major supply program as such program wound down in 2001.

Foreign revenues decreased to \$2,037,000 in 2001 compared to \$5,339,000 in 2000 primarily because of the decrease in sales made to two large customers in France and England that postponed capital equipment projects. Domestic revenues increased to \$15,505,000 in 2001 compared to \$15,082,000 in 2000 also resulting from revenues generated by a full year of sales from A-OK Controls and from nine months of sales of Optimization.

Critical accounting policies relative to revenues which involve management estimates include recognizing revenue from sales of software license agreements, software maintenance agreements, bundled products (hardware products pre-loaded with software) and bundled systems (bundled products accompanied by post-sale support activities). Revenues from these product types are deferred until all conditions in Statement of Position 97-2, *Software Revenue Recognition*, are met. Such conditions include the delivery of the products, the performance of all obligations so that remaining obligations are no longer significant, and determination that collection of the amount due from the customer is probable. Revenue from sales of both software license and maintenance agreements are initially deferred and recognized ratably over the licensing or maintenance periods. Revenue from sales of bundled products and systems is initially deferred, and the recognition of revenues is dependent on, among other things, estimates of revenue attributed to individual components of the total products and services to be rendered under the sales agreement. Management has determined that the most equitable method of assigning a revenue amount to each system component (product, software license or post-sales service) is in relation to the published or established list price for each such component, and recognizing a percentage of total revenue for a system when the individual component is delivered or performed. Management believes that ascribing revenue values on a basis other than established list price would be arbitrary and result in significantly different amounts of revenue recognized from sales of bundled and system sales.

The Company has established programs, which, under specified terms and limited conditions, enable its distributors to return limited amounts of product. The effect of these programs, which is not a material amount, is estimated, and current period revenues and cost of revenues are reduced accordingly during each period presented.

Management believes that revenues will increase in 2002 as a result of increased marketing and sales efforts, the inclusion of Optimization's revenues for a full year in 2002 versus nine months in 2001, and the expectation of increased revenues from sales of new products scheduled for release in 2002. Additionally, management expects that revenues from control design and system integration services will increase as a result of an expectation of a return to more normal levels of activity compared to the depressed level of services ordered by customers in 2001 during a recessionary economic period.



### *Cost of Revenues*

Cost of revenues includes costs related to raw materials and component parts, direct assembly labor, hardware design engineering labor, control system and integration services labor, overhead, amortization of capitalized software costs, write-downs of previously capitalized software development costs, provisions for warranty costs on products sold, provisions for excess and obsolete inventory and other direct and indirect costs of these departments and activities. Cost of revenues increased to 92.8% of revenues in 2001 compared 75.4% in 2000. The increase results primarily from a \$1.9 million write-down of previously capitalized software development costs to net realizable value of a software product. This \$1.9 million write-down of previously capitalized software development costs to net realizable value had an effect on cost of revenue of 10.8%, without which the cost of sales percentage would have been 81.9% in 2001, an increase of 6.5% over the 75.4% cost of revenues percentage in 2000. This increase results primarily from the adverse change in product mix resulting from the expiration of the major OEM program during 2000 under which higher margin bundled systems were sold, and the decrease in sales of higher margin software products. Additionally, the decrease in revenues resulted in a smaller revenue base over which to spread Company's fixed cost of revenues.

Critical accounting policies relative to cost of revenues which involve management estimates include an estimate of the costs of repairing and servicing products sold under warranty, the amount and period of capitalized software development costs and the estimate of slow-moving, excess and obsolete inventory.

Warranty costs are estimated based upon historical information, including units repaired under warranty as a percentage of total units sold, costs to repair such units and data concerning sales and repairs by year of sale. Based upon a six-year rolling historical average of the percentage of units actually repaired under warranty, management has estimated the number of units that will be returned for warranty repair. Management has applied the most current year per-unit cost to the estimated number of units to be repaired in future periods under warranty, and has established a warranty reserve at year end. Generally, hardware products are warranted for an eighteen-month period from date of installation, except where longer periods are agreed to under specific sales agreements. Warranty expenses in 2001 and 2000 were \$137,000 and \$181,000, respectively, and the year-end warranty accrual at December 31, 2001 and 2000 was \$165,000. The use of different factors or different periods to determine rolling average warranty unit percentages would impact the year-end reserve for warranty accrual. Since the percentage of units repaired under warranty has been decreasing over the last ten years, the use of a longer rolling average period would result in a higher year-end warranty reserve, the cost of which is a component of cost of revenues. Using a ten-year rolling average period would result in an increase in cost of revenues by approximately \$16,000, the effect of which is not material.

The capitalization of software development costs, including developer salaries and other payroll related costs plus third party development expenditures, begin upon establishment of technological feasibility of the product under development. The establishment of technological feasibility, the period over which such costs are amortized and the ongoing assessment of recoverability of capitalized software development costs requires considerable judgment by management. This judgment includes certain external factors, including, but not limited to, estimated future gross revenues, estimated economic life of the product, and changes in software and hardware technology. The Company annually reviews the recoverability of capitalized software costs based on estimated cash flows. Software costs are written off at the time a determination has been made that the amounts are not recoverable. During 2001 and 2000, the Company capitalized software development costs of \$704,000 and \$486,000, respectively, and amortized \$952,000 and \$1,070,000, respectively, of such costs. The establishment of the date of technological feasibility involves considerable judgment, and the earlier that such a date is set would result in a larger pool of costs that will be capitalized, and a later date would result in a smaller pool of such costs subject to amortization. Management has estimated the economic life of each product, and major enhancement thereto, for which costs have been capitalized, and such economic lives average six years. Shorter economic lives of software products would accelerate amortization, and longer economic lives would decrease annual amortization amounts that are a component of costs of revenues. The use of an average economic life of five years would have resulted in additional amortization of approximately \$190,000, and the use of an average economic life of seven years would have resulted in decreased amortization of approximately \$136,000 compared to the amount amortized in 2001. In connection with the Company's long-term strategic planning and 2002 budgeting processes initiated in the fourth quarter of 2001, management determined that the net realizable value of capitalized software attributed to one product was less than the carrying amount recorded for the product. This net realizable value determination included estimated revenues to be received from that product's sales over its estimated life, reduced by the related estimated direct costs to manufacture and reproduce the product, sales expenses and commissions. Consequently, in the fourth quarter of 2001, the Company wrote off to cost of revenues a total of \$1.9 million of previously capitalized costs to write down the carrying cost of the intangible asset to net realizable value. The Company made

similar calculations of estimated future net revenue from capitalized costs for software products in 2000, and determined that no write-downs were necessary. The use of lower future revenue estimates at the end of 2001 would have resulted in an additional write-down of capitalized costs, and the use of higher future revenue estimates would have resulted in a lower write-down of capitalized costs in 2001. The use of lower future revenue estimates at the end of 2000 may have resulted in a write-down of capitalized costs, depending on the magnitude of such change in estimate.

The recorded historical carrying amount of inventories are reduced by provisions for the costs of estimated slow-moving, excess and obsolete inventory. Management makes this determination based upon an item-by-item review of quantities on hand compared to estimated future usage for sales and service. Inventory reserves at the end of 2001 and 2000 totaled \$801,000 and \$1,061,000, respectively. The decrease in reserves in 2001 compared to 2000 results from the disposition of obsolete material in 2001. The determination that future usage would differ from amounts determined by management would result in different year-end reserves and correspondingly different charges to cost of revenues for the periods presented.

Management expects that the change in product mix in 2002 towards higher margin computer products, and the lower amortization of capitalized software development costs, resulting from the year-end 2001 write off of \$1.9 million of previously capitalized costs, will cause margins to improve in 2002.

#### *Product development expenditures – software development*

Software product development expenditures decreased by \$81,000 to \$591,000 in 2001 compared to \$672,000 in 2000. This represents a decrease of 12.1% from the 2000 level and results from the Company's use of a smaller development staff in 2001 compared to 2000. Management expects that product development expenses will increase in 2001 compared to 2000 because the Company plans to hire additional staff to enhance its existing software products and its plan to capitalize less software development costs resulting from the write-down of previously capitalized costs in 2001 as the Company will suspend additions to capitalized software development costs until the estimated net realizable value of revenues from software products increase significantly from current estimates.

As discussed above under Costs of Revenues, the Company capitalizes the costs and expenses of certain software development activities related to new product development beginning upon the establishment of technological feasibility of the developed product. All other costs and expenses, including those incurred prior to technological feasibility and after product release and those incurred in support and maintenance and minor enhancements, are expensed at the time such costs and expenses are incurred. Consequently, the determination of technological feasibility, which requires considerable judgment, is a key factor in management determination's of whether costs are expensed or capitalized. As discussed above, the Company capitalized \$704,000 and \$486,000 in 2001 and 2000, respectively, and such costs were not recorded as expenses during the periods presented. Had management determined that technological feasibility had not been reached for the products under development, such costs would have been charged to operations.

#### *Selling, General and Administrative Expenses*

Selling, general and administrative expenses decreased to \$6,071,000 in 2001 compared to \$6,457,000 in 2000. This represents a decrease of \$385,000, or 6.0% from the 2000 level. This decrease results primarily from staff reductions, lower discretionary spending for advertising, and lower sales commissions, partially offset by increases in general and administrative costs arising from the effects of including the administrative costs of A-OK Controls for a full year in 2001 compared to six months in 2000, and including the administrative costs of Optimization for nine months in 2001 since the date of its acquisition by Nematron. Without the effect of A-OK Controls costs for the additional six-month period in 2001 and Optimization costs for nine months, selling, general and administrative expenses would have decreased by \$1,737,000 in 2001 compared to 2000, and such amount represents a 29.9% decrease compared to the 2000 level. The decrease results primarily from reduced staff levels, decreases in sales and commission expenses and decreases discretionary spending in 2001 in anticipation of and response to the anticipated and actual revenue declines in 2001 compared to 2000.

Critical accounting policies relative to selling, general and administrative expenses and which involve management estimates include the period over which goodwill is amortized, the period over which other intangible assets are amortized, the amount of the reserve for doubtful accounts receivable and the period over which property and equipment are amortized.

The Company recorded \$2,299,000 and \$835,000 of goodwill resulting from the acquisitions of A-OK Controls in 2000 and Optimization in 2001, respectively. The Company determined that the appropriate periods over

which to amortize goodwill resulting from the acquisitions of A-OK Controls and Optimization was twenty and fifteen years, respectively. Using such periods, the Company charged to operations in 2001 and 2000 a total of \$157,000 and \$56,000, respectively. The use of shorter or longer periods over which to amortize goodwill would have changed the amortization expense included in selling, general and administrative expenses in each period presented.

The Company has recorded other intangible assets, including the costs of patents, deferred loan costs and acquired intangible assets relating to an acquired technical workforce and distribution network from the 1997 acquisition of Intec Controls. The costs of the acquired intangible assets relating to an acquired technical workforce and distribution network and the related amortization period were established based upon a third party analysis of all assets acquired in 1997. The costs of other intangible assets are amortized to operations over periods assigned by management. Management has assigned an amortization period of thirty-two months for deferred loan costs (such period being equal to the remaining period of the bank debt at the time such costs were incurred), five years for the acquired distribution network, six years for the acquired technical workforce and ten years for patent costs. The estimate of economic lives of each of these intangible assets was based on several factors, including estimates of the projected term of the senior debt, the costs that the Company avoided by acquiring the establishing product distributors and resellers, the costs the Company avoided by acquiring a technical workforce when it acquired an entity in 1997 and acquired employees' projected turnover, salary and benefit rates. The Company charged to operations in 2001 and 2000 a total of \$472,000 and \$309,000, respectively, for amortization of intangible assets. The use of different periods over which to amortize intangible assets would result in different amounts charged to selling, general and administrative expenses in each period presented.

The Company monitors its accounts receivable and charges to expense an amount equal to its estimate of uncollectible accounts. The Company recorded insignificant amounts of bad debts during 2001 and 2000, and its reserve for bad debts as of the end of 2001 and 2000 were in the amounts of \$110,000 and \$78,000, respectively. The use of different estimates for future uncollectible accounts would result in different charges to selling, general and administrative expenses in each period presented.

The Company depreciates its property and equipment over estimated useful lives established by management. Management has determined that useful lives of three to ten years for equipment and furniture and thirty-three years for its building are appropriate assignable lives. The use of shorter or longer lives would result in different depreciation amounts charged to operations during the periods presented. The Company has also elected to depreciate its property and equipment over the assigned lives using the straight-line depreciation period. Total depreciation expense charged to operations in 2001 and 2000 was \$524,000 and \$624,000, respectively. The use of accelerated methods of depreciation would result in higher depreciation charges in each period presented.

Management expects that selling, general and administrative expenses will increase in 2002 compared to 2001 because of increases in marketing and sales efforts, increased sales commissions from higher revenue levels and the inclusion of a full year of expenses relating to the Optimization operation, offset in part by the absence of amortization charges related to goodwill (\$157,000 in 2001) resulting from the cessation of goodwill amortization effective January 1, 2002 pursuant to the accounting promulgated in SFAS 142 – *Goodwill and Other Intangible Assets*.

#### *Interest Expense*

Interest expense increased to \$1,588,000 in 2001 compared to \$563,000 in 2000. Included in interest expense for 2001 is \$884,000 of non-cash interest expense related to the beneficial conversion feature of warrants and convertible notes sold in March 2001. Of the total non-cash interest, \$342,000 relates to the beneficial conversion feature of the detachable warrants and \$542,000 relates to the beneficial conversion feature of the notes. Without the effect of the non-cash interest charge for the aforementioned beneficial conversion feature, the increase in interest expense represents an increase of \$141,000, or 25.0%, over the 2000 level. The increase results from higher average borrowing levels in 2001 compared to 2000 necessary to fund losses in 2001, offset in part by lower prime-rate indexed interest rates on bank debt. Management expects that interest expense will decrease in 2002 because of the scheduled pay downs of debt in 2002 will cause average borrowing levels to decrease in 2002, and because of the absence of beneficial conversion features of warrant and debt as experienced in 2001. Without the effects of the non-cash interest charges for the aforementioned beneficial conversion feature, the increase in interest expense represents an increase of \$141,000, or 25.0%, over the 2000 level. The increase results from higher average borrowing levels in 2001 compared to 2000 necessary to fund losses in 2001, offset in part by lower prime-rate indexed interest rates on bank debt. Management expects that interest expense will decrease in 2002 because of the scheduled pay downs of debt in 2002 will cause average borrowing levels

to decrease in 2002, and because of the absence of beneficial conversion features of warrants debt as experienced in 2001.

*Other Income (Expense) - Net*

Other expense totaled \$77,000 in 2001 compared to \$449,000 of income in 2000. Other expense in 2001 resulted primarily from \$96,000 of foreign currency losses, offset in part by rentals to third parties of office space at the A-OK Controls facility and other miscellaneous income. Other income in 2000 resulted primarily from the sale of a domain name that the Company did not use, and to a lesser extent, from rentals to third parties of office space at the A-OK Controls facility.

**Liquidity and Capital Resources**

Primary sources of liquidity are cash generated from operations, the Company's three lines of credit totaling \$3.9 million (as of February 25, 2002), from two term loans totaling \$2,951,000 at December 31, 2001, from subordinated debt totaling \$1,500,000 at December 31, 2001, from changes in working capital and from planned near-term private placement so of subordinated debt or equity, if successful. The Company's operations generated \$852,000 in cash during 2001, primarily as a result of changes in working capital and the noncash depreciation, amortization, capitalized software cost write-off and interest charges to operations, offset in part by the \$6.5 million loss from operations. During 2001, the Company used \$279,000 of cash in connection with its acquisition of Optimization, \$119,000 of cash for additions to fixed assets, \$486,000 of cash to fund capitalized software development costs, and \$1,488,000 of cash for debt repayments. Primary sources of cash in 2001 were \$278,000 from private placements of Common Stock and \$1,500,000 from the proceeds of sales of subordinated promissory notes and warrants.

The Company has a Loan and Security Agreement (the "LBCI Agreement") with LaSalle Business Credit, Inc. ("LBCI"). The LBCI Agreement provides for a \$2.9 million term loan with interest at the prime rate plus 4.5% (the "Term Loan") (7.25% effective rate at December 31, 2001 and 9.25% effective February 1, 2001), a \$1.5 million special accommodation loan with interest at the prime rate of interest plus 5.0% (the Special Accommodation Loan") (8.75% effective rate at December 31, 2001 and 10.25% effective February 1, 2001) and a \$3.5 million revolving line of credit with interest at the prime rate plus 3.5% (7.25% effective rate at December 31, 2001 and 9.25% effective February 1, 2001). The LBCI line of credit borrowings are limited by a borrowing formula that allows for advances up to 85% of eligible accounts receivable. The Term Loan requires monthly principal payments of \$16,100, plus a mandatory quarterly prepayment of "Excess Cash Flow", as defined in the LBCI Agreement. The Special Accommodation Loan requires monthly principal payments of \$62,500. Pursuant to an October 2002 agreement with LBCI, LBCI will apply all Term Loan principal payments made to the Special Accommodation Loan balance until the Special Accommodation Loan is paid in full, which, with the application of the Term Loan payment, will be in May 2002. As of December 31, 2001, the Company had borrowed \$1,817,000 of its revolving credit facility, \$2,562,000 under its Term Loan and \$389,000 under its Special Accommodation Loan. Based upon the borrowing formula underlying the LBCI credit line, an additional \$30,000 may be borrowed under the LBCI credit line as of December 31, 2001.

Borrowings under the Credit Agreement are secured by substantially all of the Company's assets and guaranteed by its domestic subsidiaries and their assets. Borrowings under the LBCI Agreement are due in full on November 12, 2002, but the due date may be extended for an additional one-year period unless the lender has given prior notice of termination to the Company. The LBCI Agreement includes various affirmative and negative covenants limiting the Company's ability to take certain actions, including the payment of cash dividends, requiring the Company to maintain specified levels of tangible net worth, debt service coverage and interest coverage, and limiting capital expenditures and software development expenditures to specified levels.

The Company is not in compliance with the tangible net worth, debt service and interest coverage financial covenants contained in the LBCI Agreement. The lender has issued a forbearance letter to the Company concerning these covenant violations. However, in such letter, the lender has specifically reserved its right to take any action permitted under the LBCI Agreement and related agreements in the future without any notice to the Company. The lender and management are discussing management plans to cure the defaults, including, without limitation, a capital infusion by accredited investors. This capital infusion, if successful, may cure the tangible net worth covenant, but it will not cure the debt service and interest coverage covenants that were not met beginning in 2001. Management is hopeful, however, that a successful capital infusion will cause the lender to continue its forbearance. In view of the continuing default, the Company has classified all indebtedness to LBCI as current liabilities.

The Company's wholly owned subsidiary, Optimization, is party to a loan and security agreement (the "Compass Credit Agreement") with Compass Bank, an Alabama-based bank. The Compass Credit Agreement, amended through February 2002, provides for a total line of credit of \$405,000 (\$650,000 at December 31, 2001). The amount available under the Compass Bank line of credit is limited by a borrowing formula that allows for advances up to a maximum of the sum of specified percentages of eligible accounts receivable and inventory. Amounts borrowed under the Compass Bank line of credit facility total \$445,000 at December 31, 2001, and such borrowings bear interest at the prime rate plus .50% (5.25% effective rate at December 31, 2001). Based upon such borrowing formula, \$42,000 of the available Compass Bank line is eligible for additional advance at December 31, 2001. The Compass Credit Agreement, as amended through March 2002, provides for line of credit facility through April 30, 2002. The Compass Bank line of credit is collateralized by substantially all assets of Optimization, a guaranty by Nematron and a partial guaranty by Optimization's president. The Company expects that the Compass Credit Agreement will be renewed for consecutive 90-day periods until the borrowings are reduced to zero.

The Company is in the process of raising a bridge financing in the range of \$500,000 to \$750,000 in the form of subordinated debt with detachable warrants, until such time as it can close a secondary private placement of preferred stock to accredited investors. Based upon the Company's current projections, the Company will not generate cash from operations until the third quarter of 2002, during which period it will require approximately \$1,350,000 to fund operations, product development and repay bank borrowings. Included in the Company's projection is management's assumption that the borrowings from LaSalle will be refinanced with LaSalle or another lender on substantially the same terms as the current arrangement.

Management can offer no assurance that the private placement of bridge financing subordinated notes or of preferred stock will be successful, nor if the private placement of subordinated notes or preferred stock occurs, that the debt and equity raised will be sufficient to persuade LBCI to continue its forbearance on demanding repayment of LBCI debt because of the continuing covenant violations. If the private placements are not successful, the Company will not have sufficient liquidity to satisfy its liabilities and obligations as they become due and it may be forced to curtail its operations, sell product lines or the operations of subsidiaries or sell the Company to a third party.

#### **Uncertainties Relating to Forward-Looking Statements**

"Item 6. Management's Discussion and Analysis or Plan of Operation" and other parts of this Form 10-KSB contain certain "forward-looking statements" within the meaning of the Securities Act of 1934, as amended. . While the Company believes any forward-looking statements it has made are reasonable, actual results could differ materially since the statements are based on current management expectations and are subject to risks and uncertainties. These risks and uncertainties include, but are not limited to the following:

- Uncertainties discussed elsewhere in "Management's Discussion and Analysis or Plan of Operation" and in "Description of Business" above;
- The potential inability to raise additional equity or debt financing in a sufficient amount to sustain operations and allow management to execute its strategies;
- The potential inability to modify bank covenants as it may be necessary from time to time or continue the lender's forbearance exercising its remedies;
- The ability of the Company to effectively integrate the operations of acquired entities;
- A further decline of economic conditions in general and conditions in the automotive manufacturing industry in particular;
- Delays in introduction of planned hardware and software product offerings;
- Reductions in product life cycles;
- Changes in customer requirements or reductions in demand for the Company's products and services;
- The inability of the Company to successfully implement its strategy to lead the industrial automation market migration from closed architecture PLCs to open architecture PC-based solutions or changes in corporate strategy to capitalize on market changes;
- Competitive factors (including the introduction or enhancement of competitive products);

- Pricing decreases and component price increases that may result in materially reduced selling prices and gross profit margins for the Company's products;
- Software defects and latent technological deficiencies in existing and new hardware products;
- Unforeseen increases in operating expenses or adverse fluctuations in foreign exchange rates;
- The inability to attract or retain management, sales or engineering talent;
- Evolving industrial automation industry standards.

**Item 7. Financial Statements**

The financial statements filed herewith are set forth in the Index to Consolidated Financial Statements (on page F-1) of the separate financial section which follows this report, and are incorporated herein by reference.

**Item 8. Changes In and Disagreements With Accountants on Accounting and Financial Disclosures**

Not applicable.

**PART III**

**Item 9. Directors, Executive Officers, Promoters and Control Persons; Compliance With Section 16(a) of the Exchange Act.**

The information required by this item is incorporated by reference to the Company's 2002 Proxy Statement under the captions "Election of Directors" (excluding the Report of the Audit Committee) and "Section 16(a) Beneficial Ownership Reporting Compliance."

**Item 10. Executive Compensation**

The information required by this item is incorporated by reference to the Company's 2002 Proxy Statement under the caption "Executive Compensation."

**Item 11. Security Ownership of Certain Beneficial Owners and Management**

The information required by this item is incorporated by reference to the Company's 2002 Proxy Statement under the caption "Security Ownership of Certain Beneficial Owners and Management."

**Item 12. Certain Relationships and Related Transactions.**

The information required by this item is incorporated by reference to the Company's 2002 Proxy Statement under the caption "Certain Relationships and Related Transactions."

**Item 13. Exhibits and Reports on Form 8-K.**

- (a) The exhibits filed herewith are set forth in the Index to Exhibits (on the first page of the separate exhibit section, which follows the financial section of this report) and are incorporated herein by reference.
- (b) The Company did not file any current reports on Form 8-K during the fourth quarter of the Company's fiscal year ended December 31, 2001.

## SIGNATURES

In accordance with Section 13 or 15(d) of the Exchange Act, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized

NEMATRON CORPORATION

By: /s/ Matthew S. Galvez  
Matthew S. Galvez, President and CEO

Dated: March 29, 2002

In accordance with the Exchange Act, this report has been signed below by the following persons on behalf of the registrant in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Matthew S. Galvez</u> Matthew S. Galvez	President, CEO and a Director (Principal Executive and Financial Officer)	<u>March 29, 2002</u>
<u>/s/ David P. Gienapp</u> David P. Gienapp	Vice President - Finance and Administration (Principal Accounting Officer) and Secretary	<u>March 29, 2002</u>
<u>/s/ Hugo E. Braun</u> Hugo E. Braun	Director	<u>March 29, 2002</u>
<u>/s/ Ronald C. Causley</u> Ronald C. Causley	Director	<u>March 29, 2002</u>
<u>/s/ Joseph J. Fitzsimmons</u> Joseph J. Fitzsimmons	Chairman of the Board and a Director	<u>March 29, 2002</u>
<u>/s/ Stephen E. Globus</u> Stephen E. Globus	Director	<u>March 29, 2002</u>
<u>/s/ James H. Wicker</u> James H. Wicker	Director	<u>March 29, 2002</u>

# NEMATRON CORPORATION AND SUBSIDIARIES

## Index to Exhibits

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
2.01	Stock Purchase Agreement dated as of June 30, 2000 by and among the Ronald C. Causley, Trustee of the Ronald C. Causley Revocable Trust dated March 14, 1990, as amended, Ronald C. Causley, individually, and Nematron Corporation, together with Exhibits: a) Registration Rights Agreement by and between Ronald C. Causley, Trustee of Ronald C. Causley Revocable Trust dated March 14, 1990, as amended and Nematron Corporation; b) Employment Agreement between Ronald C. Causley and A-OK Controls Engineering, Inc. and c) Agreement not to Compete between Ronald C. Causley, A-OK Controls Engineering, Inc. and Nematron Corporation, filed as Exhibit 2.01 to the Registrant's Form 10-QSB for the quarterly period ended June 30, 2000 and incorporated herein by reference.
2.02	Stock Purchase Agreement dated as of March 30, 2001 by and among Nematron Corporation, Optimation, Inc., Dennis A. Sierk, Sheila D. Sierk, Charles Garrett and Kerry Garrett, filed as Exhibit 2.01 to the Registrant's Form 10-QSB for the quarterly period ended March 31, 2001 and incorporated herein by reference.
3.01	Amended and Restated Articles of Incorporation, as amended, filed as Exhibit 3.1 to the Registrant's Form 10-QSB for the quarterly period ended September 30, 1999 and incorporated herein by reference.
3.02	Amended and Restated Bylaws, as amended, filed as Exhibit 3.02 to the Registrant's Form 10-KSB for the year ended December 31, 1999 and incorporated herein by reference.
4.01	Term Loan and Warrant Purchase Agreement dated as of November 7, 1995 between the Registrant and Onset BIDCO, The Capital Fund, Joseph Krinski Trust U/A Dated 6/20/91, Emily Krinski Trust U/A Dated 6/20/91, and Urban A. MacDonald filed as Exhibit 4.04 to the Registrant's Form S-2 Registration Statement dated June 6, 1996 and incorporated herein by reference.
4.04	Loan and Security Agreement dated as of November 12, 1999 by and among LaSalle Business Credit, Inc. and the Registrant for a \$10.9 million credit facility, filed as Exhibit 4.1 to the Registrant's Form 10-QSB for the quarterly period ended September 30, 1999 and incorporated herein by reference.
4.05	Amended and Restated Loan and Security Agreement dated as of June 30, 2000 by and among LaSalle Business Credit, Inc. and the Registrant for a \$8.3 million credit facility, filed as Exhibit 4.1 to the Registrant's Form 10-QSB for the quarterly period ended June 30, 2000 and incorporated herein by reference.
4.06	Loan and Security Agreement dated as of June 30, 2000 by and among LaSalle Business Credit, Inc. and the A-OK Controls Engineering, Inc. for a \$3.0 million credit facility, filed as Exhibit 4.2 to the Registrant's Form 10-QSB for the quarterly period ended June 30, 2000 and incorporated herein by reference.
4.07	First Amendment to Amended and Restated Loan and Security Agreement dated as of March 1, 2001, by and between Nematron Corporation and LaSalle Business Credit, Inc., as Lender, filed as Exhibit 4.1 to the Registrant's Form 10-QSB for the quarterly period ended March 31, 2001 and incorporated herein by reference.
4.08	First Amendment to Loan and Security Agreement dated as of March 1, 2001, by and between Nematron Corporation and A-OK Controls Engineering, Inc. and LaSalle Business Credit, Inc., as Lender, filed as Exhibit 4.2 to the Registrant's Form 10-QSB for the quarterly period ended March 31, 2001 and incorporated herein by reference.
4.09	Second Amendment and Waiver to Amended and Restated Loan and Security Agreement dated as of April 12, 2001, by and between Nematron Corporation and LaSalle Business Credit, Inc., as Lender, filed as Exhibit 4.3 to the Registrant's Form 10-QSB for the quarterly period ended March 31, 2001 and incorporated herein by reference.
4.10	Second Amendment and Waiver to Loan and Security Agreement dated as of April 12, 2001, by and between Nematron Corporation and A-OK Controls Engineering, Inc. and LaSalle Business Credit, Inc., as Lender, filed as Exhibit 4.4 to the Registrant's Form 10-QSB for the quarterly period ended March 31, 2001 and incorporated herein by reference.
4.11	Security Agreement dated as of April 12, 2001, by Optimation, Inc. in favor of LaSalle Business Credit, Inc., filed as Exhibit 4.5 to the Registrant's Form 10-QSB for the quarterly period ended March 31, 2001 and incorporated herein by reference.



<u>Number</u>	<u>Description of Exhibit</u>
4.12	Form of Convertible Subordinated Promissory Note dated between March 21 and April 6, 2001, by and between Nematron Corporation and Noteholders, and schedule of Noteholders and amounts, filed as Exhibit 4.6 to the Registrant's Form 10-QSB for the quarterly period ended March 31, 2001 and incorporated herein by reference.
4.13	Form of Warrant Agreement dated between March 21 and April 6, 2001, by and between Convertible Subordinated Noteholders and Nematron Corporation, and schedule of amounts of Warrants by Warrant holder, filed as Exhibit 4.7 to the Registrant's Form 10-QSB for the quarterly period ended March 31, 2001 and incorporated herein by reference.
4.14	Subordinated Promissory Note dated October 1, 2001, by and between North Coast Technology Investors LP and Nematron Corporation.
4.15	Revolving Credit and Security Agreement dated July 9, 1999, by and between Optimization, Inc. and Compass Bank, filed as Exhibit 4.8 to the Registrant's Form 10-QSB for the quarterly period ended March 31, 2001 and incorporated herein by reference.
4.16	Modification Agreement and Amendment to Loan Documents dated July 19, 2000, by and between Optimization, Inc. and Compass Bank, filed as Exhibit 4.9 to the Registrant's Form 10-QSB for the quarterly period ended March 31, 2001 and incorporated herein by reference.
4.17	Modification Agreement and Amendment to Loan Documents dated July 9, 2001, by and between Optimization, Inc. and Compass Bank filed as Exhibit 4.0 to the Registrant's Form 10-QSB for the quarterly period ended June 30, 2001 and incorporated herein by reference.
4.18	Modification Agreement and Amendment to Loan Documents dated February 25, 2002, by and between Optimization, Inc. and Compass Bank.
10.01*	Nematron Corporation 1993 Stock Option Plan, as amended and restated March 1997, filed as Exhibit 10.1 to the Registrant's Form 10-QSB for the quarterly period ended March 31, 1997 and incorporated herein by reference.
10.02*	Nematron Corporation 1993 Directors Option Plan, as amended and restated, filed as Exhibit 10.2 to the Registrant's Form 10-QSB for the quarterly period ended March 31, 1997 and incorporated herein by reference.
10.03*	Nematron 401(k) Plan, filed as Exhibit 10.04 to the Registrant's Form 10-KSB for the year ended September 30, 1995 and incorporated herein by reference.
10.04*	Nematron Corporation Long-Term Incentive Plan, filed as Exhibit 10.03 to the Registrant's Form 10-QSB for the quarterly period ended March 31, 1999 and incorporated herein by reference.
10.05*	Employment Agreement entered into effective October 1, 1998 and dated July 26, 1999 by and between Matthew S. Galvez and the Registrant, filed as Exhibit 10.01 to the Registrant's Form 10-QSB for the quarterly period ended June 30, 1999 and incorporated herein by reference.
10.06*	Employment Agreement entered into effective March 30, 2001 and dated March 30, 2001 by and between Dennis A. Sierk and the Registrant, filed as Exhibit 10.01 to the Registrant's Form 10-QSB for the quarterly period ended March 31, 2001 and incorporated herein by reference.
10.07*	Nonqualified Stock Option Agreement dated October 13, 1998 between Matthew S. Galvez and the Registrant, filed as Exhibit 10.02 to the Registrant's Form 10-QSB for the quarterly period ended June 30, 1999 and incorporated herein by reference.
10.08*	Nonqualified Stock Option Agreement dated December 3, 1998 between Matthew S. Galvez and the Registrant, filed as Exhibit 10.02 to the Registrant's Form 10-QSB for the quarterly period ended June 30, 1999 and incorporated herein by reference.
10.09*	Nonqualified Stock Option Agreement dated December 13, 1999 between Matthew S. Galvez and the Registrant, filed as Exhibit 10.08 to the Registrant's Form 10-KSB for the year ended December 31, 1999 and incorporated herein by reference.
10.10	Registration Rights Agreement by and between Ronald C. Causley, Trustee of Ronald C. Causley Revocable Trust dated March 14, 1990, as amended and Nematron Corporation, filed as Exhibit 4.1 to the Registrant's Form 8-K filed July 14, 2000 and incorporated herein by reference.
21.01	Subsidiaries of Nematron Corporation.
23.01	Consent of Grant Thornton LLP.

\*Management compensatory plan or arrangement.

## UNDERTAKING

The Company will furnish to any shareholder a copy of any of the exhibits listed above upon written request and upon payment of a specified reasonable fee, which fee shall be equal to the Company's reasonable expenses in furnishing the exhibit to the shareholder. Requests for exhibits and information regarding the applicable fee shall be direct to: Mr. David P. Gienapp, Vice President - Finance and Administration, at the address of the principal executive offices set forth on the cover of this Report on Form 10-KSB.

## FINANCIAL STATEMENTS

### NEMATRON CORPORATION AND SUBSIDIARIES

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REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

**The Board of Directors**

Nematron Corporation:

We have audited the accompanying consolidated balance sheet of Nematron Corporation and Subsidiaries as of December 31, 2001, and the related consolidated statements of operations, stockholders' equity, and cash flows for the two years ended December 31, 2001. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Nematron Corporation and Subsidiaries as of December 31, 2001, and the results of their operations and their cash flows for the two years ended December 31, 2001, in conformity with generally accepted accounting principles in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company has suffered recurring losses from operations, has a deficit in working capital, has experienced cash flow difficulties and is in default of its loan agreement with its primary bank lender. These matters raise substantial doubt about the Company's ability to continue as a going concern. Management's plans with respect to these matters are also discussed in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Grant Thornton LLP

March 25, 2002  
Southfield, Michigan

**Nematron Corporation and Subsidiaries**  
**Consolidated Balance Sheet**  
**December 31, 2001**

**Assets (Notes 6 and 8)**

Current assets:	
Cash	\$291,726
Accounts receivable, net of allowance for doubtful accounts of \$70,000	3,284,376
Inventories (Note 5)	1,916,235
Prepaid expenses and other current assets	<u>190,010</u>
Total current assets	5,682,347
Property and equipment:	
Land	117,000
Building and improvements	2,292,685
Equipment	<u>6,973,124</u>
	9,382,809
Less accumulated depreciation	<u>(7,192,705)</u>
Net property and equipment	2,190,104
Software and related development costs, net of accumulated amortization of \$5,775,449 (Note 3)	886,286
Goodwill and other intangible assets, net of accumulated amortization of \$3,061,775 (Notes 3 and 4)	<u>3,636,780</u>
Total assets	<u>\$12,395,517</u>

**Liabilities and Stockholders' Equity**

Current liabilities:	
Notes payable to banks under lines of credit agreements (Note 6)	\$2,262,475
Accounts payable	1,452,658
Deferred revenue and other accrued liabilities	1,851,956
Subordinated debt (Note 7)	1,500,000
Current maturities of long-term debt (Note 8)	<u>2,962,536</u>
Total current liabilities	10,029,625
Long-term debt (Note 8)	28,940
Commitments and contingencies (Note 13)	-
Stockholders' equity (Notes 4, 7, 11 and 12):	
Common stock, no par value; 30,000,000 shares authorized; 15,744,625 shares outstanding	33,054,089
Accumulated comprehensive income	18,096
Accumulated deficit	<u>(30,735,233)</u>
Total stockholders' equity	<u>2,336,952</u>
Total liabilities and stockholders' equity	<u>\$12,395,517</u>

See accompanying notes to consolidated financial statements.

**Nematron Corporation and Subsidiaries**  
**Consolidated Statements of Operations**  
**For the Years Ended December 31, 2000 and 2001**

	<u>Year Ended December 31,</u>	
	<u>2000</u>	<u>2001</u>
Net revenues (Notes 14 and 15)	\$20,420,752	\$17,541,766
Cost of revenues, including \$1,900,000 write-off of capitalized software development costs in 2001 (Note 3)	<u>15,388,939</u>	<u>16,273,116</u>
Gross profit	5,031,813	1,268,650
Operating expenses:		
Product development costs - software	672,052	590,769
Selling, general and administrative expenses	6,456,709	6,071,447
Total operating expenses	<u>7,128,761</u>	<u>6,662,216</u>
Operating loss	(2,096,948)	(5,393,566)
Other income (expense):		
Interest expense (Notes 6, 7 and 8)	(562,756)	(1,587,615)
Sundry income, net of sundry expense	<u>449,167</u>	<u>(76,641)</u>
Total other expense	<u>(113,589)</u>	<u>(1,664,256)</u>
Loss before income tax benefit (7,057,822)	(2,210,537)	
Income tax benefit, net (Note 9)	<u>293,230</u>	<u>-</u>
Net loss	<u>\$(1,917,307)</u>	<u>\$(7,057,822)</u>
Loss per share - basic and diluted (Note 10)	<u>\$ (0.15)</u>	<u>\$ (0.46)</u>

See accompanying notes to consolidated financial statements.

**Nematron Corporation and Subsidiaries**  
**Consolidated Statements of Stockholders' Equity**  
**For the Years Ended December 31, 2000 and 2001**

	<u>Common Stock</u>		Accumulated Comprehensive Income	Accumulated	<u>Total</u>
	<u>Shares</u>	<u>Amount</u>	<u>Adjustment</u>	<u>Deficit</u>	
Balance, January 1, 2000	12,605,430	\$28,727,838	\$1,869	\$(21,760,104)	\$6,969,603
Shares issued in exchange for equity of A-OK Controls Engineering, Inc. (Note 4)	604,186	1,250,000			1,250,000
Private placement of common stock (Note 7)	760,000	914,251			914,251
Comprehensive loss:					
Net loss for the year ended December 31, 2000				(1,917,307)	(1,917,307)
Foreign currency translation adjustment			(3,475)		(3,475)
Total comprehensive loss	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>(1,920,782)</u>
Balance, December 31, 2000	13,969,616	30,892,089	(1,606)	(23,677,411)	7,213,072
Shares issued in exchange for equity of Optimization, Inc. (Note 4)	1,483,680	1,000,000			1,000,000
Beneficial conversion feature of convertible subordinated notes and warrants (Note 7)		884,000			884,000
Private placement of common stock (Note 7)	291,329	278,000			278,000
Comprehensive loss:					
Net loss for the year ended December 31, 2001				(7,057,822)	(7,057,822)
Foreign currency translation adjustment			19,702		19,702
Total comprehensive loss	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>                    </u>	<u>(7,038,120)</u>
Balance, December 31, 2001	<u>15,744,625</u>	<u>\$33,054,089</u>	<u>\$18,096</u>	<u>\$(30,735,233)</u>	<u>\$2,336,952</u>

See accompanying notes to consolidated financial statements.

**Nematron Corporation and Subsidiaries**  
**Consolidated Statements of Cash Flows**  
**For the Years Ended December 31, 2000 and 2001**

	<u>Year Ended December 31,</u>	
	<u>2000</u>	<u>2001</u>
Cash flows from operating activities:		
Net loss	\$(1,917,307)	\$(7,057,822)
Adjustments to reconcile net loss to net cash flows provided by operating activities:		
Depreciation	624,237	523,993
Amortization	1,260,433	1,541,989
Write-off of capitalized software development costs (Note 3)		1,900,000
Non-cash interest expense for beneficial conversion feature		884,000
Loss on disposal of property and equipment	10,400	13,467
Gain on the sale of domain name	(375,000)	-
Deferred income tax benefit	(291,000)	-
Changes in current assets and liabilities that provided (used) cash:		
Accounts receivable	2,955,257	2,305,308
Inventories	(284,607)	1,458,339
Prepaid expenses and other current assets	(10,933)	129,637
Accounts payable	(183,470)	(286,567)
Deferred revenue and other accrued liabilities	<u>(776,330)</u>	<u>(560,202)</u>
Net cash provided by operating activities	1,011,680	852,142
Cash flows from investing activities:		
Acquisition of A-OK Controls Engineering, Inc., net of cash acquired (Note 4)	(3,189,586)	-
Acquisition of Optimization, Inc., net of cash acquired (Note 4)	-	(278,877)
Additions to capitalized software development costs	(704,040)	(486,482)
Additions to property and equipment	(160,267)	(118,663)
Proceeds from sale of domain name	375,000	-
Proceeds from disposals of property and equipment	<u>3,255</u>	<u>450</u>
Net cash used in investing activities	(3,675,638)	(883,572)
Cash flows from financing activities:		
Proceeds from issuance of subordinated notes and warrants (Note 7)	-	1,500,000
Proceeds from issuance of common stock (Note 7)	914,251	278,000
Borrowings under long-term debt agreements	1,500,000	-
Repayments of long-term debt	(607,433)	(1,050,976)
Net borrowings (repayments) under bank line of credit	639,204	(436,843)
Additions to other intangible assets	<u>(60,545)</u>	<u>(61,439)</u>
Net cash provided by financing activities	2,385,477	228,742
Foreign currency translation effect on cash	<u>(3,475)</u>	<u>19,702</u>
Net increase (decrease) in cash and cash equivalents	(281,956)	217,014
Cash at beginning of year	<u>356,668</u>	<u>74,712</u>
Cash at end of year	<u>\$ 74,712</u>	<u>\$ 291,726</u>

See accompanying notes to consolidated financial statements.



**Nematron Corporation and Subsidiaries**  
**Consolidated Statements of Cash Flows - Continued**  
**For the Years Ended December 31, 2000 and 2001**

	<u>Year Ended December 31,</u>	
	<u>2000</u>	<u>2001</u>
<b>Non-Cash Financing and Investing Activities:</b>		
Fair value of assets acquired from A-OK Controls Engineering, Inc., including goodwill	\$6,643,854	
Less liabilities assumed	(2,204,268)	
Less common stock issued	<u>(1,250,000)</u>	
Net cash paid for A-OK Controls Engineering, Inc. (Note 4)	<u>\$3,189,586</u>	
Fair value of assets acquired from Optimization, Inc., including goodwill		\$2,459,727
Less liabilities assumed		(1,180,850)
Less common stock issued		<u>(1,000,000)</u>
Net cash paid for Optimization, Inc. (Note 4)		<u>\$ 278,877</u>
Equipment acquired under capital leases	\$16,538	\$45,213
 <b>Supplemental Disclosures of Cash Flow Information:</b>		
Cash paid for interest	\$523,230	\$587,152
Cash paid for income taxes	\$ 16,261	\$ -

See accompanying notes to consolidated financial statements.

**Nematron Corporation and Subsidiaries**  
**Notes to Consolidated Statements**  
**December 31, 2000 and 2001**

(1) **Business**

Nematron Corporation (the "Company") designs, manufactures, and markets environmentally ruggedized computers and computer displays known as industrial workstations; designs, develops, and markets software for worldwide use in factory automation and control and in test and measurement environments; and provides application engineering support to customers of its own and third parties' products.

(2) **Going Concern Matters**

The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. As shown in the financial statements, during the years ended December 31, 2000 and 2001, the Company incurred losses of \$1.9 million and \$7.1 million, respectively, which have contributed to the Company's difficulties in generating sufficient cash flow to finance operations. Additionally, as discussed in Note 8, the Company is in violation of certain financial position and operating covenants contained in the bank credit agreement with its senior bank lender. The senior bank lender has reserved its right to take any action permitted under the bank credit agreement, including requiring the Company to repay all amounts borrowed from the bank totaling \$4,768,308 at December 31, 2001. These factors, among others, raise substantial doubt about the Company's ability to continue as a going concern. The accompanying financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Management's plans with respect to these matters include the following:

Management plans to complete a private placement of convertible subordinated debt or preferred stock totaling not less than \$2.0 million by the end of the third quarter of 2002, and in connection therewith, to enter into a revised lending agreement with its lead bank to continue the bank's forbearance and to adjust certain financial covenants. Proceeds of the debt and equity would be used for working capital, including paying down the bank line, for investments in new technology-based products and for the creation of strategic alliances with automation products or system integration companies that will enhance Company revenues and operating results. Management believes that the placement of convertible subordinated promissory notes or preferred stock would cure the financial position covenants that the Company currently violates. Furthermore, management intends to negotiate with its bank lender a forbearance agreement that will permit the Company to postpone compliance with the operating and financial covenants with which the Company is in violation. Management believes that a modification of the loan covenants is possible, assuming that the Company is able to complete the placement of equity securities in the amount, form and timing as contemplated.

Management also plans to improve the Company's financial performance in 2002 and eventually return to profitability. Management believes that the Company's revenues will increase in 2002 in response to an expanded distribution sales channel, by an increased emphasis on foreign-based customers, and by the introduction of new industrial automation hardware products and enhanced software products in the first half of 2002. Management also believes that the Company will continue to control its expenses through cost containment initiatives, through a more efficient sales organization and through product cost reductions.

Management believes successful implementation of the plans set forth above will enable the Company to continue as a going concern. If the Company is not successful in executing these plans, management may be forced to curtail operations and either sell the Company, sell product lines or wind down operations.

(3) **Summary of Accounting Principles**

*Principles of Consolidation*

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries: Nematron Limited, a United Kingdom corporation; Nematron Canada, Inc., a Canadian corporation; A-OK Controls Engineering, Inc., a Michigan corporation the Company acquired on June 30, 2000, and Optimization, Inc., an Alabama corporation the Company acquired on March 30, 2001. The operations of A-OK Controls are included in these consolidated statements since July 1, 2000, and the operations of Optimization are included in these consolidated statements since March 31, 2001. See Note 4 for a description of each acquisition. All significant intercompany transactions and balances have been eliminated in consolidation.

*Inventories*

Inventories are carried at the lower of cost or market. Cost is determined by the first in, first out method. Provision is made to reduce inventories (including demonstration units) to net realizable value for excess and/or obsolete inventories based upon an item-by-item review of quantities on hand compared to estimated future usage for sales and service.

*Property and Equipment*

Property and equipment are stated at cost. Depreciation is provided over the estimated useful lives of the assets, ranging from three years for certain factory and office equipment to thirty-three years for the Company's headquarters and assembly facility. Depreciation is computed using the straight-line method for financial reporting purposes and accelerated methods, for tax reporting purposes.

*Software and Related Development Costs*

Certain computer software development costs, primarily salaries, wages and other payroll costs, and purchased software technology have been capitalized. Capitalization of computer software development costs begins upon establishment of technological feasibility. The establishment of technological feasibility and the ongoing assessment of recoverability of capitalized computer software development costs requires considerable judgment by management with respect to certain external factors, including, but not limited to, anticipated future gross revenues, estimated economic life, and changes in software and hardware technology. The Company annually reviews the recoverability of capitalized software costs based on estimated cash flows. Software costs are written off at the time a determination has been made that the amounts are not recoverable.

In connection with the Company's long-term strategic planning and 2002 budgeting processes initiated in the fourth quarter of 2001, management determined that the net realizable value of capitalized software attributed to one product was less than the carrying amount recorded for the product. This net realizable value determination included estimated revenues to be received from that product's sales over its estimated life, reduced by the related estimated sales expenses and commissions. Consequently, in the fourth quarter of 2001, the Company charged \$1,900,000 to cost of revenues to reduce the carrying cost to estimated fair value. As a result of the write down of carrying costs to estimated fair value, the Company will suspend adding to the carrying amount of capitalized software development costs as such additions would create additional net book value in excess of estimated fair value. If in the future, however, market conditions change and a higher estimated fair value results, the Company will resume capitalizing current period qualifying software development costs as long as the net book value of the software product does not exceed the then estimated fair value.

Amortization of capitalized computer software development costs is provided on a product-by-product basis using the greater of the amount computed using (a) the ratio that current gross revenues for each product bear to the total of current and anticipated future gross revenues for that product, or (b) the straight-line method over the remaining estimated economic lives of the respective products, ranging from two to five years.

A summary of capitalized software and related development costs for the years presented are as follows:

	<u>December 31,</u>	
	<u>2000</u>	<u>2001</u>
Balance at beginning of year	\$3,617,553	\$3,369,660
Additions	704,040	486,482
Amortization	(951,933)	(1,069,856)
Write down of capitalized costs to net realizable value	-	(1,900,000)
Balance at end of year	<u>\$3,369,660</u>	<u>\$886,286</u>

#### Intangible Assets

Intangible assets, which consist primarily of acquired intangible assets, including goodwill, are carried at cost less accumulated amortization, which is calculated on a straight-line basis over the estimated useful lives of the assets. The estimated useful lives of the assets range from fifteen to twenty years for goodwill and range from three to ten years for other intangible assets.

The carrying value of intangible assets is periodically reviewed, and impairments are recognized when the expected future cash flows derived from such intangible assets are less than their carrying value.

A summary of intangible assets for the years presented is as follows:

	<u>December 31,</u>	
	<u>2000</u>	<u>2001</u>
Balance at beginning of year	\$ 861,375	\$3,212,345
Additions, including acquired goodwill	2,659,470	896,568
Amortization	<u>(308,500)</u>	<u>(472,133)</u>
Balance at end of year	<u>\$3,212,345</u>	<u>\$3,636,780</u>

#### Stock Option Plan

The Company adheres to the guidance of Statement of Financial Accounting Standards No. 123, *Accounting for Stock-Based Compensation* ("SFAS 123"). SFAS 123 requires entities to consistently (a) recognize as compensation expense, over the vesting period, the fair value of all stock-based awards on the date of grant, or (b) to continue to apply the provisions of APB Opinion No. 25 ("APB - 25") and provide pro forma net income (loss) and pro forma earnings (loss) per share disclosures for employee stock option grants as if the fair-value-based method defined in SFAS No. 123 had been applied. The Company has elected to continue to apply the provisions of APB - 25 and provide the pro forma disclosure provisions of SFAS No. 123 (See Note 11).

#### Foreign Currency Translation

The assets and liabilities of the Company's foreign subsidiaries, Nematron Limited and Nematron Canada, Inc., denominated in foreign currencies, are translated at exchange rates in effect on the balance sheet date, and revenue and expenses are translated using a weighted average exchange rate during the periods presented. Gains or losses resulting from translating foreign currency financial statements are recorded as a separate component of stockholders' equity. Gains or losses resulting from foreign currency transactions are included in net loss.

#### Revenue Recognition

Revenues from hardware product sales are recognized upon delivery and when collection is probable. Revenues from application and other services and repair of computers are recognized as the services are performed and when collection is probable. Revenues from software and engineering development are recognized as the Company performs the services and when collection is probable, in accordance with the contract terms. Revenues from extended warranty agreements covering software are recognized ratably over the terms of the agreement with the customer. Revenues from software license agreements and from bundled products (hardware products pre-loaded with software covered by applicable license agreements) and from systems sales (bundled products accompanied by post sale support activities) are deferred until all conditions in Statement of Position 97-2, *Software Revenue Recognition* ("SOP 97-2"), are met. Such conditions include the delivery of the product, the performance of all obligations so that remaining obligations are no longer significant, and collectibility is probable. The Company has established programs, which, under specified terms and limited conditions, enable its distributors to return limited amounts of product. The effect of these programs, which is not a material amount, is estimated, and current period revenues and cost of revenues are reduced accordingly.

#### Research and Development Costs

Research and development costs are expensed when incurred. These costs include certain engineering wages, fringe benefits, and direct costs. Hardware and software engineering costs are included in the accompanying consolidated statements of operations as components of cost of revenues and product development costs, respectively. Research and development costs were \$1,860,000 and \$1,604,000 for the years ended December 31, 2000 and 2001, respectively.

#### Warranty Costs

The Company provides for estimated warranty costs as products are shipped. Estimated warranty reserves are adjusted currently based upon projected levels of warranty repairs and estimated costs of materials, labor, and other costs to be incurred in meeting warranty obligations.

#### Income Taxes

Income taxes are accounted for under the asset-and-liability method. Deferred income tax assets and liabilities are computed annually for differences between the financial statement and tax bases of assets and liabilities that will result in taxable or deductible amounts in the future. Such deferred income tax asset and liability computations are based on enacted tax laws and rates. A valuation allowance is established when necessary to reduce deferred income tax assets to the amount expected to be realized.

#### Loss Per Share

Loss per share is calculated using the weighted average number of common shares outstanding during the period, adjusted for the assumed conversion of dilutive stock options and warrants. Since net losses were incurred in the years ended December 31, 2000 and 2001, no conversion of dilutive stock options and warrants was assumed in the loss per share calculation, as the effect would be anti-dilutive.

#### Fair Value

Financial instruments of the Company, consisting principally of cash, accounts receivable, accounts payable, and debt, are recorded at estimated fair value. The Company, using available market information and available valuation methodologies, has determined the estimated fair value amounts.

#### Use of Estimates

Management of the Company has made a number of estimates and assumptions relating to the reporting of assets and liabilities and the disclosure of contingent assets and liabilities to prepare these consolidated financial statements in conformity with generally accepted accounting principles. Actual results could differ from those estimates. Estimates are used in the determination of the

allowance for doubtful accounts, obsolete and slow moving inventory, the amount of software development costs capitalized each month, the net realizable value of capitalized software development costs, depreciation, amortization, intangible assets, warranty costs, returns and allowances, and deferred tax assets and liabilities.

Recent Accounting Pronouncements

In July 2001, the Financial Accounting Standards Board ("FASB") issued Statement No. 141, *Business Combinations*, that is effective for years beginning after December 15, 2001. Statement No. 141 eliminates the Pooling of Interest method of business combinations and requires that companies use the Purchase method to account for all business combinations after the effective date. Management believes that the adoption of this pronouncement will not have a material impact on the Company's financial position or results of operations. The Company will comply with the requirements of Statement No. 141 beginning in 2002.

In July 2001, the FASB issued Statement No. 142, *Goodwill and Other Intangible Assets*, that is effective for years beginning after December 15, 2001. Statement No. 142 addresses how intangible assets that are acquired individually or with a group of other assets should be accounted for in financial statements upon their acquisition. Statement No. 142 also specifies that intangible assets must be amortized over their useful lives unless such lives are indefinite, in which case the intangible assets are not subject to amortization. Statement No. 142 also specifies that goodwill is not subject to amortization but is subject to certain impairment tests at least annually. The Company will comply with the requirements of Statement No. 142 beginning in 2002. The effect of the accounting proscribed by Statement No. 142 is that the Company will no longer amortize goodwill by charges to operations. The Company amortized \$56,000 and \$157,000 of goodwill to operations in 2000 and 2001, respectively.

In July 2001, the FASB issued Statement No. 143, *Accounting for Asset Retirement Obligations*, that is effective for years beginning after June 15, 2002. Statement No. 143 addresses financial accounting and reporting for obligations associated with the retirement of tangible long-lived assets and the associated asset retirement costs. Management believes that the adoption of this pronouncement will not have a material impact on the Company's financial position or results of operations. The Company will comply with the requirements of Statement No. 142 beginning in 2003.

In October 2001, the FASB issued Statement No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, that is effective for years beginning after December 15, 2001. Statement No. 144 establishes one accounting model for long-lived assets to be disposed of by sale and addresses significant implementation issues. Management believes that the adoption of this pronouncement will not have a material impact on the Company's financial position or results of operations. The Company will comply with the requirements of Statement No. 142 beginning in 2002.

(4) Acquisitions

Acquisition of A-OK Controls Engineering, Inc.

On June 30, 2000, the Company completed its acquisition of A-OK Controls Engineering, Inc., an Auburn Hills, Michigan-based provider of automation controls engineering and systems integration services. The Company recorded this transaction using the purchase method of accounting.

The purchase price was approximately \$4,538,000, including expenses of approximately \$186,000. Under the terms of the Stock Purchase Agreement, the Company issued 604,186 shares of its Common Stock to the former A-OK Controls shareholder in exchange for 100% of the outstanding equity of A-OK Controls. Additionally, the Company paid the former shareholder of A-OK Controls \$2,750,000 cash and agreed to pay the remaining amount of \$352,000 after December 31, 2000. A-OK Controls conducts its operations as a wholly owned subsidiary of the Company. In

connection with the Stock Purchase Agreement, the Company also entered into a three-year employment agreement and a five-year agreement not to compete with A-OK Controls' former shareholder.

The allocation of the total purchase price to assets acquired and liabilities assumed as of the June 30, 2000 acquisition date, are as follows:

Cash	\$ 42,000
Other current assets	3,490,000
Equipment	611,000
Intangible assets, including goodwill	2,599,000
Current notes payable	(1,420,000)
Other current liabilities	(675,000)
Long-term debt	<u>(109,000)</u>
Total purchase price	<u>\$4,538,000</u>

Acquisition of Optimization

On March 30, 2001, the Company completed its acquisition of Optimization, Inc., a Huntsville, Alabama-based company that develops, produces and markets industrial communications and display products for industrial automation. The Company recorded this transaction using the purchase method of accounting.

The purchase price was approximately \$1,660,000, including expenses of approximately \$60,000. Under the terms of the related Optimization Stock Purchase Agreement, the Company issued 1,483,680 shares of its common stock to the former Optimization shareholders in exchange for 100% of the outstanding equity of Optimization. Additionally, the Company paid the former Optimization shareholders \$300,000 and agreed to pay the former Optimization shareholders \$300,000 after the acquisition. As of December 31, 2001, the Company has paid one-half of the agreed upon amount. In connection with the Optimization Stock Purchase Agreement, the Company also entered into three-year employment agreements and three-year agreements not to compete with Optimization's president and vice-president, both of whom were Optimization shareholders.

The allocation of the total purchase price to assets acquired and liabilities assumed as of the March 30, 2001 acquisition date are as follows:

Cash	\$ 21,000
Other current assets	1,605,000
Equipment	19,000
Intangible assets, including goodwill	835,000
Current notes payable	(640,000)
Other current liabilities	(137,000)
Long-term debt	<u>(43,000)</u>
Total purchase price	<u>\$1,660,000</u>

The following unaudited pro forma information presents a summary of consolidated results of operations for the years ended December 31, 2000 and 2001 of the Company, A-OK Controls and Optimization as if the acquisitions had occurred as of the beginning of 2000, with pro forma adjustments to give effect to amortization of intangible assets, additional interest expense on funds borrowed for the A-OK Controls acquisition, differences in actual versus contractual compensation, and utilization of the Company's net operating loss carry-forwards.

	<u>December 31,</u>	
	<u>2000</u>	<u>2001</u>
Net revenues	\$27,802,000	\$17,953,000
Net loss	(1,629,000)	(7,049,000)
Net loss per share:		
Basic	\$(0.11)	\$(0.44)
Diluted	\$(0.11)	\$(0.44)

(5) Inventories

Inventories are summarized as follows:

	<u>December 31,</u> <u>2001</u>
Purchased parts and accessories	\$1,402,209
Work in process	219,765
Finished goods and service stock	<u>294,260</u>
Total inventories	<u>\$1,916,235</u>

(6) Notes Payable to Bank Under Line of Credit Facilities

The Company and its subsidiary, A-OK Controls, are parties to two loan and security agreements (the "Agreements") with a Wisconsin-based bank. The Agreements, as amended through February 2002, provide for a total of \$3.5 million in two lines of credit, a \$2.9 million term loan and a \$1.5 million special accommodation term loan for the purpose of the Company's acquisition of A-OK Controls on June 30, 2000. The Agreements provide for credit facilities through November 2003, and may be extended for an additional one-year period at the option of the Company, unless the lender gives prior notice of termination. See Note 8 for additional information concerning the term loans and the Agreements.

The amount available under the line of credit is limited by a borrowing formula that allows for advances up to a maximum of a specified percentage of eligible accounts receivable, less the amount, if any, of outstanding letters of credit issued by the Company. Based upon such borrowing formula, approximately \$30,000 of the available line is eligible for advance at December 31, 2001. Amounts borrowed under the line of credit facility total \$1,817,475 at December 31, 2001, and such borrowings bear interest at the prime rate plus 2.5% (7.25 % effective rate at December 31, 2001). The line of credit and the term loans (see Note 8) are collateralized by substantially all assets of the Company and a mortgage on the Company's Ann Arbor facility. Effective February 1, 2002, the senior bank lender increased the interest rate on the line of credit by 2.0% above the rate in effect as of December 31, 2001.

The Company's wholly owned subsidiary, Optimization, is party to a loan and security agreement with an Alabama-based bank. The agreement, amended through November 27, 2001, provides for a total line of credit of \$650,000 (the "Optimization line of credit"). The amount available under the Optimization line of credit is limited by a borrowing formula that allows for advances up to a maximum of the sum of specified percentages of eligible accounts receivable and inventory. Amounts borrowed under the Optimization line of credit facility total \$445,000 at December 31, 2001, and such borrowings bear interest at the prime rate plus .50% (5.25% effective rate at December 31, 2001), but not less than 5.0% per annum. Based upon such borrowing formula, \$42,000 of the available line is eligible for advance at December 31, 2001. The agreement, as amended through February 2002, provides for line of credit facility through April 30, 2002, at which time the Company anticipates that it will be renewed on no less than substantially the same terms and



conditions as the current facility. The Optimization line of credit is collateralized by substantially all assets of Optimization, a guaranty by Nematron and a partial guaranty by Optimization's president.

(7) Common Stock and Subordinated Debt

Common Stock Issuances

In December 2000, the Company issued 760,000 shares of Common Stock pursuant to a private placement to accredited investors, including three investors represented on the Board of Directors who purchased 735,000 of the total shares issued. Net proceeds after expenses associated with the issuance totaled \$914,251.

In May 2001, the Company issued 41,329 shares of Common Stock in return for investment banking services valued at \$28,000. In June 2001, the Company sold 250,000 shares of Common Stock at \$1.00 per share pursuant to a private placement.

Subordinated Debt

Subordinated debt consists of the following:

	December 31 <u>2001</u>
Convertible subordinated promissory notes, interest at 10% per annum, due August 31, 2001. Accrued and unpaid interest and the principal of the note may be converted into common stock at the lower of \$0.30 per share or the lowest closing price of the underlying common stock during the period the notes are outstanding.	\$1,200,000
Subordinated promissory notes, interest at 10% per annum, due on demand. The notes are callable by the Company at any time, and the notes may be converted into common or preferred stock if the Company issues such equity during the period the notes are outstanding.	<u>300,000</u>
Total	<u>\$1,500,000</u>

The subordinated notes due August 31, 2001 included detachable warrants. The warrants, which are non-assignable, allowed the holders to purchase Common Stock at \$0.30 per share (the "Per Share Warrant Price") at any time until March 31, 2006 (the "Warrants"). If at any time prior to the exercise of the Warrants the daily closing price of the Common Stock, as traded on the American Stock Exchange, falls below the Per Share Warrant Price for five consecutive days, the Per Share Warrant Price will be adjusted downward to the lowest price during such five trading day period. In the event that the Company completes the proposed equity offering at less than the Per Share Warrant Price, the holders have the option to exchange the Warrants for warrants to purchase a greater number of shares based on the difference between the Per Share Warrant Price and the proposed equity offering price per share. Because the Per Share Warrant Price was less than the closing price of the Common Stock, as traded on the American Stock Exchange, on the dates the notes were sold, the Warrants were ascribed a value of \$342,000 and such amount was credited to shareholders equity, and the Subordinated Notes were ascribed a value of \$858,000. The \$342,000 was charged to interest over the term of the Subordinated Note, resulting in a total non-cash charge to interest expense of \$342,000 between April 1, 2001 and August 31, 2001.

The beneficial conversion feature attributable to the difference between the ascribed value of the subordinated notes and the underlying number of common shares into which the notes could have

been converted also amounted to \$342,000 and has been charged to interest expense and credited to equity. The terms of the subordinated note agreements contemplated the conclusion of a stock offering prior to August 31, 2001, and absent this, the conversion rate would be set at \$0.30 per share. The offering did not occur, and as a result, the aggregate difference between the conversion price and the stock price at that date, amounting to \$200,000, was charged to interest expense and credited to equity.

The promissory notes discussed above are subordinated to the debt due to the Company's senior bank lender, and such notes are collateralized by a second mortgage on the Company's Ann Arbor facility. The agreements underlying the notes provide for detachable warrants that allow the Noteholders to purchase common stock at specified exercise prices for a five-year period from the date of issuance of the notes, as discussed in Note 12.

A total of \$750,000 of the convertible subordinated promissory note and all of the subordinated promissory notes were issued to an affiliate of one of the Company's Board members. At December 31, 2001, a total of \$96,795 of accrued interest has been accrued for these promissory notes, including \$62,493 on promissory notes due to the related party.

(8) **Long-Term Debt**

Long-term debt consists of the following:

	December 31, <u>2001</u>
Term loan payable to a bank, interest at prime plus 4.0% per annum (8.75% effective rate at December 31, 2001), payable in monthly installments of \$78,611 through May 2002. The term loan is collateralized by substantially all assets of the Company and a mortgage on the Ann Arbor facility.	\$ 389,166
Special accommodation loan payable to a bank, interest at prime plus 2.5% per annum (7.25% effective rate at December 31, 2001), payable in monthly installments of \$62,500 beginning June 2002 through August 2002, at which time the remaining principal and any interest thereon is due. The term loan is collateralized by substantially all assets of the Company and a mortgage on the Ann Arbor facility.	2,561,667
Other notes payable	<u>40,643</u>
Total long-term debt	2,991,476
Less current maturities	<u>(2,962,536)</u>
Total long-term debt, less current maturities	<u>\$ 28,940</u>

The Agreements, under which the Company has the line of credit with a Wisconsin-based bank (see Note 6) and the term loans, contain several financial covenants, including specified levels of tangible net worth, interest coverage and debt service coverage. The terms of the Agreement also prohibit the payment of dividends, limit the amount of annual capital expenditures and include other restrictive covenants. Although the Company is not in compliance with the tangible net worth, interest coverage and debt service coverage covenants as of December 31, 2001, the bank issued a forbearance letter to the Company in February 2002 concerning these covenant violations. In such letter, the bank has specifically reserved its right to take any action permitted under the Agreements in the future without any notice to the Company. The bank and management are in discussion to revise the Agreements and management is pursuing other solutions to the violations, including the private placement of additional capital. The Company has classified all debt with the bank as current liabilities.

Effective February 1, 2002, the senior bank lender increased the interest rate on the two term loans discussed above and on the line of credit discussed in Note 6 by 2.0% above the rate in effect as of December 31, 2001.

(9) **Taxes on Income**

The following reconciles the statutory federal income tax rate to the Company's effective tax rate:

	<u>Year Ended December 31,</u>	
	<u>2000</u>	<u>2001</u>
Income tax expense (benefit) based on the federal statutory rate	(34.0)%	(34.0)%
Generation (utilization) of net operating loss carryforwards	34.0 %	34.0 %
Effect of impairment, amortization of intangible assets and alternative minimum tax	<u>(13.3)%</u>	<u>0.0%</u>
Effective tax rate	<u>(13.3)%</u>	<u>0.0%</u>

The domestic and foreign components of loss before taxes on income are as follows:

	<u>Year Ended December 31,</u>	
	<u>2000</u>	<u>2001</u>
Domestic loss before taxes on income	\$(2,003,264)	\$(6,877,512)
Foreign loss before taxes on income	<u>(207,273)</u>	<u>(180,310)</u>
Total loss before tax benefit	<u>\$(2,210,537)</u>	<u>\$(7,057,822)</u>

Deferred income taxes result from temporary differences in the recognition of income and expenses for financial and income tax purposes. Temporary differences and net operating loss carryforwards, which give rise to the net deferred tax position, are as follows:

	<u>December 31,</u>
	<u>2001</u>
Deferred tax assets:	
Inventory valuation allowance	\$ 296,000
Accounts receivable allowance for doubtful accounts	23,000
Property and equipment, principally depreciation	209,000
Accrued expenses deductible when paid	107,000
Net operating loss carryforward	<u>8,419,000</u>
Total deferred tax assets	9,054,000
Deferred tax liabilities – capitalized software development costs and other intangible assets	<u>(446,000)</u>
Net deferred tax assets	8,608,000
Less valuation allowance against deferred tax assets	<u>(8,608,000)</u>
Net deferred tax position	<u>\$ -0-</u>

The valuation allowance against net deferred tax assets increased by \$541,000 and \$2,336,000 during the years ended December 31, 2000 and 2001, respectively.

At December 31, 2001, the Company has net operating loss carryforwards of approximately \$24,000,000, which expire at various dates between 2004 and 2021. Utilization of certain of these carryforwards is subject to annual limitations under current IRS regulations. The Company has established a valuation allowance for the estimated amount of the total limitation on the utilization of the net operating loss carryforwards. Realization of net deferred tax assets associated with the net

operating loss carryforwards is dependent upon generating sufficient taxable income prior to their expiration.

**(10) Loss Per Share**

The weighted average shares outstanding used in computing loss per share was 12,921,207 and 15,259,188 in 2000 and 2001, respectively.

For the years ended December 31, 2000 and 2001, outstanding options and warrants were not included in the computation of diluted loss per share because the inclusion of such securities is antidilutive. Information relative to the excluded options and warrants is as follows:

<u>Year Ended</u>	<u>Outstanding Options</u> <u>(See Note 11)</u>		<u>Outstanding Warrants</u> <u>(See Note 12)</u>	
	<u>Amount</u>	<u>Expiration</u> <u>Dates</u>	<u>Amount</u>	<u>Expiration</u> <u>Dates</u>
December 31, 2000	2,203,156	2003 to 2010	197,678	October 2002
December 31, 2001	2,162,942	2003 to 2011	1,111,314	2002 to 2006

**(11) Employee Benefit Plans**

1993 Stock Option Plan

The Company's 1993 Stock Option Plan (the "1993 Plan") provides for the granting of options to purchase a total of 950,000 shares of common stock to key employees. The exercise price for each option granted under the 1993 Plan cannot be less than the fair market value of the common stock on the date of the grant.

The 1993 Plan gives the Compensation Committee of the Board of Directors latitude in deciding the vesting period. Options generally vest either (a) one-third immediately and one-third on each successive anniversary date of the award, or (b) vest over three years at the rate of one-third per year beginning on the day after the first anniversary of the date of the award. Under provisions of the 1993 Plan, shares subject to an option award will become immediately exercisable upon a change in control of the Company. Options remaining unexercised on the tenth anniversary of the date of the grant will expire. No options may be granted after February 26, 2003. As of December 31, 2001, awards to purchase an additional 395,303 shares of common stock may be made under the 1993 Plan.

Long-Term Incentive Plan

The Company's Long-Term Incentive Plan (the "Incentive Plan"), adopted in April 1999, provides for the granting of awards to purchase a total of 1,250,000 shares of common stock to key employees and others. Awards may be made by the Compensation Committee of the Board of Directors in the form of incentive stock options, non-qualified stock options, restricted stock or performance shares, provided that the Committee may not grant options to any salaried employee during any three-year period to purchase more than 500,000 shares.

The exercise price for each option granted under the Incentive Plan cannot be less than the fair market value of the common stock on the date of the grant. The Incentive Plan's Committee has latitude in setting the vesting and exercise periods, but generally the options vest over a three-year period and have a ten-year term.

The Incentive Plan authorizes the Committee to grant restricted stock awards pursuant to which shares of Common Stock will be awarded, subject to restrictions on transfer that lapse over a period

of time or upon achievement of performance goals, as determined by the Committee. Participants who receive restricted stock grants are entitled to dividend and voting rights on the awarded shares prior to the lapse of restrictions on such awards.

The Committee is also authorized to grant performance share awards under the Incentive Plan that are payable at the discretion of the Committee in cash, shares of Common Stock, or a combination of each, upon achievement of performance goals established by the Committee. The Committee will determine the terms and conditions of restricted stock and performance share awards, including the acceleration or lapse of any restrictions or conditions of such awards. As of December 31, 2001, awards to purchase 589,950 shares of common stock may be made under the Incentive Plan.

Directors Option Plan

The Company's 1993 Directors Stock Option Plan (the "Directors Option Plan") provides for the granting of options to purchase a total of 120,000 shares of common stock. The exercise price for each option granted beginning April 1997 under the Directors Option Plan is equal to 110% of the closing price of the stock on the grant date. The exercise price for options granted prior to April 1997 was the greater of the fair market value or book value of the Company's common stock on the date of the award.

The Directors Option Plan provides that beginning April 1997, each qualified director will be granted an option to purchase 4,500 shares of common stock every three years. Prior to April 1997, each qualified director was granted annually an option to purchase 1,000 shares of common stock. Options granted in April 1997 or thereafter are exercisable in one-third increments beginning on the date of the grant. Options granted prior to April 1997 are exercisable at any time beginning six months after the date of the grant. Options expire five years from the date of the grant. As of December 31, 2001, an additional 36,008 options may be issued under the Directors Option Plan.

Special Option Grants

The Board of Directors has from time to time awarded special option grants to certain officers, key employees and others. The awards have been made separate from the plans described above. Information with respect to options under the plans and the special awards for the years ended December 31, 2000 and 2001, is as follows:

	<u>Outstanding</u>		<u>Exercisable</u>		Number Available For Grant
	Number Outstanding	Weighted Average Exercise Price	Number Exercisable	Wtd. Ave. Exercise Price	
Balance January 1, 2000	1,927,656	\$2.18	1,132,173	\$1.76	1,256,547
Granted	483,400	\$2.09			(483,400)
Exercisable			276,681	\$2.65	
Exercised	-				
Forfeited	<u>(207,900)</u>	\$2.07	<u>(4,300)</u>	\$2.50	<u>207,900</u>
Balance, December 31, 2000	2,203,156	\$2.14	1,404,554	\$1.99	981,047
Granted	390,000	\$0.84			(390,000)
Exercisable			339,313	\$2.24	
Exercised	-				
Forfeited	<u>(430,214)</u>	\$2.24	<u>(150,340)</u>	\$2.61	<u>430,214</u>
Balance, December 31, 2001	<u>2,162,942</u>	\$1.80	<u>1,593,527</u>	\$1.99	<u>1,021,261</u>

Information concerning outstanding options at December 31, 2001 is as follows:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number of Options Outstanding at 12-31-01	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number of Options Exercisable at 12-31-01	Weighted Average Exercise Price
\$0.75 to \$1.50	1,155,000	7.51 years	\$0.81	748,333	\$0.79
\$1.94 to \$2.75	896,200	7.62 years	\$2.48	733,452	\$2.53
\$3.00 to \$5.50	44,742	5.61 years	\$5.19	44,742	\$5.19
\$6.75 to \$8.75	<u>67,000</u>	5.06 years	\$7.51	<u>67,000</u>	\$7.51
Total	<u>2,162,942</u>	7.44 years	\$1.80	<u>1,593,527</u>	\$1.99

The Company applies APB - 25 in accounting for its stock option plans. Accordingly, no compensation cost has been recognized in the Company's financial statements. Had compensation cost been determined based on the fair value of such awards at the date of grant consistent with the provisions of SFAS No. 123, the Company's total and per share net loss would have been as follows:

	Year Ended December 31,	
	2000	2001
Net loss:		
As reported	\$(1,917,307)	\$(7,057,822)
Pro forma	\$(2,249,320)	\$(7,380,859)
Net loss per share:		
As reported	\$(0.15)	\$(0.46)
Pro forma	\$(0.17)	\$(0.48)

The fair values of options granted during periods presented were determined using the Black-Scholes option-pricing model based on the following assumptions:

	Year Ended December 31,	
	2000	2001
Risk-free interest rate	6.64%	5.26%
Dividend yield	0.00%	0.00%
Expected life	3 to 6 years	3 to 6 years
Expected volatility	106.16%	102.05%

The weighted average fair values of options granted during 2000 and 2001 were \$1.82 and \$0.63, respectively.

#### 401(k) Plan and Trust

The Company has established a defined-contribution retirement plans for all eligible employees. Participants may make basic contributions of up to 15 percent of their compensation, pursuant to section 401(k) of the Internal Revenue Code.

Under terms of the 401(k) plan in effect at Nematron, Nematron may make a basic matching contribution and a discretionary contribution to the 401(k) plan. Nematron's matching contribution is 100% of a specified percentage of each employee's contribution limited to the first 5% of the employee's base salary. Nematron's matching contributions were 2% from January to March 2000 and 3% from April 2000 to December 2001. A 401(k) plan participant becomes vested in Nematron's contribution on his or her behalf at a rate of 20% for each year of service beginning with

the completion of one year of service. The participant will be fully vested in Nematron's contributions in the event of his or her death, disability or normal retirement.

Under terms of the 401(k) plan in effect at A-OK Controls, A-OK Controls may make a basic matching contribution and a discretionary contribution to the 401(k) plan. A-OK Control's matching contribution is 50% of each participant's contribution to the 401(k) plan up to a maximum of \$2,500 per participant. A 401(k) plan participant becomes vested in A-OK Control's contribution on his or her behalf at a rate of 20% for each year of service beginning with the completion of two years of service. The participant will be fully vested in A-OK Control's contributions in the event of his or her death, disability or normal retirement.

The Company's Optimization subsidiary sponsors a Savings Incentive Match Plan for Employees of Small Employers ("SIMPLE Plan") under section 408(p) of the Internal Revenue Code. Under the SIMPLE Plan, all employees who receive at least \$4,000 in compensation are eligible to participate in the plan, and employee deferrals and employer matching contributions, up to a maximum of 3% of each participant's compensation, are contributed to each employee's SIMPLE IRA.

The Company's contributions to both of its 401(k) plans and the SIMPLE Plan were \$171,000 and \$231,000 for the years ended December 31, 2000, and 2001, respectively.

(12) Warrants

The Company has issued warrants for the purchase of its common stock in connection with the following transactions:

<u>Transaction</u>	<u>Warrants Issued</u>
Issuance of subordinated debt in 1995	197,678
Acquisition of Intec Controls on 1997	124,998
Issuance of subordinated debt in first quarter 2001	800,000
Issuance of subordinated debt in fourth quarter 2001	333,333

Information with respect to outstanding warrants is as follows:

	<u>Sub Debt - 1995</u>	<u>Intec Acquisition</u>	<u>Sub Debt Q1-2001</u>	<u>Sub Debt Q4-2001</u>	<u>Total</u>
Issue dates	11-07-95	03-20-97	03-31-01	10-05-01 to 12-05-01	
Exercise price	\$4.00	\$6.73	\$0.18	\$0.18	
Expiration dates	10-31-02	02-20-00	03-31-06	10-05-06 to 12-05-06	
Balance, 01-01-2000	197,678	124,998			322,676
Expired	-	(124,998)			(124,998)
Balance, 12-31-2000	197,678	-			197,678
Issued			800,000		800,000
Earned	-	-	-	333,333	333,333
Balance, 12-31-2001	<u>197,678</u>	<u>-</u>	<u>800,000</u>	<u>333,333</u>	<u>1,331,011</u>

(13) Commitments and Contingencies

The Company leases under operating leases its Auburn Hills and Saginaw, Michigan system integration facilities from the president of A-OK Controls, and leases its Lansing, Michigan, Foxboro, Massachusetts, Huntsville, Alabama and United Kingdom facilities, as well as certain office equipment, from unrelated entities. The leases on the facilities expire at various dates through December 2008, and the equipment operating leases expire at various dates through October 2003.

A summary of commitments under noncancelable leases as of December 31, 2001, is as follows:

	Related Party <u>Leases</u>	Third Party <u>Leases</u>	<u>Total</u>
Year ending December 31,			
2002	\$397,800	\$187,400	\$585,200
2003	397,800	70,500	468,300
2004	397,800	40,700	438,500
2005	397,800	39,900	437,700
2006	397,800	39,400	437,200
Thereafter	<u>618,800</u>	<u>69,000</u>	<u>687,800</u>
Total minimum lease obligations	<u>\$2,607,800</u>	<u>\$446,900</u>	<u>\$3,054,700</u>

Total rental expense was \$355,000 and \$618,300 for the years ended December 31, 2000 and 2001, respectively.

(14) Segment Information

The Company operates in one market segment – factory automation.

Net revenues include export sales to various countries. A summary of both foreign and domestic revenues is as follows:

	<u>Year Ended December 31,</u>	
	<u>2000</u>	<u>2001</u>
Foreign:		
France	\$ 1,525,060	\$ 1,168,437
Germany	1,830,439	236,297
Other countries	<u>1,983,720</u>	<u>632,016</u>
Total foreign revenue	5,339,219	2,036,750
United States	<u>15,081,533</u>	<u>15,505,016</u>
Total revenue	<u>\$20,420,752</u>	<u>\$17,541,766</u>

Long-lived assets include property and equipment, capitalized software development costs and other intangible assets. A summary of both foreign and domestic long-lived assets at depreciated or amortized cost is as follows:

	December 31, <u>2001</u>
Foreign countries	\$ 34,759
United States	<u>6,679,916</u>
Total	<u>\$6,714,675</u>



(15) Significant Customers

The Company conducts its business through distributors, end users and other entities under purchase orders, supply contracts and other agreements. Information with respect to significant customers is as follows:

<u>Year Ended</u>	<u>Number of Significant Customers</u>	<u>Revenues From Customer(s) During the Year</u>	<u>Accounts Receivable From Customer(s) at End of Year</u>
December 31, 2000	Two	\$7,230,000	\$1,749,000
December 31, 2001	One	\$6,888,000	\$1,175,000

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**QUARTERLY FINANCIAL DATA**  
For the Years Ended December 31, 2000 and 2001

	<u>1<sup>st</sup> Quarter</u>	<u>2<sup>nd</sup> Quarter</u>	<u>3<sup>rd</sup> Quarter</u>	<u>4<sup>th</sup> Quarter</u>	<u>Full Year</u>
<b>2000</b>					
Net revenue	\$5,238,888	\$3,857,531	\$6,249,149	\$5,075,184	\$20,420,752
Operating loss	(221,014)	(696,554)	(227,736)	(951,644)	(2,096,948)
Net income (loss)	89,059	(754,482)	(411,163)	(840,721)	(1,917,307)
Net income loss per share (basic and diluted)	\$0.01	\$(0.06)	\$(0.03)	\$(0.07)	\$(0.15)
<b>2001</b>					
Net revenue	\$4,785,350	\$4,764,477	\$4,358,366	\$3,633,573	\$17,541,766
Operating loss	(848,161)	(847,966)	(708,149)	(2,989,290)	(5,393,566)
Net income (loss)	(1,017,763)	(1,238,194)	(1,016,266)	(3,785,599)	(7,057,822)
Net income loss per share (basic and diluted)	\$(0.07)	\$(0.08)	\$(0.06)	\$(0.25)	\$(0.46)

**Selected FINANCIAL DATA**  
1997 Through 2001

<b>Operating Statement Data</b>	<u>Y/E</u> <u>12-31-01</u>	<u>Y/E</u> <u>12-31-00</u>	<u>Y/E</u> <u>12-31-99</u>	<u>Three Months</u> <u>12-31-98</u>	<u>Y/E</u> <u>9-30-98</u>	<u>Y/E</u> <u>9-30-97</u>
(1)	(2)	(2)	(2)	(3)	(2)	(2)
Net revenue	\$17,541,766	\$20,420,752	\$29,772,129	\$3,186,910	\$16,829,334	\$20,875,397
Cost of revenue	<u>16,273,116</u>	<u>15,388,939</u>	<u>19,991,704</u>	<u>2,084,915</u>	<u>13,986,019</u>	<u>19,291,081</u>
Gross profit	1,268,650	5,031,813	9,780,425	1,101,995	2,843,315	1,584,316
Operating expenses						
Product development	590,769	672,052	794,207	191,987	1,318,894	1,548,408
SG&A	6,071,447	6,456,709	6,471,046	1,323,945	18,926,090	8,338,411
Other charges	-	-	-	-	1,669,698	2,782,582
Total	<u>6,662,216</u>	<u>7,128,761</u>	<u>7,265,256</u>	<u>1,455,932</u>	<u>11,914,682</u>	<u>12,669,443</u>
Operating income (loss)	(5,393,566)	(2,096,948)	2,515,172	(353,937)	(9,071,367)	(11,085,117)
Interest and other	<u>(1,664,256)</u>	<u>(113,589)</u>	<u>(549,722)</u>	<u>(3,160,012)</u>	<u>(749,461)</u>	<u>(413,262)</u>
Income (loss) before tax	(7,057,822)	(2,210,537)	1,965,450	(3,513,949)	(9,820,828)	(11,498,379)
Income tax credit	-	293,230	43,200	10,800	811,000	-
Net income (loss)	<u>\$(7,057,822)</u>	<u>\$(1,917,307)</u>	<u>\$2,008,650</u>	<u>\$(3,503,149)</u>	<u>\$(9,009,828)</u>	<u>\$(11,498,379)</u>
Net income loss per share						
Basic	\$(0.46)	\$(0.15)	\$0.19	\$(0.65)	\$(1.69)	\$(2.33)
Diluted	\$(0.46)	\$(0.15)	\$0.18	\$(0.65)	\$(1.69)	\$(2.33)
Weighted ave. shares O/S						
Basic	15,259,188	12,921,207	10,753,844	5,353,316	5,345,889	4,933,939
Diluted	15,259,188	12,921,207	11,321,512	5,353,316	5,345,889	4,933,989
<b>Financial Position</b>	<u>12-31-01</u>	<u>12-31-00</u>	<u>12-31-99</u>	<u>12-31-98</u>	<u>9-30-98</u>	<u>9-30-97</u>
Current assets	\$5,682,347	\$7,754,116	\$7,206,239	\$4,296,275	\$5,271,220	\$10,276,081
Property and equipment	2,190,104	2,544,041	2,397,472	3,344,140	3,623,860	4,264,301
Capitalized software, net	886,286	3,369,660	3,617,553	3,880,284	3,942,695	2,724,819
Other intangibles, net	<u>3,636,780</u>	<u>3,212,345</u>	<u>861,375</u>	<u>942,158</u>	<u>1,002,225</u>	<u>3,008,547</u>
Total assets	<u>\$12,395,517</u>	<u>\$16,880,162</u>	<u>\$14,082,639</u>	<u>\$12,462,857</u>	<u>\$13,840,000</u>	<u>\$20,273,748</u>
Current liabilities	\$10,029,625	\$9,667,090	\$4,271,368	\$9,212,953	\$10,173,530	\$5,352,305
Long-term liabilities	29,940	-	2,841,668	2,360,983	2,273,346	4,595,378
Stockholders' equity	<u>2,336,952</u>	<u>7,213,072</u>	<u>6,969,603</u>	<u>888,921</u>	<u>1,393,124</u>	<u>10,326,065</u>
Total liabilities and equity	<u>\$12,395,517</u>	<u>\$16,880,162</u>	<u>\$14,082,639</u>	<u>\$12,462,857</u>	<u>\$13,840,000</u>	<u>\$20,273,748</u>

- (1) The Company changed its fiscal year in 1998 from September 30<sup>th</sup> to December 31<sup>st</sup>.
- (2) The Company's acquisitions of the following entities may affect the comparability of the data presented: Optimization, Inc. – March 30, 2001; A-OK Controls Engineering, Inc. – June 30, 2000; Virtual-Time Software, Inc. – June 20, 1997; and Intec Controls Corp. – March 31, 1997. See applicable financial statements
- (3) For the Transmission Period, interest expense includes \$3 million related to the beneficial conversion feature of convertible promissory notes issued during that period. See Note 7 to the 1999 financial statements.

## CORPORATE INFORMATION

### Board of Directors

Joseph J. Fitzsimmons	Chairman of the Board, Nematron Corporation Retired Executive, Bell and Howell Company
Hugo E. Braun	Partner, North Coast Technology Investors LP
Ronald C. Causley	President, A-OK Controls Engineering, Inc.
Matthew S. Galvez	President and CEO, Nematron Corporation
Stephen E. Globus	Chairman of the Board, Globus Growth Group Director, Plasmaco, Inc., a subsidiary of Matsushita (Panasonic)
James H. Wicker	Partner, Technology 2 Market Retired Executive, Ci Technologies, Inc.

### Management Team

Matthew S. Galvez	President and CEO, Nematron Corporation
Ronald C. Causley	President, A-OK Controls Engineering, Inc.
Jeffrey K. Crowell	Senior Executive
David P. Gienapp	Executive Vice President – Finance and Administration Secretary and Treasurer
David W. Hicks	Managing Director – Nematron Limited
James D. King	Vice President – Sales
Tina M. Raiford	Corporate Controller
Dennis A. Sierk	Vice President, Engineering and President, Optimization, Inc.

### Shareholder Information

Legal Counsel	Dykema Gossett PLLC 400 Renaissance Center Detroit, MI 48243
Independent Public Accountants	Grant Thornton LLP First Center Office Plaza, Suite 400 26911 Northwestern Highway Southfield, MI 48034
Transfer Agent	Registrar and Transfer Company 10 Commerce Drive Cranford, NJ 07016 Web site for inquiries and transactions: <a href="http://www.rtco.com">www.rtco.com</a>
2002 Annual Meeting	10:00 a.m. on May 14, 2002 Nematron Corporation 5840 Interface Drive Ann Arbor, MI 48103

Nematron Corporation  
5840 Interface Drive  
Ann Arbor, Michigan 48103

Tel: 1.734.214.2000

Fax: 1.734.994.8074

[www.nematron.com](http://www.nematron.com)

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