UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2003

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: 0-1649

NEWPORT CORPORATION

(Exact name of registrant as specified in its charter)

Nevada (State or other jurisdiction of incorporation or organization) 94-0849175 (IRS Employer Identification No.)

1791 Deere Avenue, Irvine, California 92606

(Address of principal executive offices) (Zip Code)

Registrant s telephone number, including area code: (949) 863-3144

Securities registered pursuant to Section 12(b) of the Act: None

Securities registered pursuant to Section 12(g) of the Act: Common Stock, Par Value \$0.1167 per share

Indicate by check mark whether the registrant: (1) has 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 x No "

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not 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-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2). Yes x No "

As of January 31, 2004, 39,233,080 shares of the registrant s sole class of common stock were outstanding. As of January 31, 2004, the aggregate market value of the common stock held by non-affiliates of the registrant was approximately \$575 million, calculated based upon the closing price of our common stock as reported by the Nasdaq Stock Market on June 30, 2003.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant s Proxy Statement for its Annual Meeting of Stockholders to be held on May 19, 2004 are incorporated by reference into Part III of this Annual Report on Form 10-K.

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This Annual Report on Form 10-K contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and we intend that such forward-looking statements be subject to the safe harbors created thereby. For this purpose, any statements contained in this Annual Report on Form 10-K except for historical information may be deemed to be forward-looking statements. Without limiting the generality of the foregoing, words such as may, will, expect, believe, intend, could, estimate, or continue or the negative or other variations thereof or comparable terminology are intended to identify forward-looking statements. In addition, any statements that refer to projections of our future financial performance, trends in our businesses, or other characterizations of future events or circumstances are forward-looking statements.

The forward-looking statements included herein are based on current expectations and involve a number of risks and uncertainties, all of which are difficult or impossible to predict accurately and many of which are beyond our control. As such, our actual results may differ significantly from those expressed in any forward-looking statements. Factors that may cause or contribute to such differences include, but are not limited to, those discussed in more detail in Item 1 (Business) of Part I and Item 7 (Management s Discussion and Analysis of Financial Condition and Results of Operations) of Part II of this Annual Report on Form 10-K. Readers should carefully review these risks, as well as the additional risks described in other documents we file from time to time with the Securities and Exchange Commission. In light of the significant risks and uncertainties inherent in the forward-looking information included herein, the inclusion of such information should not be regarded as a representation by us or any other person that such results will be achieved, and readers are cautioned not to place undue reliance on such forward-looking information to revise the forward-looking statements contained herein to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

PART I

Item 1. Business

General Description of Business

Newport Corporation is a global supplier of advanced technology products and systems to a wide range of industries, including semiconductor manufacturing and advanced packaging equipment, scientific research, aerospace and defense, life and health sciences and fiber optic communications. We provide:

components and integrated subsystems to manufacturers of semiconductor front-end processing equipment;

automated systems for semiconductor back-end packaging applications to integrated device manufacturers;

a broad array of high-precision components and instruments to commercial, academic and government customers worldwide; and

automated and manually operated assembly equipment to manufacturers of fiber optic components.

Our products leverage our expertise in precision robotics and automation, high-precision positioning systems, vibration isolation technology, precision optics, opto-mechanics and photonics instrumentation to enhance the capabilities and productivity of our customers manufacturing,

anticipat

engineering and research applications.

For over three decades we have serviced the needs of research laboratories for precision equipment. Since 1991, we have acquired a series of companies to expand our product offerings, technology base and geographic presence. Through these acquisitions and our internal development efforts, we have evolved from a provider of discrete components and instruments for research applications to a company that manufactures both components

and integrated systems for research and commercial applications. In particular, during 2001, we acquired Kensington Laboratories, Inc. (KLI), a manufacturer of high-precision robotic and motion control equipment primarily for the semiconductor equipment industry, and during 2002 we acquired Micro Robotics Systems, Inc. (MRSI), a manufacturer of high-precision, fully-automated assembly and dispensing systems for back-end packaging applications in the semiconductor, microwave communications and fiber optic communications markets. Both of these acquisitions significantly increased our product offerings and expertise in these areas. We pursue acquisitions of companies, technologies and complementary product lines that we believe will provide us with key technologies, give us access to new markets or otherwise further our strategic objectives. Conversely, from time to time we review our different businesses, including our acquired companies, to ensure that they are key to our strategic plans, and close or divest businesses that we determine are no longer of strategic importance. See Management s Discussion and Analysis of Financial Condition and Results of Operations Overview and Note 3 of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K.

Within the semiconductor industry, the manufacturing of devices is often divided into two areas front-end wafer processing and back-end packaging. Over the years, we have developed a significant presence as a supplier to top-tier equipment manufacturers for front-end applications, providing high-performance components and subsystems that enhance the performance of these customers products. More recently, we have become an integrated systems supplier for advanced back-end packaging applications. With well-designed and tested products, a flexible product portfolio and a strong intellectual property position, we now offer our customers advanced products for both front-end and back-end semiconductor manufacturing processes.

In addition to our presence in the semiconductor industry, we also supply components, instruments and subsystems to a broad range of other markets, including basic and applied scientific research, aerospace and defense and, increasingly, in life and health sciences. Our high-precision component and subsystem products are often incorporated into the products of our customers in these industries, enabling our customers to meet demanding performance requirements. We also provide high-performance components, instruments and subsystems to commercial, academic and governmental research institutions worldwide that engage in research and development activities.

We also continue to be a leading supplier of automated and manually operated equipment used to assemble and test fiber optic telecommunications and data communications devices. Our unique machines, which combine our proven technology with advanced computer software and our in-depth industry and process expertise, are used around the world to manufacture and test active and passive telecommunication components. These systems provide our customers with the flexibility required to facilitate the development of new components and manufacturing processes for next-generation telecommunications equipment.

Products and Services

We develop and sell a broad range of components, instruments, subsystems and systems to markets where high-precision, efficient manufacturing, test, measurement and assembly are critical. Our products are used in mission-critical applications in industries including semiconductor manufacturing, aerospace and defense, life and health sciences and fiber optic device manufacturing. We also provide high-performance components, instruments and subsystems to commercial, academic and governmental research institutions worldwide. We develop, manufacture and market our products within two distinct business segments, Industrial and Scientific Technologies and Advanced Packaging and Automation Systems.

Industrial and Scientific Technologies Division

Our Industrial and Scientific Technologies division s products and systems are used across a wide range of industrial markets in applications that range from basic research and development activities to high-precision manufacturing. In addition, we sell subsystems to third parties that integrate these products into larger systems, particularly for semiconductor manufacturing and life and health sciences applications. The division also offers

automated and manually operated equipment used to assemble and test fiber optic telecommunications and data communications devices, addressing applications from pre-test to assembly and packaging to final device testing. Our industrial and scientific products address markets including semiconductor equipment, scientific research, aerospace and defense, life and health sciences and fiber optic communications. We believe that purchasers of our Industrial and Scientific Technologies division s products develop an appreciation for the quality of our products which makes them more likely to buy integrated, automated systems from us as the need for production and test systems grows. In addition to the products that are developed and manufactured by this division, we also distribute certain products that are developed and manufactured by third parties on a private label basis. This allows us to select best-in-breed products in these product lines, and to maximize the efficiency of our research and development efforts. Our Industrial and Scientific Technologies division s product lines include:

Category	Products	Applications
Precision Micro-Positioning Devices, Systems and Subsystems	Precision air bearing stages	Precision positioning of semiconductor wafers for metrology and fabrication
	Motion systems	Sample sorting and sequencing for DNA research
	Linear and rotational stages	
	Elevational devices	High-precision positioning and motion control apparatus for manufacturing and test applications
	Actuators	Tracking and targeting test systems for aerospace and defense applications
	Simple and programmable motion controllers for linear stepping and direct current (DC) motors	Precision alignment in fiber optic, telecommunication and laser device assembly
	Manual fiber optic positioners	
Optics and Optical Hardware	Lenses	Deep ultraviolet illumination optics for semiconductor lithography
	Mirrors	Components for research and product development activities
	Prisms and windows	
		Blood cell analysis

Filters and attenuators

Laser systems

Collimators

Manual, high-precision alignment of optical instruments

Ultrafast laser optics

Electro-optical research

Beamsplitters and polarization optics

Optical systems

Optical mounts

Bases and brackets

Posts and rod systems

Laser-to-fiber couplers

Educational kits

Category	Products	Applications
Opto-Mechanical Subassemblies and Subsystems	Fast steering mirrors	Optical coherence tomography for non-invasive diagnostics
	Laser beam stabilization modules	Thin film measurement of semiconductor wafers for defect inspection
	Laser beam attenuators	
	Optics plates	Laser beam stabilization for industrial metrology applications
	Integrated electro-optical subsystems	High-speed cell sorting for genomic research
	Objective lens systems	Analytical instrumentation for life and health sciences
Photonics Instruments	Power meters	Measure optical power for free space and fiber-directed laser light
	Laser diode instruments	Temperature and current controllers for maintaining stability of laser diodes
	Optical spectrum analyzers	
	Photonics test systems	Characterization of light emitted by laser diodes, ion lasers and solid state lasers
	Optical detectors	Testing and qualification of optical fibers and passive fiber optic components
	Spectrometers	Environmental detection of hazardous bio-agents
	Ultrafast laser pulse measurement systems	Chemical composition analysis

Category	Products	Applications
Vibration Isolation Systems and Subsystems	Optical benches and support systems	Isolated floor for semiconductor lithography equipment
	Workstations	Foundation platforms for laser systems
	Active and passive isolation systems	Reduction of impact of external forces on high-precision research, manufacturing
	Honeycomb, granite and rigid structures	test and assembly systems
	Elastomeric mounts	Scanning electron microscope/atomic force microscope base isolation
		Workstation platforms for fiber optic device fabrication
Fiber Optic Device Assembly and Test Systems	Fiber alignment and attachment systems	Manual to fully automated assembly and packaging of fiber optic components, using welding, soldering and epoxy attachment techniques
	Laser diode characterization systems	
		Manual to fully automated testing of laser diodes

Subassemblies

We offer subassemblies that are a value-added combination of standard and custom products drawn from the components, optics, motion control and vibration isolation product lines. We combine these items with additional engineering to create more highly integrated products to meet customer needs. These products are often subsystems of our original equipment manufacturer (OEM) customers products. We believe that this subassembly capability gives us a significant competitive advantage by differentiating us from competitors that offer a more limited product selection. We have used our capabilities in this area to develop and supply subassemblies to customers in a number of industries, most notably semiconductor equipment and life and health sciences. These products range from low level subassemblies to complete finished products. For example, during 2003 we completed the joint development of a new bioanalyzer for research and drug discovery applications, combining our customer s expertise in flow cytometry and our expertise in optics, automation and system integration. We manufacture and supply the completed instrument to our customer.

Fiber Optic Device Engineering Services

Due to our extensive experience in fiber optic device assembly, packaging and testing technology, we have a deep knowledge base and expertise in the processes and technologies necessary to build high-precision fiber optic components. We apply this expertise to assist our customers in designing device packaging, developing manufacturing processes, developing and producing tooling and programming customized process automation software. These services help customers significantly reduce the development cycle for their products and improve the productivity, yields and quality of their manufacturing processes. In addition to helping customers become more productive, these services assist us in establishing a long-term relationship with our customers and

allow us to identify additional opportunities for new products. We also offer device manufacturing and packaging services to enable customers to design and test new products. We believe that the extent of our capabilities and services in this area provides us with a key competitive advantage over other capital equipment suppliers to this market.

Advanced Packaging and Automation Systems Division

Within the semiconductor industry, the manufacturing of integrated circuits is often divided into two areas front-end wafer processing and back-end packaging. Our Advanced Packaging and Automation Systems division offers a broad array of automation subsystem products for semiconductor front-end wafer processing applications, and also supplies complete turnkey systems for advanced back-end packaging applications. These high-performance products provide our customers with the speed, accuracy, repeatability and dependability required for high-throughput production environments.

Semiconductor Front-End Technologies

Our Advanced Packaging and Automation Systems division offers a broad array of products for front-end semiconductor process applications, including automated wafer handling subsystems such as atmospheric robots, load ports and wafer alignment stations. In addition, during 2003 we introduced a family of equipment front end modules (EFEMs), which are an integrated combination of our subsystem products. We are a leader in advanced wafer handling robotic systems technologies, and we are committed to developing and manufacturing atmospheric wafer handling robots, load ports and EFEMs that are among the highest performance, most reliable and most cost-effective in the industry.

Atmospheric Wafer Handling Robots. We sell a full range of atmospheric robots that automate the handling of semiconductor wafers in the ultra-clean environment of a process or inspection tool. We hold a number of issued and pending patents on state-of-the-art edge-gripping robotic end effectors that are critical to enabling semiconductor equipment manufacturers to efficiently and reliably handle 300-millimeter wafers without contacting the backside of the wafer, an important technique in reducing particle contamination and the resultant yield losses. Our wafer handling robots also feature our patented automated teaching technology, which allows the robot to be programmed more accurately and more consistently, reducing setup time. All of our 300-millimeter wafer handling robots incorporate our patented optical sensing technology in the end effector to maximize the accuracy of the robot while simplifying the setup and calibration process.

Load Ports. Our automatic door opener system (ADO) is a load port for 300-millimeter wafers that serves as the physical interface between a process or inspection tool and the fabrication environment, allowing wafers to be efficiently and reliably loaded into the tool while maintaining an ultra-clean environment. The ADO is easy to install, conforms to industry standards, and is compatible with popular wafer transport pods, known in the industry as front-opening universal pods, or FOUPs. We hold a number of issued and pending patents on various features of this technology, including our latchkey opening mechanism, our wafer scanning mechanism and our alignment technique. The ADO provides throughput performance that is among the highest in the industry under Class 1 clean room conditions.

Wafer Alignment Stations. Our edge-gripping wafer prealigner is a patented design based on our innovative edge-grip wafer handling technology. This product enables our customers to rapidly and precisely align 300-millimeter wafers prior to insertion into the process or inspection module of the capital equipment, without contacting the backside of the wafer. This reduces losses due to particle contamination of the wafer, helping to improve process yields.

Equipment Front End Modules (EFEMs). In late 2003, we introduced a series of EFEMs to the marketplace. These products combine our wafer handling robots, tracks, load ports and wafer prealigners with additional software and hardware engineering to produce an integrated front end to our

customers equipment. The EFEMs incorporate the patented automated teaching, wafer scanning and alignment features of our robot and load port products, require no factory adjustment and can be installed on our customers equipment in the field.

Advanced Packaging Systems

In February 2002, we acquired MRSI, a leading supplier of automated assembly and dispensing systems to the semiconductor packaging, microwave, aerospace and defense, life and health sciences and fiber optic communications industries. We offer a line of automated chip assembly equipment, including die bonding and flip chip bonding systems, as well as epoxy-dispensing and flip chip underfill systems, that are used to manufacture microwave, optical, radio frequency (RF) and multi-chip modules. Flip chip packaging is one of the fastest growing areas of semiconductor back-end packaging today, due to the strong growth in sales of handheld devices such as wireless PDAs and cellular phones, which increasingly incorporate system-on-a-chip package designs and chip-scale packaging methods to enable reductions in device sizes and improvements in device performance.

Automated Assembly Systems. Our MRSI-605 AP Ultra-Precise Assembly Work Cell provides users with a high-speed, high-precision solution for the automated assembly of a variety of microelectronic and optoelectronic devices, such as microwave modules, optical modules, hybrid circuits and multichip modules. We also offer the MRSI-5005 OPTO Optical Assembly Work Cell, which is specially designed to produce extremely precise placements required for certain photonics applications.

Automated Dispensing Systems. Our MRSI-175 family of products provides users with high-speed, high-performance solutions for a range of automated dispensing applications. The MRSI-175Ag Conductive Epoxy Dispensing System is designed to provide the process control and dispensing capability required for demanding applications such as microwave modules, optical modules, hybrid circuits, multichip modules, and semiconductor packaging. The MRSI-175UF Underfill Dispensing System is a high-speed, high-accuracy, automated dispenser designed for flip chip underfill applications.

Flip Chip Bonding Systems. In September 2003, we introduced our MACH FC Plus Flip Chip Bonder, a high-speed, high-accuracy system for the automated assembly of flip chip devices. The system performs the various process steps of picking, flipping, fluxing, vision alignment and controlled die placement with asynchronous parallel motion, maximizing the system s throughput. Some of its many advanced features include eight-micron placement accuracy, closed-loop placement force control, a patent-pending flux well and advanced vision and lighting.

Financial information regarding our two business segments, and our operations by geographic area, is included in Note 13 of the Notes to Consolidated Financial Statements included in this Annual Report on Form 10-K beginning on page F-28. A discussion of our net sales by end market and geographic area is included in Management s Discussion and Analysis of Financial Condition and Results of Operations.

Sales and Marketing

We market and sell our products and services through our domestic and international sales organizations, an international network of independent distributors and sales representatives, technical catalogs and our web site. Our domestic and international sales organizations are comprised of teams of field sales persons, which work closely with strategic account managers and internal sales support personnel based in Irvine, California and in France. Our OEM subsystem and capital equipment customers often have unique technical specifications and manufacturing processes, and may require specific system, subsystem or component designs. This requires close cooperation between our sales personnel and distributors and our engineering staff, and can result in long sales cycles for our subsystem and capital equipment products. As of January 31, 2004, we employed 56 persons in our domestic sales organization, and 51 persons in our international sales organization, located in Canada, France, Germany, Italy, the Netherlands, Singapore, Sweden, Taiwan, and the United Kingdom.

We currently engage 23 independent sales representatives and distributors that actively market and sell our products in certain markets outside of North America. We have written agreements with most of our representatives and distributors. In some cases we have granted representatives and distributors exclusive authorization to sell certain of our products in a specific geographic area. These agreements generally have terms of one year and are renewable on an annual basis, and are generally terminable by either party for convenience following a specified notice period. Most distributor agreements are structured to provide distributors with sales discounts below the domestic list price. Representatives are generally paid commissions for sales of products. No single independent representative or distributor accounted for more than 5% of our net sales in 2003.

We also market our standard products through our product catalog and web site. Our principal marketing tool for the scientific market is our comprehensive product catalog, The Newport Resource. This catalog, numbering approximately 1,300 pages, provides detailed product information as well as extensive technical and applications data. We publish this catalog in English, French, German and Japanese, and mail it to approximately 40,000 existing and potential customers. New product supplements are also distributed between publications. Our web site features an online catalog, providing customers with access to the latest information regarding our products, technical/tutorial and application related materials, sales information, a literature and information request form, and the ability to purchase a majority of our standard products.

Research and Product Development

We continually seek to improve our technological leadership position through internal research, product development and licensing, and acquisitions of complementary technologies. As of January 31, 2004, we had 111 employees engaged in research and development. We continually work to enhance our existing products and to develop and introduce innovative new products to satisfy the needs of our customers. In addition, we regularly investigate new ways to combine components manufactured by our various divisions to produce innovative technological solutions for the markets we serve. Total research and development expenses were \$18.1 million, or 13.5% of net sales, in 2003, \$24.4 million, or 14.9% of net sales, in 2002, and \$26.1 million, or 9.0% of net sales, in 2001. Research and development expenses attributable to our Industrial and Scientific Technologies division were \$9.8 million, or 8.9% of net sales to that segment, in 2003, \$10.5 million, or 9.0% of net sales to that segment, in 2002, and \$10.6 million, or 5.9% of net sales to that segment, in 2003, \$10.5 million, or 9.0%, of net sales to that segment, in 2003, \$10.6 million, or 9.0% of net sales to that segment, in 2003, \$10.6 million, or 9.0% of net sales to that segment, in 2003, \$10.6 million, or 9.0% of net sales to that segment, in 2003, \$10.6 million, or 9.0% of net sales to that segment, in 2003, \$10.6 million, or 9.9% of net sales to that segment, in 2003, \$10.9 million, or 9.9% of net sales to that segment, in 2003, \$10.9 million, or 9.0% of net sales to that segment, in 2003, \$10.9 million, or 29.8% of net sales to that segment, in 2002, and \$15.5 million, or 14.0% of net sales to that segment, in 2001.

We are committed to product development and expect to continue our investment in this area in the current and future years. We believe that the continual development or acquisition of innovative new products will be critical to our future success. Failure to develop, or introduce on a timely basis, new products or product enhancements that achieve market acceptance could have a material adverse effect on our business, operating results or financial condition.

Customers

We sell our products to a significant number of customers worldwide, in a wide range of diverse end markets, including semiconductor manufacturing and advanced packaging equipment, scientific research, aerospace and defense, life and health sciences and fiber optic communications. We believe that our diversification in this area minimizes our dependence on any single industry or group of customers. Sales during 2003 to two customers of our Advanced Packaging and Automation Systems division totaled \$8.3 million and \$3.0 million, respectively, which represented 32.9% and 11.8% of our net sales to that segment for the year, respectively. Sales during 2003 to each of these customers represented less than 10% of our consolidated net sales for the year. Sales during 2003 to one customer of our Industrial and Scientific Technologies division, KLA-Tencor Corporation, totaled \$13.8 million, which represented 12.6% of our net sales to that segment for the year, and 10.2% of our consolidated net sales for the year. We believe that our relationships with these customers

are good. However, if KLA-Tencor Corporation or any other key customer discontinues or reduces its relationship with us, or suffers downturns in its business, it could have a significant negative impact on our financial results on a short-term basis, and our business and results of operations could be harmed going forward if we are unable to sufficiently expand our customer base to replace the lost business.

Competition

The markets for our products are intensely competitive and characterized by rapidly changing technology. In our industrial and scientific technologies business, our primary competitors are currently Aerotech Inc., Anorad Corporation, Danaher Corporation and Physik Instrumente for our precision motion systems; Kinetic Systems, Inc., Melles Griot, Inc., and Technical Manufacturing Corp. for our vibration isolation products; CVI Laser Corporation, Corning Tropel Corporation, LINOS Photonics, Melles Griot, Inc., New Focus, Inc., OptoSigma Corporation, and Thorlabs, Inc. for our precision optics and opto-mechanical products; AOI Sansho, EXFO Electro-Optical, Inc., Palomar Technologies and Suruga-Seiki Co., Ltd., for our assembly automation systems; and Agilent Technologies, Inc., Ando Corporation, Anritsu Corporation, EXFO Electro-Optical Inc., Keithley Instruments, Inc., and Moritex Corporation for our test and measurement systems.

In the semiconductor market, for front-end processing applications, our primary competitors are currently Asyst Technologies, Inc., Brooks Automation, Inc., Genmark Automation, Inc., Kawasaki Heavy Industries, Ltd., and Yaskawa Electric Corp. for our wafer handling robots; and Asyst Technologies, Inc., Brooks Automation, Inc. and TDK Corporation for our load ports. For semiconductor back-end packaging applications, our primary competitors are Datacon Technology AG, ESEC, F&K Delvotech, and Palomar Technologies, for our automated assembly systems, and Asymtek, Cookson Electronics, Inc., and Protec Co., Ltd. for our dispensing systems.

In each of our businesses, we also face competition from certain of our existing and potential customers who have developed or may develop their own systems, subsystems and components.

We believe that the primary competitive factors in our markets are:

product features and performance;

quality, reliability and service support;

customer relationships;

ability to manufacture and deliver products on a timely basis;

pricing; and

ability to customize products to customer specifications.

We believe that we currently compete effectively with respect to each of these factors. However, we may not be able to compete successfully in the future against existing or new competitors.

We compete in various markets against a number of companies, some of which have longer operating histories, greater name recognition and significantly greater technical, financial, manufacturing and marketing resources than we do. In addition, some of these companies have long established relationships with our customers and potential customers in our markets. In addition to current competitors, we believe that new competitors, some of whom may have substantially greater financial, technical and marketing resources than us, will seek to provide products to one or more of our markets in the future. Such future competition could harm our business.

Intellectual Property and Proprietary Rights

Our success and competitiveness depends to an extent on our technology and other intellectual property such as trade secrets, patents and trademarks. We protect our technology by controlling access to our proprietary

information and by maintaining confidentiality agreements with our employees and consultants and our customers and partners, and, in some cases, through the use of patents, trademark registrations, and licenses. We have been granted a number of patents in the U.S. and foreign jurisdictions. We also have trademarks registered in the U.S. and foreign jurisdictions. We actively pursue applications for new patents and trademarks as we deem appropriate.

It is possible that, despite our efforts, other parties may use, obtain or try to copy our products and technology. Policing unauthorized use of our products and technology is difficult and time consuming. We cannot guarantee that the steps we take to protect our rights will prevent any misappropriation of our products or technology. This is particularly the case in foreign jurisdictions, where the intellectual property laws may not afford our intellectual property rights the same protection as the laws of the United States. In addition, infringement, invalidity, right to use or ownership claims by third parties may be asserted against us in the future, which claims could materially harm our business, operating results or financial condition, regardless of the outcome.

Manufacturing

We assemble, test and package components and systems at domestic manufacturing facilities located in Irvine, California; Richmond, California; North Billerica, Massachusetts; and Chandler, Arizona, and at our international manufacturing facilities in Beaune-la Rolande, France and Brigueuil, France. In addition, we subcontract the manufacture of various products and components to a number of third-party subcontract manufacturers.

Our manufacturing processes are diverse and consist of: purchasing raw materials, principally stainless steel, aluminum and glass; processing the raw materials into components, subassemblies and finished products; purchasing components, assembling and testing components and subassemblies; and, for our larger products, assembling the subassemblies and components into integrated systems. We primarily design and manufacture components internally, although on a limited basis, we purchase completed products from certain third-party suppliers and resell those products through our distribution system. Most of these completed products are produced to our specifications and carry our name and logo.

We currently procure various components from single-sources due to unique component designs as well as certain quality and performance requirements. In addition, we manufacture certain components internally, and there are no readily available third-party suppliers of these components. If single-sourced components were to become unavailable or were to become unavailable on terms satisfactory to us, we would be required to purchase comparable components from other sources. While we believe that we would be able to obtain comparable replacement components from other sources in a timely manner, if we are unable to do so our business, results of operations or financial condition could be adversely affected.

We have not incurred material expenses related to environmental compliance in past periods, and, due to the nature of our businesses, do not expect to incur such expenses in the future.

Backlog

Our total consolidated backlog of orders totaled \$36.3 million and \$33.9 million at December 31, 2003 and 2002, respectively. As of December 31, 2003, \$33.5 million of our consolidated backlog was scheduled to be shipped on or before December 31, 2004. Orders for many of the

products we sell to the semiconductor equipment market, which comprise a significant portion of our sales, are often subject to cancellation or rescheduling by the customer, and we have from time to time experienced significant cancellations and pushouts of orders from these markets, which negatively affected our operating results in those periods. In addition, because we manufacture a significant portion of our standard catalog products for inventory, we often make shipments of these products upon or within a short time period following receipt of an order. As a result, our backlog of orders at any particular date may not be an accurate indicator of our sales for succeeding periods.

Investments

In addition to the ownership of subsidiaries detailed in Exhibit 21.1 to this Annual Report on Form 10-K, we from time to time make investments in companies involved in developing products and technologies related to our business, and we currently hold minority ownership interests in a number of small, privately-held companies. These investments are designed to further our strategic objectives and to support our key business initiatives. We want to support growth in new technologies, particularly those related to our strategic markets, in order to create and expand markets for our products. While financial returns are not our primary goal, our strategic investment program seeks to invest in companies that can succeed and have a positive impact on their markets. During 2003, we invested \$3.7 million to acquire 19.9% of NEXX Systems, Inc., a privately-held developer and manufacturer of flip chip processing equipment located in Billerica, Massachusetts, to continue to expand our participation in the flip chip packaging market. At December 31, 2003, the carrying value of our investments totaled \$5.4 million.

Investments in technology companies involve significant risks, including the risks that such companies may be unable to raise additional required operating capital on acceptable terms or at all, or may not achieve or maintain market acceptance of their technology or products. In the event that any of such risks occurs, the value of our investment could decline significantly. In addition, because there is no public market for the securities we acquire, our ability to liquidate our investments is limited, and such markets may not develop in the future. In 2002, two fiber optic component manufacturers in which we had made minority investments in prior years experienced severe financial difficulties. Each manufacturer has shut down its business and liquidated its assets. As a result, in 2002 we recorded an asset write-down of \$6.5 million relating to these investments. In the event that we are required to write-down the carrying value of one or more of our investments in the future, our earnings could be materially and adversely affected.

Employees

As of January 31, 2004, we had 942 employees worldwide. None of our employees are represented by a union. We believe that our relationships with our employees are good.

Availability of Reports

We make available free of charge on our web site at www.newport.com our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to such reports, as soon as reasonably practicable after such reports are electronically filed with, or furnished to, the Securities and Exchange Commission. We will also provide electronic or paper copies of such reports free of charge, upon request made to our Corporate Secretary.

Item 2. Properties

Our corporate headquarters is located in Irvine, California. We lease this facility under a lease expiring in February 2012. Our primary manufacturing operations for each of our divisions are located in the following facilities:

Division	Primary Facility Locations	Approximate Facility Size
Advanced Packaging and Automation Systems	Chandler, Arizona	20,000 square feet
- ,	Richmond, California	139,000 square feet
	North Billerica, Massachusetts	48,000 square feet
Industrial and Scientific Technologies	Irvine, California	273,000 square feet
	Beaune-la Rolande, France	86,000 square feet
	Brigueuil, France	44,000 square feet

We own a portion of our Beaune-la Rolande, France facility. We lease all other facilities under leases with expiration dates ranging from 2006 to 2030. In addition to these primary facilities, we lease 12 facilities worldwide for administration, research and development, sales and/or service. We believe that our facilities are adequate for our current needs and that suitable additional or substitute space will be available in the future on commercially reasonable terms to accommodate expansion of our operations.

Item 3. Legal Proceedings

From time to time, we may be involved in litigation relating to claims arising out of our operations in the normal course of business. We currently are not a party to any legal proceedings, the adverse outcome of which, in management s opinion, individually or in the aggregate, would have a material adverse effect on our results of operations or financial position or cash flows.

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

No matters were submitted to a vote of security holders during the fourth quarter of the year ended December 31, 2003.

PART II

Item 5. Market for the Registrant s Common Equity and Related Stockholder Matters

Price Range of Common Stock

Our common stock is traded on the Nasdaq National Market under the symbol NEWP. As of January 31, 2004, we had 1,229 common stockholders of record based upon the records of our transfer agent which do not include beneficial owners of common stock whose shares are held in the names of various securities brokers, dealers and registered clearing agencies. The following table reflects the high and low sales prices of our common stock for each quarterly period during the last two fiscal years:

Quarter Ended		Low	
December 31, 2003	\$ 17.57	\$ 14.14	
September 30, 2003	19.18	14.02	
June 30, 2003	16.67	11.41	
March 31, 2003	14.99	10.49	
December 31, 2002	14.95	8.96	
September 30, 2002	19.40	10.90	
June 30, 2002	26.43	14.21	
March 31, 2002	27.47	18.50	

Dividends

We declared no dividends on our common stock during 2003 or 2002. We do not intend to pay cash dividends in the foreseeable future, however, we will periodically review this issue in the future based on changes in our financial position and investment opportunities, as well as any changes in the tax treatment of dividends.

Item 6. Selected Financial Data

The table below presents selected consolidated financial data of Newport and our subsidiaries as of and for the years ended December 31, 2003, 2002, 2001, 2000, and 1999. The financial data presented incorporates the results of operations and financial position of Unique Equipment Co. (Unique) and KLI, which merged with Newport in 2000 and 2001, respectively, and the transactions have been accounted for as poolings of interests for all periods presented. This data has been derived from our audited consolidated financial statements and should be read in conjunction with the full consolidated financial statements and associated notes and with Management s Discussion and Analysis of Financial Condition and Results of Operations for such periods.

		As of or for the Years Ended December 31,			
	2003	2002	2001	2000	1999
(In thousands, except percentages)					
Net sales	\$ 134,789	\$ 163,994	\$ 289,963	\$	