

ONE OF THE WORLD'S

LARGEST MANUFACTURERS of discrete semiconductors and passive components

RIN54

VISHAY INTERTECHNOLOGY, INC.

is one of the world's largest manufacturers of discrete semiconductors and passive electronic components. These components are used in virtually all types of electronic devices and equipment. Vishay participates in multiple markets, including automotive, communications, consumer, computer, industrial, medical, military, and aerospace. Vishay works closely with strategic partners worldwide and has a strong presence in Asia. Sales to customers in Asia represent over one-third of Vishay revenues.

Vishay's diverse product portfolio — one of the broadest in the industry — helps provide relative stability during business cycles. Vishay's world-wide sales rank as number-one or number-two in many different product categories, and Vishay has many product patents and trademarks. Vishay's strategy of providing one-stop shopping to customers, innovations in technology, superior product quality, successful acquisition strategy, and focus on cost reduction have made it a global industry leader.

www.vishay.com

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FINANCIAL HIGHLIGHTS

AS OF AND FOR THE YEAR ENDED DECEMBER 31 (In thousands, except per share amounts)	2002	2001	2000
Net sales	\$1,822,813	\$ 1,655,346	\$ 2,465,066
Operating (loss) profit	(79,948) ****	14,250 ***	696,498
Net (loss) earnings	(92,614) *	513 *	517,864
Depreciation and amortization	180,748	163,387	140,840
Basic (loss) earnings per share	\$ (0.58) *	\$ 0.00 *	\$ 3.83
Diluted (loss) earnings per share	\$ (0.58) *	\$ 0.00 *	\$ 3.77
Weighted average shares outstanding – basic	159,413	141,171	135,295
Weighted average shares outstanding – diluted	159,413	142,514	137,463
Cash flows from operations	\$ 366,871	\$ 161,418	\$ 542,319
Working capital	897,456	1,096,034	1,057,200
Property and equipment – net	1,274,850	1,167,533	973,554
Long-term debt	706,316	605,031	140,467
Stockholders' equity	\$2,358,787	\$ 2,366,545	\$ 1,833,855



- * Includes charges for the sale of a subsidiary and a German tax rate change of \$14,562,000 (\$0.11 per share) for the year ended December 31, 1999, and restructuring expenses and unusual charges of \$136,103,000 (\$0.85 per share), \$118,776,000 (\$0.84 per share), and \$55,335,000 (\$0.44 per share) for the years ended December 31, 2002, 2001 and 1998, respectively.
- ** Darker shade in graphs excludes charges for the sale of a subsidiary and a German tax rate change of \$14,562,000 (\$0.11 per share) for the year ended December 31, 1999, and restructuring expenses and unusual charges of \$136,103,000 (\$0.85 per share), \$118,776,000 (\$0.84 per share), and \$55,335,000 (\$0.44 per share) for the years ended December 31, 2002, 2001 and 1998, respectively.
- *** Excluding the write-down of inventories (\$70,000,000), restructuring expense (\$61,908,000), and purchased research and development (\$16,000,000), operating profit would have been \$162,158,000.
- **** Excluding the write-down of inventories (\$30,856,000), restructuring expense (\$30,970,000), and loss on long-term purchase commitments (\$106,000,000), operating profit would have been \$87,878,000.

TO OUR SHAREHOLDERS, EMPLOYEES, CUSTOMERS, AND VENDORS

YEAR 2002

Year 2002 was another difficult year for the entire electronics industry. Vishay, like other electronic component manufacturers, faced problems related to market demand, inventory, pricing, and other factors. Nevertheless, despite the ongoing industry-wide downturn, Vishay continued to generate cash, increase market penetration, and make strategic acquisitions.

As stated in last year's Annual Report, "We will continue to pursue acquisition opportunities to facilitate the growth of our business and to strengthen our position in the markets we serve. This is consistent with Vishay's historic ability to maintain a competitive edge throughout economic cycles. In the year 2002 and beyond, we will continue to build on our position as a leader in the U.S., European, and Asian electronics markets."

In this light, in December 2002 Vishay completed its acquisition of BCcomponents Holdings B.V., a leading manufacturer of passive components with a strong market position in Europe and Asia. Its product lines complement Vishay's passive component product lines and include additional products, such as miniature aluminum capacitors, thermistors of the PTC type, and varistors. The acquisition also provided passive component manufacturing plants in China and India. These plants, our first ones for passive components in China and India, will strengthen considerably our market position in Asia by making Vishay more cost-competitive and bringing us closer to our customers in Asia. Vishay already has had, for several years, discrete semiconductor manufacturing facilities in Asia, with plants in China, Taiwan, the Philippines, and Malaysia. Now we also have plants in Asia for passive components.

We are very excited about the opportunities presented by the BCcomponents acquisition, which, barring extraordinary events, should add approximately \$250 million in sales during year 2003.

During 2002, Vishay also expanded into the measurement and weighing markets by making a series of small acquisitions: Sensortronics (in January 2002), Tedea-Huntleigh (in June 2002), the BLH and Nobel businesses of Thermo Electron Corporation (in July 2002), and Celtron Technologies (in October 2002). Our Vishay Measurements Group unit already was the world's largest manufacturer of strain gages, which are sold into the global transducers market. With these

acquisitions, which are being consolidated into Vishay Measurements Group, we have implemented a strategy of vertical market integration. Vishay now manufactures and markets strain gages (which are used in transducers), the transducers themselves (metallic structures to which strain gages are cemented), and the electronic instruments and systems that use transducers to measure and control output.

The global market for transducers, instruments, and systems that measure the output of transducers is estimated to be over \$1.5 billion [Company estimate]. Because this market is relatively fragmented, and because Vishay is now a vertically integrated player in it, Vishay is well positioned to increase market share.

FINANCIAL HIGHLIGHTS

For the year ended December 31, 2002, sales were \$1,822,813,000 compared to sales of \$1,655,346,000 in the previous year, an increase of 10%. Before restructuring charges and other unusual items of \$169,800,000, net earnings for the year ended December 31, 2002 were \$43,489,000 or \$0.27 per share as compared to net earnings of \$119,289,000 or \$0.84 per share, for the year ended December 31, 2001. After the restructuring charges and other non-recurring items of \$169,800,000, the net loss for the year ended December 31, 2002 was \$(92,614,000) or \$(0.58) per share. Non-recurring items incurred during 2002 include a write-down of current inventory of tantalum and a pre-tax loss on long-term purchase commitments for tantalum in excess of market price in the amount of \$106,000,000.

Cash generation is critical, especially during difficult times. The Company continued to generate cash from operations during year 2002. In fact, for the year ended December 31, 2002, the Company's cash flow from operations was \$366,871,000. Purchases of property and equipment for the year ended December 31, 2002 were \$110,074,000.

The long-term debt of the Company was \$706,316,000 at December 31, 2002 and the stockholders' equity at December 31, 2002 was \$2,358,787,000 resulting in a debt to equity ratio of 0.30. Our cash balance at December 31, 2002 was \$339,938,000.

LOOKING AHEAD

We expect our cash generation to continue during 2003 and beyond, giving us the ability to make acquisitions. Revenues from our specialty products help to offset the impact of price erosion for many of our commodity products. Our broad product line and global footprint allow us to be a one-stop shop for discrete semiconductors and passive components, from single-source and specialty components to commodity products.

The ongoing industry-wide downturn has a positive side, as it lowers the cost to Vishay of potential acquisition targets. We acquired the former Infineon infrared components group and General Semiconductor in 2001, and successfully integrated them with our former Vishay Telefunken operations into the new Vishay Semiconductors unit in 2002. These acquisitions contributed strongly to our cash generation in the last year. We acquired BCcomponents at the end of 2002 and anticipate immediate cost savings and increased revenues during 2003. Also, I expect that the integration of the recently acquired transducer companies into Vishay Measurements Group will increase our revenues and earnings, and will provide an additional avenue of growth.

Another area where Vishay's growth during 2002 set the stage for future growth is Asia. During 2002, Vishay's revenues in Asia increased to 38% of our total global revenues. We expect our growth in Asian sales to continue during year 2003 and beyond, as Asia, particularly China, assumes an increasingly important role in the global electronics industry — not just in manufacturing, but in product design and development as well. Our acquisition of BCcomponents during 2002 — like our acquisitions of General Semiconductor (2001), the Infineon infrared components group (2001), Telefunken and 80.4% of Siliconix (1998), and the transducer companies Celtron and Tedea-Huntleigh (2002) — brought with it manufacturing and sales locations in Asia. Vishay's ongoing penetration of the Asian market involves close cooperation with local and regional sales channel partners in mainland China, Hong Kong, Taiwan, India, and elsewhere.

In March 2003, Marc Zandman was named Vice Chairman of the Board of Directors of Vishay, along with existing Vice Chairman Avi Eden. While I have no current plans for retirement, in a company with the size, worldwide presence, and technological sophistication of Vishay, it is prudent to plan for the future. I believe that the present management team of Avi Eden, Gerald Paul, Richard Grubb, and Marc Zandman assures the Company of having the strong strategic and operational direction it will need in the future. The appointment of Marc as Vice Chairman will now provide for an orderly succession of experienced leadership at the top, with Avi assuming the

Chairmanship, depending on the timing of my retirement, and Marc following thereafter.

During year 2003, as in the past, Vishay will continue to develop and introduce new manufacturing techniques, products, technologies, and packaging methods. In



2002, our Siliconix unit introduced 127 new products and achieved 857 new design-wins with customers. Our other semiconductor unit (Vishay Semiconductors) and our passive component units also introduced many new products and achieved design-wins, thus ensuring that Vishay components will be used in new generations of end products such as laptop computers, automotive subsystems, computer game systems, home appliances, televisions, and many other end products. Vishay, with over four decades of technology leadership, remains firmly committed to product innovation.

When the electronics industry recovers from the current downturn, Vishay will be well positioned for enhanced growth. Meanwhile, and without having to wait for the upturn, Vishay will do what we have done during all economic cycles, both good and bad: roll out new and innovative products, generate cash, explore opportunities for strategic acquisitions, maintain our focus on cost reduction, and strengthen our relationships with customers and strategic partners.

We are very grateful to our employees, customers, and suppliers, all of whom worked very hard to meet the challenges of 2002. To our stockholders, thank you sincerely for your confidence in Vishay during the past year, a difficult one for the entire electronics industry. We look forward to renewed growth and new accomplishments during 2003 and beyond.

Sincerely

Felix Zandman

Chairman of the Board and Chief Executive Officer April 2003

ESSENTIAL BUILDING BLOCKS OF ELECTRONICS

Inside all electronic products — cell phones, computers, medical devices, industrial equipment, and just about everything else that runs on electricity — are tiny chips and other components. Highly complex chips called microprocessors, sometimes referred to as the "brains" of many electronic products, coordinate and control their functions. Supporting the work of microprocessors are discrete semiconductors and passive components.

Vishay manufactures discrete semiconductors and passive components that play key supporting roles and serve as "building blocks" of all electronic circuits. Vishay offers one of the industry's widest varieties of discrete semiconductors and passive components and sells them to customers in all major industries. Every day, throughout the world — in homes, offices, factories, hospitals, highways, airports, and military bases — people depend on electronic components manufactured by Vishay.

- DISCRETE SEMICONDUCTORS (diodes, transistors, and optoelectronic components) typically perform a single function in electronic circuits. They switch, amplify, or rectify and transmit electrical signals. (Vishay also makes selected integrated circuits, which perform multiple functions.) Semiconductors are referred to as "active" components because they require power to function.
- PASSIVE COMPONENTS (resistors, capacitors, inductors) do not require a power supply to handle the signals that pass through them. Passive components are used to store electrical charges, to limit or resist electrical current, and to help in filtering, surge suppression, measurement, timing, and tuning applications.
- STRESS SENSORS AND TRANSDUCERS manufactured by Vishay include a variety of types of components, materials, and systems for detecting, measuring, and displaying structural stresses, loads, force, and pressure. (See page 9 for more information.)

▶ 1. RECTIFIERS

Rectifiers are semiconductors that convert alternating current (AC) into direct current (DC), a unidirectional current required for operation of many electronic systems. For example, a bridge rectifier is used in a clock radio to change the AC voltage from a wall outlet to a specific DC voltage.

▶ 2. DIODES

Diodes are semiconductors that allow current to travel in only one direction. Different types of diodes perform different functions. These include emitting visible light (light-emitting diodes, or LEDs), emitting infrared energy (infrared diodes for remote control), voltage regulation (Zener diodes), switching (switching diodes), and surge protection (suppressor diodes).

▶ 3. MOSFETs

Metal-oxide-semiconductor field-effect transistors (MOSFETs) are made up of many individual transistors (as many as several million) on one piece of silicon. Power MOSFETs conserve power and prevent components from heating up. Vishay Siliconix TrenchFET* power MOSFETs use innovative silicon and packaging technologies to switch and manage power very efficiently.

▶ 4. TRANSISTORS

Transistors are semiconductors that amplify, rectify, and switch analog signals, radio frequency signals, and power. Vishay manufactures both individual transistors and multiple-transistor components, including junction field-effect transistors (JFETs), metal-oxide-semiconductor field-effect transistors (MOSFETs), and bipolar junction transistor (BJTs).

► 5. OPTOELECTRONIC COMPONENTS

Optoelectronic components emit or detect light in electronic circuits. Types include infrared data communications devices (IRDCs) for two-way data transfer; optocouplers for circuit isolation; infrared (IR) emitters for one-way remote control; optical sensors for detection; and LEDs for light sources.

► 6. INTEGRATED CIRCUITS (ICs)

Integrated circuits (ICs) take the functions of discrete semiconductors and passive components and combine them on a single chip. These may include "on-board" transistors, diodes, resistors, capacitors and other circuit components. Unlike discrete semiconductor components, which usually perform one function (such as switching), ICs can perform multiple functions.



▶ 7. CAPACITORS

Capacitors are passive components that store energy and discharge it when needed. Applications include power conversion, DC-linking, frequency conversion, bypass, decoupling, and filtering. Types of capacitors manufactured by Vishay include tantalum (both solid and wet), ceramic (both multilayer chip and disk), film, power, heavy-current, and aluminum, as well as high-performance, high-precision silicon-based capacitors.

▶ 8. RESISTORS

Fixed and variable resistors are passive components that restrict current flow. Vishay manufactures many different types of resistive products, including single (discrete) resistors based on foil, thin film, thick film, metal oxide film, carbon film, and wirewound technologies, as well as resistor networks and arrays, in which multiple components are combined in a single package. Vishay also manufactures thermistors (thermally sensitive resistors) and varistors, which are used to suppress sudden voltage increases. Thermistors and varistors are categorized as non-linear resistors.

▶ 9. INDUCTORS

Inductors are passive components that use an internal magnetic field to change or resist current. Inductor applications include controlling AC current and voltage and filtering out unwanted electronic signals. Inductors and transformers (two inductors on a common core of magnetic material, which step AC current up or down) are categorized as magnetics.

▶ 10. INTEGRATED MODULES

Integrated modules combine different components in a single package to save space, reduce assembly costs, and increase reliability. Vishay FunctionPAK™ dc-to-dc converter modules include all the active and passive components required for a complete power conversion solution in a single package that can be mounted directly to a circuit board.

► 11. STRESS SENSORS AND TRANSDUCERS

Vishay Measurements Group, a unit of Vishay, manufactures a very wide range of stress sensors and transducers for converting physical variables such as force, pressure, and displacement into measurable electrical signals. These include electrical resistance strain gages for both stress analysis testing and transducer manufacturing applications; instrumentation; hybrid strain gage assemblies; transducers for original equipment manufacturer (OEM) applications; certified load cells for electronic scales and other weighing applications; and PhotoStress* products, which use a unique optical technology to reveal and measure structural stresses.

VISHAY STRATEGIC ACQUISITIONS



INNOVATIVE PRODUCTS, EXPERIENCED MANAGEMENT

Vishay, a leader in technology for over 40 years, remains firmly committed to product innovation. The research and development (R&D) efforts of Vishay scientists and engineers lead to new manufacturing techniques, technologies, and packaging methods, and make possible a steady stream of new products.

Vishay's broad product portfolio includes commodity and specialty products, many of which are protected by patents and trademarks. Specialty products help to stabilize Vishay's revenue base and reduce the impact of industry business cycles. This is especially important during industry downturns, when pricing pressure on commodity products intensifies. New products help Vishay maintain its competitive marketing advantage.

Vishay's experienced management team uses strict criteria to evaluate each potential acquisition, and has a successful track record of acquiring companies and businesses that soon become accretive to earnings. Examples include General Semiconductor and the infrared components business of Infineon Technologies, both acquired during 2001. BCcomponents, the passive component manufacturer acquired in December 2002, is being rapidly integrated by Vishay to maximize its positive impact on earnings. The same applies to our transducer acquisitions.

VISHAY MISSION STATEMENT

PROVIDE OUR CUSTOMERS WITH:

- a single manufacturing source (one-stop shopping) for discrete semiconductors and passive components
- quality state-of-the-art products at competitive prices
- · a continuous stream of new products
- · superior customer service worldwide

PROVIDE OUR SUPPLIERS WITH:

· reliable long-term relationships

PROVIDE OUR SHAREHOLDERS WITH:

· a good return on their investment

PROVIDE OUR EMPLOYEES WITH:

- · responsible and ethical leadership
- · a creative working environment
- · responsible community membership at all Vishay locations

Vishay maintains a relentless focus on cost-cutting. Each acquisition makes possible reduction of administrative overhead, new manufacturing efficiencies, enhanced crossselling of semiconductors and passive components, and increased market penetration. Even during difficult times, Vishay is able to generate substantial cash from operations and maintain a strong balance sheet.

VISHAY BLUE-CHIP CUSTOMER BASE

ALCATEL	DELPHI	IBM	RYODEN	THOMSON
ARROW	DELTA	INTEL	SAMSUNG	TOMEN
AVNET/EBV	DYNAMAR	JABIL	SANMINA-SCI	TTI
BOSCH	ERICSSON	LG ELECTRONICS	SEAGATE	UPPERTECH
CELESTICA	FLEXTRONICS	MOTOROLA	SIEMENS	VISTEON
DAIMLER-CHRYSLER	FUTURE	NOKIA	SOLECTRON	WPI
DELL	HI-SPEED	PHILIPS	SONY	

2001

General Semiconductor

Infrared components business of Infineon

Tansitor

Mallory (NACC)

2002

BCcomponents

Tedea-Huntleigh

BLH

Celtron

Nobel

Sensortronics



MARKET STRENGTH

Vishay has market shares ranging from substantial to number-one for each of its products. It is one of the world's largest manufacturers of discrete semiconductors, with these specific product rankings:

- NUMBER-1 WORLDWIDE IN LOW-VOLTAGE POWER MOSFETs
- NUMBER-1 WORLDWIDE IN DIODES AND RECTIFIERS
- NUMBER-1 WORLDWIDE IN INFRARED DATA COMMUNICA-TIONS DEVICES (IRDCs)
- NUMBER-1 WORLDWIDE IN IR RECEIVERS
- NUMBER-2 WORLDWIDE IN OPTOCOUPLERS
- NUMBER-3 WORLDWIDE IN OPTICAL SENSORS

Vishay is one of the world's largest manufacturers of passive electronic components (resistors, capacitors, inductors, transducers), with these specific product rankings:

- NUMBER-1 WORLDWIDE IN FOIL RESISTORS
- NUMBER-1 WORLDWIDE IN THIN FILM RESISTORS
- NUMBER-1 WORLDWIDE IN MELF RESISTORS
- NUMBER-1 WORLDWIDE IN WIREWOUND POWER RESISTORS
- NUMBER-1 WORLDWIDE IN LEADED POWER FILM RESISTORS
- NUMBER-1 WORLDWIDE IN LEADED FUSIBLE RESISTORS
- NUMBER-1 WORLDWIDE IN WET TANTALUM AND CONFORMAL-COATED CAPACITORS
- NUMBER-1 WORLDWIDE IN STRAIN GAGE SENSORS AND LOAD CELLS

Vishay partners with leading original equipment manufacturers (OEMs), original design manufacturers (ODMs), electronic manufacturing services (EMS) companies, and distrib-

utors worldwide. Today, OEMs outsource a major share of their manufacturing needs to EMS companies. In some cases, OEMs outsource not just product manufacturing, but product design as well, using ODMs for both. It is estimated that, by 2004, close to three-quarters of global manufacturing will be outsourced to EMS companies and ODMs.¹ Vishay is a preferred supplier to leading EMS companies and ODMs.

Vishay, with its broad portfolio of discrete semiconductors and passive components, offers one-stop shopping for discrete electronic component solutions. This is particularly valuable as OEMs, distributors, and EMS companies reduce their vendor bases.

A key part of Vishay's overall business plan is strengthening its presence in Asia. Vishay continues to shift manufacturing to China and other countries with skilled workforces and relatively low labor costs. During 2002, Vishay's revenues in Asia increased to 38% of total global revenues. We expect our growth in Asian sales to continue during 2003 and beyond. Our ongoing penetration of the Asian market involves close cooperation with local and regional sales channel partners in mainland China, Hong Kong, Taiwan, Korea, Japan, India, and other countries.

The breadth of Vishay's product lines greatly simplifies the purchasing process for Vishay customers. Vishay's acquisitions have included such top names as Siliconix, Telefunken, the infrared components business of Infineon, and General Semiconductor, as well as Dale, Draloric, Sprague, Vitramon, and BCcomponents (the former passive components business of Philips Electronics and Beyschlag). These names and the products associated with them are integrated into one global company: Vishay.

1 Source: Electronics.ca Publications Inc., February 2003

COMPANY BACKGROUND AND HISTORY

INITIAL TECHNOLOGY BREAKTHROUGHS

In the 1950s, Dr. Felix Zandman, a physicist, and current Chairman and CEO of Vishay, was issued patents for his PhotoStress® coatings and instruments. These devices are used to reveal and measure the distribution of stresses in structures under live load conditions such as airplanes and cars. Dr. Zandman's research in this area led him to develop Bulk Metal® foil resistors — ultra-precise, ultra-stable resistors that continue to provide performance far beyond any other resistor available.

In 1962, Dr. Zandman, with the financial help of the late Alfred P. Slaner, founded Vishay to develop and manufacture Bulk Metal foil resistors. Concurrently, J.E. Starr, a colleague of Dr. Zandman, developed foil resistance strain gages, which also became a part of Vishay. The Company was named after Dr. Zandman's and Mr. Slaner's ancestral village in Lithuania, in memory of family members who perished in the Holocaust. Throughout the '60s and '70s, Vishay established itself as a technical and market leader in foil resistors, PhotoStress products, and strain gages.

ACQUISITIONS AND GROWTH

By the early '80s, Vishay was positioned to grow significantly. Because the markets for foil resistors, PhotoStress products, and strain gages were relatively small, the Company moved to expand into high-volume resistors. Beginning in 1985, Vishay acquired Dale Electronics, Draloric Electronics, and Sfernice. These acquisitions helped produce dramatic sales growth. They also brought other passive electronic components into Vishay, such as inductors, specialty capacitors, plasma displays, specialty connectors, transformers, thermistors, potentiometers, and trimmers.

In the early '90s, Vishay applied its acquisition strategy to the high-volume capacitor market. Major acquisitions included Sprague Electric, the inventor and manufacturer of tantalum capacitors; Roederstein, a manufacturer of film, aluminum, and ceramic disk capacitors and thick film chip resistors; and Vitramon, a high-quality manufacturer of multilayer ceramic chip capacitors.

EXPANSION INTO SEMICONDUCTORS

In 1997, Vishay entered the discrete semiconductor market, acquiring 65% of Lite-On Power Semiconductor. In

1998, Vishay acquired the Semiconductor Business Group of TEMIC, which included Telefunken and 80.4% of Siliconix, producers of transistors, diodes, optoelectronics, and power and analog switching integrated circuits. Vishay subsequently sold its interest in Lite-On in order to better focus on its successful Siliconix and Telefunken businesses.

ONGOING GROWTH

During 2000, Vishay acquired passive component companies Electro-Films, Cera-Mite, and Spectrol. Each of these acquisitions, while relatively small, strengthened Vishay's position in niche markets.

Vishay's acquisitions during 2001 included the infrared components business of Infineon Technologies, General Semiconductor, Mallory (North American Capacitor Company), and Tansitor. The addition of Infineon's infrared components group and General Semiconductor enhanced Vishay's existing Telefunken and Siliconix businesses — and propelled Vishay into the top ranks of discrete semiconductor manufacturers worldwide. Vishay successfully integrated General Semiconductor, the former Infineon infrared components business, and the Vishay Telefunken business into the new Vishay Semiconductors unit in 2002. General Semiconductor contributed strongly to Vishay's cash generation.

In 2002, Vishay acquired BCcomponents, a leading manufacturer of passive components with operations in Europe, India, and the Far East. This major acquisition has significantly enhanced Vishay's global market position in passive components. The product lines of BCcomponents include linear and non-linear resistors; ceramic, film, and aluminum electrolytic capacitors; switches and trimming potentiometers.

Vishay acquisitions in the transducer area during 2002 included Tedea-Huntleigh, the BLH and Nobel businesses of Thermo Electron Corporation, Sensortronics, and Celtron, which are being integrated into Vishay Measurements Group.

Vishay's growth has been fueled by research and development, strategic acquisitions, a commitment to address customer needs, and an ongoing effort to improve product performance. The Company continues to explore a variety of acquisition opportunities.

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Vishay Measurements Group products include [clockwise from bottom in left photo] the PhotoStress* Plus System, electrical resistance strain gages for stress analysis and strain-gage-based transducer applications, and strain gage instrumentation. Vishay Measurements Group load cells are widely used in small scales for both retail and industrial applications [center photo] and large-scale weighing and batching applications in process industries [right photo].

VISHAY MEASUREMENTS GROUP

INNOVATION AND ACQUISITIONS

Vishay has been an industry leader in PhotoStress® products and strain gages since the Company's founding in 1962. As it expanded into other product areas, PhotoStress products and strain gages — by then consolidated into Vishay Measurements Group — remained a valuable part of Vishay.

A major change took place in 2002, when Vishay made acquisitions in the area of transducers:

- Tedea-Huntleigh, which is engaged in the production and sale of load cells used in digital scales by the weighing industry.
- The BLH and Nobel businesses of Thermo Electron
 Corporation, which are engaged in the production and
 sale of load-cell-based process weighing systems, weighing
 and batching instruments, web tension instruments,
 weighing scales, servo control systems, and components
 relating to load cells.
- Sensortronics, Inc., a leading manufacturer of load cells and torque transducers for domestic and international customers in a wide range of industries.
- Celtron Technologies, a company engaged in the production and sale of load cells used in digital scales for the weighing industry.

VERTICAL INTEGRATION

With these acquisitions, Vishay entered the global markets for strain-gage-based transducers and instruments used in

the weighing industry, and also implemented a strategy of vertical market integration: Vishay Measurements Group now has a product range from resistance strain gages, to transducers (the metallic structures to which strain gages are cemented), to the electronic instruments and systems that measure and control output of the transducers.

As an illustration of these technologies, consider the digital bathroom scale found in many homes. Small strain gages are attached to a transducer that is hidden beneath the platform of the scale. When you stand on the scale, your weight presses down on the transducer and causes a signal to be sent to the electronic system that displays your weight in pounds or kilograms. This process is used not just in bathroom scales, but also in a wide variety of commercial scales and in business and industrial applications for process control, force measurement, and other systems.

VISHAY MICRO-MEASUREMENTS AND VISHAY TRANSDUCERS

Vishay Measurements Group now has two operating divisions: Vishay Micro-Measurements (for strain gages, instruments, and PhotoStress products), and Vishay Transducers (for load cells, weigh modules, instruments, and weighing systems). Vishay Transducers includes the operations of Vishay Tedea-Huntleigh, Vishay BLH, Vishay Nobel, Vishay Sensortronics, and Vishay Celtron.



Statistics on global cell phone sales show a 6% increase for year 2002 compared to 2001.¹ However, this is only part of the picture: Many new cell phones include features formerly associated with personal computers (PCs) and cameras. According to one report, during the fourth quarter of 2002 worldwide sales of phones able to capture, transmit, and receive photographs increased 65%.² It is estimated that, during 2002, cell phone users worldwide downloaded and used over one billion ring tones (short excerpts of songs).³

Meanwhile, cell phones are an increasingly attractive platform for games. It is estimated that, by 2005, cell phone users worldwide will spend approximately \$25 billion on phone-specific games and other types of video and audio entertainment.³

In response to the convergence of PCs and cell phones, many cell phone manufacturers and microprocessor manufacturers are focusing significant resources on cell phones with sophisticated entertainment-related features. Advances in cell phone technology help to drive demand for the types of electronic components manufactured by Vishay. Increases in the complexity of functions (including audio and video features) per cell phone generally increase the number of dis-

crete semiconductors and passive components needed per phone in order to adequately support increased functionality.

Another key market trend affecting the converging telecommunications and data communications markets is the growth of wireless technologies including Bluetooth and wireless LANs (802.11 technology). Bluetooth enables short-distance two-way data transfer, while wireless LAN technology enables high-speed data transmission over wider areas.

One study projects that, by 2008, the number of people worldwide using the Web will reach 2 billion — and half of them will use small portable devices for Web access.⁵

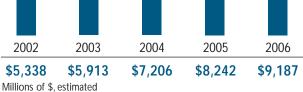
Vishay components are present not just in cell phones, portable digital assistants (PDAs), and other handheld communications devices, but in telecommunications infrastructure equipment as well. Discrete semiconductors and passive components are widely used in equipment for voice and data switching, wireless and wired access, line transmission, optical networking, power supplies, communications satellites, and other telecommunications infrastructure equipment, and Vishay has long-standing relationships with blue-chip customers in this area.



Components from Vishay are found in a very wide range of communications devices and equipment, including [left to right] GPRS radio cards, cell phones, handheld barcode scanners, PDAs, and satellite dishes.

Total worldwide usage of semiconductors in the communications market, in the categories where Vishay competes, is projected to grow from \$5.338 billion in 2002 to \$9.187 billion in 2006. Total worldwide usage of passive components (fixed capacitors, fixed resistors, and inductors) in telecommunications infrastructure equipment and telecommunications consumer electronics is projected to grow from \$1.833 billion in 2002 to \$3.018 billion in 2006. This global market growth means increasing demand for the types of discrete semiconductors and passive electronic components manufactured by Vishay.

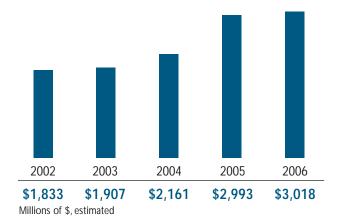
- 1 Source: Gartner Dataquest, March 10, 2003
- 2 Source: Taipei Times, February 13, 2003
- 3 Source: Red Herring, March 2003
- 4 Source: Business Week, March 3, 2003
- 5 Source: alwayson-network.com, March 6, 2003



WORLDWIDE SEMICONDUCTOR CONSUMPTION* IN COMMUNICATIONS ELECTRONICS

*Includes only General Purpose – Analog IC, General Purpose – Discrete, and General Purpose – Optical

Source: Gartner Dataquest, December 2002



WORLDWIDE PASSIVE COMPONENT CONSUMPTION* IN TELECOMMUNICATIONS

*Includes only Fixed Capacitors, Fixed Resistors, and Inductors

Source: Paumanok, February 2003



THE CONSUMER MARKET AND VISHAY

One of the bright spots in the global electronics industry has been the growth in consumer entertainment electronics, including game console hardware, DVD players, digital still cameras and video cameras, MP3 players, and other devices. It is estimated that, in the U.S., consumers spend over \$9 billion per year on game hardware and software — more than is spent on admission to movie theaters. According to a recent report, Taiwan alone will produce and ship approximately 16.7 million games consoles during 2003 — a 90% increase over 2002.

Between 2000 and 2005, annual sales of DVD players in the U.S. are projected to increase from approximately eight million units to over 20 million units. During this same period, annual U.S. sales of digital cameras are projected to increase from under five million units to over 15 million units.³

Growth in sales of video and audio entertainment electronics drives demand for types of electronic components manufactured by Vishay. To cite just one example, Vishay Siliconix power MOSFETs, already used in a leading consumer game console, are now also in demand for use in portable devices such as DVD players (which run off 12-volt batteries) and MP3 players (which run off single-cell lithium ion batteries), where they help to conserve battery life.

No assessment of consumer electronics would be complete without mentioning the impact of music downloading and file swapping. It is estimated that consumers will download from the Internet — potentially free of charge — close to 6.5 billion individual tracks of music during 2003.⁴ All this "free" music will of course require that consumers buy and use computers, MP3 players, and other hardware — all of which require electronic components.

Meanwhile, the toy industry, with estimated annual sales of \$20.3 billion, is increasingly focused on toys that require electronic components in order to function. One industry analyst has estimated that, of the several thousand new toys introduced and promoted at the 2003 Toy Fair in New York City, over two-thirds will include electronic components.⁵

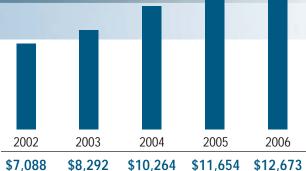
Total worldwide usage of semiconductors in the consumer electronics market, in the categories where Vishay competes, is projected to grow from \$7.088 billion in 2002 to \$12.673 billion in 2006. Total worldwide usage of passive components (fixed capacitors, fixed resistors, and inductors) in consumer audio and video imaging equipment is projected to grow from \$3.736 billion in 2002 to \$4.886 billion in 2006.



Commonly used consumer products that use Vishay components include [left to right] smart cards for electronic transactions, handheld remote controls for video and audio systems, video game controllers, digital video cameras, and home appliances such as washing machines and dryers.

Another part of the consumer market impacted by increased usage and sophistication of embedded electronics is "white goods" — refrigerators, washers and dryers, and other household appliances. In refrigerators, for example, electronic functions include LED displays to monitor food freshness, sophisticated temperature-management systems, and now even dedicated televisions, e-mail systems, and Internet access. The so-called "smart home" with networked appliances is not yet common. However, even today, appliances capable of being interconnected via a common network include smoke alarms, coffeemakers, bathroom scales, and even blood-pressure monitors.6

- 1 Source: Fortune, December 30, 2002
- 2 Source: Industrial Technology Information Service (Taiwan), February 2003
- 3 Sources: Consumer Electronics Association; Photo Marketing Association; Photo Imaging News; 2002
- 4 Source: Yankee Group, 2003
- 5 Source: Business Week, February 24, 2003
- 6 Source: Machine Design, January 24, 2003

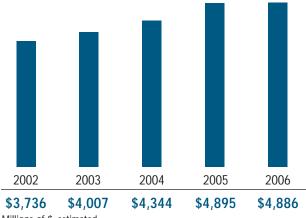


Millions of \$, estimated

WORLDWIDE SEMICONDUCTOR CONSUMPTION* IN CONSUMER ELECTRONICS

*Includes only General Purpose - Analog IC, General Purpose - Discrete, and General Purpose - Optical

Source: Gartner Dataquest, December 2002



Millions of \$, estimated

WORLDWIDE PASSIVE COMPONENT CONSUMPTION* IN CONSUMER AUDIO AND VIDEO IMAGING **EQUIPMENT**

*Includes only Fixed Capacitors, Fixed Resistors, and Inductors Source: Paumanok, February 2003



THE COMPUTER MARKET AND VISHAY

Located on the motherboard of every personal computer (PC) is a highly sophisticated integrated circuit — the microprocessor that performs calculations and coordinates the computer's activities. PC microprocessing speeds have increased dramatically — from 200 megahertz (200 million cycles per second) in 1995 to estimates of 3 gigahertz (3 billion cycles per second) and higher in 2003.1 Faster microprocessing speeds increase demand for discrete semiconductors and passive components. For example, the Intel® 486 microprocessor chip required 124 supporting passive components, while the Intel Pentium® 4 requires approximately 600.2

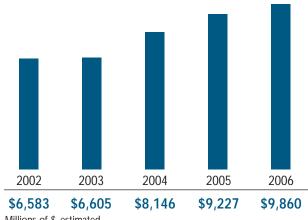
A key trend is connectivity via wireless local area networks (LANs), Bluetooth, and other wireless technologies. Wireless LANs enable computers connected to a central access point to transmit and receive data without cables. A person working in a wireless LAN office environment and equipped with a notebook computer that has a PCMCIA card can move about in the office and remain connected to the company network for file-sharing, e-mail, Internet access, and access to the company Intranet. A growing number of airport terminals, coffee shops, and bookstores offer high-speed, wireless Internet access.

Vishay components are used in PCMCIA cards, as well as in computer motherboards, monitors, keyboards, mice, disk drives, and modems. They also are commonly found in other data processing hardware — from printers, scanners, photocopiers, and fax machines to mainframes, network servers, and other infrastructure equipment.

Total worldwide usage of semiconductors in data processing electronics, in the categories where Vishay competes, is projected to grow from \$6.583 billion in 2002 to \$9.860 billion in 2006. Total worldwide usage of passive components (fixed capacitors, fixed resistors, and inductors) in computers and peripherals is projected to grow from \$2.833 billion in 2002 to \$3.603 billion in 2006.

1 Source: EE Times, February 24, 2002 2 Source: Company estimates

From [left to right] massive mainframes to light notebook computers to printers, virtually all kinds of computers and peripherals contain types of semiconductors and passive components made by Vishay. DC-to-DC converters [far right] with these components are used to help distribute power in computers and many other products.

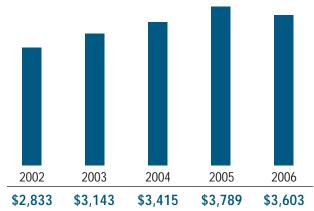


Millions of \$, estimated

WORLDWIDE SEMICONDUCTOR CONSUMPTION* IN DATA PROCESSING ELECTRONICS

*Includes only General Purpose - Analog IC, General Purpose - Discrete, and General Purpose - Optical

Source: Gartner Dataquest, December 2002



Millions of \$, estimated

WORLDWIDE PASSIVE COMPONENT CONSUMPTION* IN COMPUTERS AND PERIPHERALS

*Includes only Fixed Capacitors, Fixed Resistors, and Inductors

Source: Paumanok, February 2003



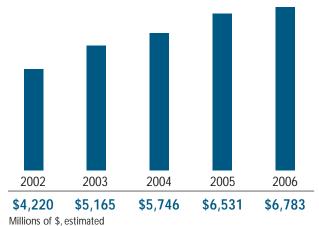
THE INDUSTRIAL MARKET AND VISHAY

The industrial market accounted for approximately 38% of Vishay's global revenues during 2002. Vishay components are used in critical industrial applications such as power management, data handling, instrumentation, filtering, motor control, and many others. Vishay manufactures components designed to handle wide voltage and capacitance ranges, extreme temperatures, space constraints, and other factors associated with industrial applications.

In a typical retail store, for example, types of electronic components manufactured by Vishay are used in handheld barcode readers and electronic cash registers, in the store's lighting system, in its air conditioning and heating systems, and in its electronic security system. They are used in the factories that produce the items sold in the store — to manage power and control motors during the manufacturing process; to help sort, weigh, and package items; and to perform other functions. Types of electronic components manufactured by Vishay are also used in the electrical generating plants that power the factories; in the trucks, trains, airplanes, and related infrastructure for transporting manufactured items from factory to store; and in practically every other type of industrial system.

In the semiconductor categories where Vishay competes, global semiconductor usage in industrial electronics is expected to grow from \$4.220 billion in 2002 to \$6.783 billion in 2006. Meanwhile, global passive component usage (fixed capacitors, fixed resistors, and inductors) in industrial electronics is expected to increase from \$580 million in 2002 to \$740 million in 2006.

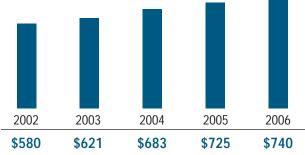
Vishay components play integral roles in [left to right] factories, industrial robotics, and wind-power turbines for energy generation. Instrument panels in power stations [background image] use types of semiconductors and passive components made by Vishay.



WORLDWIDE SEMICONDUCTOR CONSUMPTION* IN INDUSTRIAL ELECTRONICS

*Includes only General Purpose – Analog IC, General Purpose – Discrete, and General Purpose – Optical

Source: Gartner Dataquest, December 2002

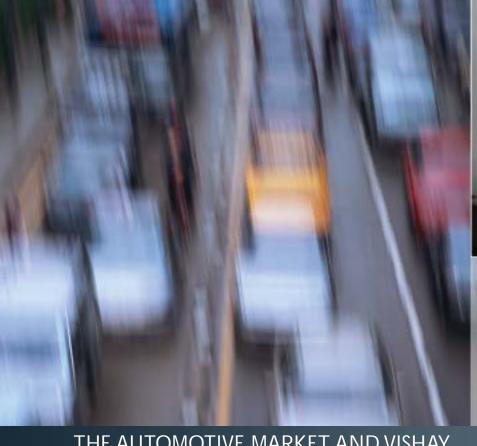


Millions of \$, estimated

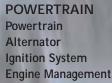
WORLDWIDE PASSIVE COMPONENT CONSUMPTION* IN INDUSTRIAL ELECTRONICS

*Includes only Fixed Capacitors, Fixed Resistors, and Inductors

Source: Paumanok, February 2003









BODY CONTROLS HID-headlights Suspension Gear **Headlight Adjustment Speed Control** Steering **Traction Control** Wiper Control

THE AUTOMOTIVE MARKET AND VISHAY

In all automobiles, mechanical functions continue to be replaced by electronic functions. For example, a high-end Audi includes 55 different electronic control units for everything from climate control to steering.¹ Mechanical and hydraulic components in automobiles tend to be less reliable than electronic components. Increased use of electronics provides the benefits of increased engine performance, fuel efficiency, driver and passenger comfort, and safety. Thus, even in budget-priced cars, electronic functions proliferate, and their usage is on the rise. It is estimated that, between 2002 and 2010, the average percentage of electronics content in cars will rise from 22% to 35%.2

Vishay manufactures components that are used in a wide range of automotive applications — powertrain, body controls, safety, comfort, and driver information. Throughout an automobile, the parts with electronic functionality airbags, audio system, brakes, climate-control system, engine, global positioning system (GPS), lighting, security system, steering, suspension, transmission, and more — use discrete semiconductors and passive components.

Over the years, Vishay has worked closely with automotive suppliers and manufacturers to develop electronic

From powertrain to safety to comfort to body controls to driver information, automotive subsystems and parts with electronic functionality depend on types of discrete semiconductors and passive components manufactured by Vishay.

components that function reliably under extreme conditions, including high under-the-hood temperatures and heavy vibration. Vishay components used in automobiles include Power Metal Strip® resistors, multilayer ceramic capacitors, TRANSZORB® transient voltage suppressors, automotive power MOSFETs, glass-passivated Superectifiers®, and many others.

Vishay components are helping to enable the transition from 12-V to 42-V system voltages. The 42-volt on-board systems expected to become common within the next few years will require discrete semiconductors and passive components to handle higher levels of power, more complex system architecture, and other concerns.

In the semiconductor categories where Vishay competes, global semiconductor usage in automotive electronics is

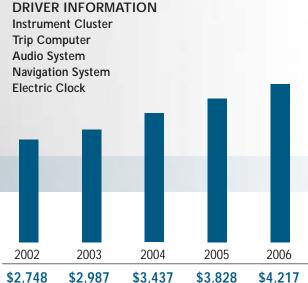






COMFORT Central Locking Power Window Seat/Mirror Adjustment Window/Mirror Heating Sunroof Climate Control Interior Lighting Neckrest Control

SAFETY Anti-lock Braking System Electronic Stability Program Automatic Speech Recognition Airbag Seatbelt Immobilizer Anti-theft



Millions of \$, estimated

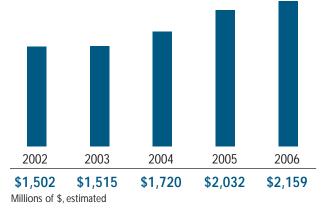
WORLDWIDE SEMICONDUCTOR CONSUMPTION* IN AUTOMOTIVE ELECTRONICS

*Includes only General Purpose – Analog IC, General Purpose – Discrete, and General Purpose – Optical

Source: Gartner Dataquest, December 2002



One area that has received particular attention from automotive original equipment manufacturers (OEMs) and suppliers is telematics, the wireless communication between vehicles, their occupants, and the outside world. According to a recent industry study, the number of telematicsenabled vehicles is expected to rise during this decade, forming a telematics network making use of the Internet, cellular technologies, and wireless technologies such as Bluetooth and 802.11. In 2001, approximately two million telematics systems were built into vehicles, for 3.5% of all vehicles sold. It is estimated that, by 2007, more than 42% of all cars sold in the U.S., and 20% of all vehicles sold worldwide, will be telematics-equipped.³



WORLDWIDE PASSIVE COMPONENT CONSUMPTION* IN AUTOMOTIVE ELECTRONICS

 $^{\star} \text{Includes}$ only Fixed Capacitors, Fixed Resistors, and Inductors

Source: Paumanok, February 2003

¹ Source: Robert Bosch GmbH, August 2002

² Source: EE Times, February 14, 2003

³ Source: Machine Design, January 2003



THE MEDICAL MARKET AND VISHAY

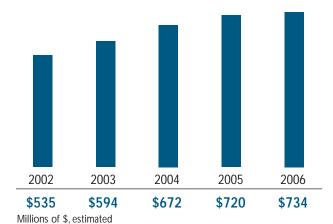
The global medical market is characterized by continuing innovations in technology to better prevent, diagnose, and treat illness and disease. In this market, where people's lives depend on reliable and highly accurate monitoring and treatment, Vishay components are widely used. Vishay is a leading manufacturer of telemetry coils for defibrillators and pacemakers, transformers for defibrillators, tantalum capacitors for hearing aids, and electronic components for many other types of medical instrumentation and equipment, from handheld oscilloscopes to MRI and CAT-scan machines. Vishay has a track record of excellent relationships with medical manufacturers.

Even the information infrastructure of health care institutions is changing to become more reliant on electronics. One leading U.S.-based company has provided a system involving 650 computers to a hospital, with the stated goal of reducing medical errors by 80%.¹ On the other end of the spectrum, home-based health care will require increasing numbers of portable diagnostic and treatment devices, many of which will use types of discrete semiconductors and passive components made by Vishay.

As evidence of the importance of the medical market, EMS companies — which as a group are major movers and shakers in the global electronics supply chain — expect to realize increased revenues from the medical device industry: from approximately \$5.6 billion in 2001 to \$7.1 billion in 2005.²

Passive component consumption worldwide (fixed capacitors, fixed resistors, and inductors) for medical equipment is projected to rise from \$535 million in 2002 to \$734 million in 2006. Although statistics for semiconductor usage in medical equipment are not presented in this Annual Report, semiconductor usage trends generally

The magnetic resonance image [far left] produced by an MRI system [far right] is made possible by electronic circuits containing types of discrete semiconductors and passive components manufactured by Vishay. These components are also used in portable defibrillators [second from left], medical test equipment of all kinds [third from left], and numerous other medical products.



WORLDWIDE PASSIVE COMPONENT CONSUMPTION* IN MEDICAL EQUIPMENT

*Includes only Fixed Capacitors, Fixed Resistors, and Inductors

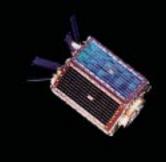
Source: Paumanok, February 2003

drive passive component usage trends. Thus, it is logical to project that, in the semiconductor categories where Vishay competes, global semiconductor usage in medical equipment will rise as well between 2002 and 2006.

1 Source: Forbes, February 24, 2002 2 Source: EBN, February 14, 2002







THE MILITARY AND AEROSPACE MARKETS AND VISHAY

Types of military and aerospace equipment where Vishay components have been employed include tanks, submarines, missile systems, jet aircraft, satellites, the Hubble space telescope, and more. The types of electronic components manufactured by Vishay are also used in the growing field of surveillance and security, where companies are developing systems to protect against potential attacks on government facilities, office buildings, airports, energy plants, and other targets.

One key innovation in military aircraft is the development and use of unmanned aerial vehicles (UAVs) for reconnaissance and combat. These aircraft, which eliminate aircrews and can significantly decrease airborne equipment costs, will be able to receive and respond to real-time video transmitted by satellites and carried by high-bandwidth, wide-area networks.1 On the ground, some military combat and support personnel from the U.S. and other countries are equipped with ruggedized laptop computers and other portable electronic devices.

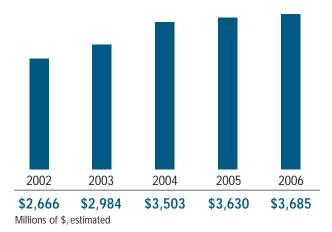
Vishay components used in military, security, and aerospace applications are designed to function reliably when subjected to extremely hot and cold temperatures, intense vibration, and other environmental stresses. In addition, Vishay has the ability to custom-design and produce components to meet the high expectations of quality and reliability demanded by military and aerospace customers.

In the semiconductor categories where Vishay competes, global semiconductor usage in military/civil aerospace electronics is expected to increase from \$2.666 billion in 2002 to \$3.685 billion in 2006. Meanwhile, global passive component usage (fixed capacitors, fixed resistors, and inductors) in military and aerospace electronics is expected to increase from \$470 million in 2002 to \$500 million in 2006.

1 Source: Machine Design, January 24, 2002

Vishay components for military and aerospace applications are designed to function reliably when subjected to extreme environmental conditions, such as those encountered by the NASA F/A 18 aircraft [left], International Space Station [center], and U.S. Air Force/Philips laboratory satellite [right].

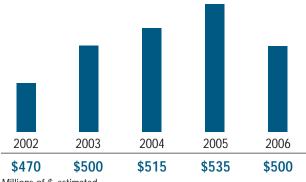
All photos on this page courtesy of NASA.



WORLDWIDE SEMICONDUCTOR CONSUMPTION* IN MILITARY/CIVIL AEROSPACE ELECTRONICS

*Includes only General Purpose - Analog IC, General Purpose - Discrete, and General Purpose - Optical

Source: Gartner Dataquest, December 2002



Millions of \$, estimated

WORLDWIDE PASSIVE COMPONENT CONSUMPTION* IN MILITARY AND AEROSPACE ELECTRONICS

*Includes only Fixed Capacitors, Fixed Resistors, and Inductors

Source: Paumanok, February 2003

FINANCIAL SUMMARY

SUMMARY OF OPERATIONS (in thousands, except per share amounts)	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992
Net sales.	\$1,822,813	\$ 1,655,346	\$ 2,465,066	1,760,091	\$ 1,572,745	\$ 1,125,219	\$ 1,097,979	\$ 1,224,416	\$ 987,837	\$ 856,272	\$ 664,226
Costs of products sold	1,454,540	1,273,827	1,459,784	1,299,705	1,189,107	858,020	825,866	902,518	748,135	663,239	508,018
Gross profit	368,273	381,519	1,005,282	460,386	383,638	267,199	272,113	321,898	239,702	193,033	156,208
Selling, general, and administrative expenses	311,251	278,171	297,315	254,282	234,840	136,876	141,765	158,821	137,124	118,906	101,327
Amortization of goodwill	I	11,190	11,469	12,360	12,272	7,218	6,494	6,461	4,609	3,294	2,380
Unusual items	136,970	77,908	I	I	42,601	14,503	38,030	4,200	I	(562)	I
Operating (loss) profit	(79,948)	14,250	696,498	193,744	93,925	108,602	85,824	152,416	696'26	71,395	52,501
Other income (expense):											
Interest expense	(28,761)	(16,848)	(25,177)	(53,296)	(49,038)	(18,819)	(17,408)	(29,433)	(24,769)	(20,624)	(19,110)
Other	8,664	12,701	18,904	(5,737)	(2,241)	(222)	2,430	272	916	123	4,533
Total other income (expense)	(20,097)	(4,147)	(6,273)	(59,033)	(51,279)	(19,041)	(14,978)	(29,161)	(23,853)	(20,501)	(14,577)
(Loss) earnings before income taxes, minority interest, and											
cumulative effect of accounting change	(100,045)	10,103	690,225	134,711	42,646	89,561	70,846	123,255	74,116	50,894	37,924
Income taxes (benefit)	(16,900)	2,695	148,186	36,940	30,624	34,167	17,741	30,307	15,169	8,246	7,511
Minority interest	9,469	3,895	24,175	14,534	3,810	2,092	489	281	I	I	I
(Loss) earnings before cumulative effect of accounting change	(92,614)	513	517,864	83,237	8,212	53,302	52,616	92,667	58,947	42,648	30,413
Cumulative effect of accounting change	I	I	I	1	I	I	1	I	I	1,427	I
Net (loss) earnings	\$ (92,614)	\$ 513	\$ 517,864	\$ 83,237	\$ 8,212	\$ 53,302	\$ 52,616	\$ 92,667	\$ 58,947	\$ 44,075	\$ 30,413
(Loss) earnings per share:											
Basic	\$ (0.58)		3.83				\$ 0.41			\$ 0.43	
Diluted	\$ (0.58)	\$ 0.00	\$ 3.77	\$ 0.65	\$ 0.07	\$ 0.42	\$ 0.41	\$ 0.78	\$ 0.55	\$ 0.43	\$ 0.36
Shares used in computing (loss) earnings per share: Rasic	159 413	141 171	135 295	126 678	126 665	126 627	126 632	117 857	106 571	101 593	82,652
Diluted	159,413	142,514	137,463	128,233	126,797	126,904	126,717	117,923	106,571	101,593	92,687
FINANCIAL DATA (in thousands, except ratios)											
Cash and cash equivalents	\$ 339,938	\$ 367,115	\$ 337,213	\$ 105,193	\$ 113,729	\$ 55,263	\$ 20,945	\$ 19,584	\$ 26,876	\$ 10,949	\$ 15,994
Working capital	897,456	1,096,034	1,057,200	604,150	650,483	455,134	434,199	411,286	328,322	205,806	145,327
Current ratio	2.56	3.29	3.53	2.87	3.13	3.38	3.27	2.80	2.41	2.09	2.02
Property and equipment – net	1,274,850	1,167,533	973,554	930,545	790,799	709,142	710,662	669,228	543,402	422,668	271,619
Capital expenditures	110,074	162,493	229,781	119,638	151,682	78,074	136,276	165,699	91,571	79,377	49,801
Depreciation and amortization	180,748	163,387	140,840	139,676	127,947	81,874	77,247	69,547	57,742	48,578	36,062
Total assets	4,315,159	3,951,523	2,783,658	2,323,781	2,462,744	1,719,648	1,558,515	1,543,331	1,345,070	950,670	661,643
Long-term debt	706,316	605,031	140,467	656,943	814,838	347,463	229,885	228,610	402,337	266,999	139,540
Stockholders' equity	2,358,787	2,366,545	1,833,855	1,013,592	1,002,519	959,648	945,230	907,853	265,088	376,503	346,625

Note: This table should be read in conjunction with the related consolidated financial statements and accompanying notes and managements discussion and anythis of financial condition and results of operations. Earnings per stare amounts and weighted average stares outstanding have been retroachedy restated for stock dividends and stock spilts. Basic and diluted earnings per stare for 1993 includes \$0.01 for the cumulative effect of an accounting charge for home taxes.

20

VISHAY PRODUCTS

DISCRETE SEMICONDUCTORS: PASSIVE COMPONENTS: Rectifiers Capacitors Schottky (single, dual) Tantalum Capacitors Standard, Fast and Ultra-fast Recovery (single, dual) Solid Tantalum Capacitors Clamper/Damper Wet Tantalum Capacitors Bridge Ceramic Capacitors Superectifier® Multilayer Chip Capacitors Sinterglass Avalanche Diodes Disc Capacitors Film Capacitors **Small-Signal Diodes** Schottky and Switching (single, dual) **Power Capacitors** Tuner/Capacitance (single, dual) Heavy Current Capacitors **Aluminum Capacitors** Bandswitching **Resistive Products** PIN Foil Resistors Zener and Suppressor Diodes Zener (single, dual) Film Resistors Thin Film Resistors TVS (TRANSZORB®, Automotive, ESD, Arrays) Thick Film Resistors **MOSFETs Power MOSFETs** Metal Oxide Film Resistors **JFFTs** Carbon Film Resistors Wirewound Resistors **RF Transistors** Variable Resistors Bipolar Transistors (AF and RF) **Dual Gate MOSFETs Cermet Variable Resistors** Wirewound Variable Resistors MOSMICs® Conductive Plastic Variable Resistors **Optoelectronics** IR Emitters, Detectors and IR Receiver Modules Networks/Arrays Opto Couplers and Solid State Relays Non-linear Resistors **NTC Thermistors Optical Sensors PTC Thermistors** LEDs and 7-Segment Displays Infrared Data Transceiver Modules **Varistors** Magnetics **Custom Products ICs Inductors Transformers** Power ICs **Analog Switches INTEGRATED MODULES:** DC/DC converters STRESS SENSORS AND TRANSDUCERS: Strain Gages and Instruments PhotoStress® Instruments **Transducers** Load Cells Weighing Systems

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 10-K

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
[NO FEE REQUIRED]
For the fiscal year ended December 31, 2002

OR

[] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 19
[NO FEE REQUIRED]
For the transition period from to

Commission file number 1-7416

VISHAY INTERTECHNOLOGY, INC.

(Exact name of registrant as specified in its charter)

<u>Delaware</u>
(State or other jurisdiction of incorporation or organization)

38-1686453
(IRS employer identification no.)

63 Lincoln Highway Malvern, Pennsylvania 19355-2143 (Address of principal executive offices)

(610) 644-1300

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Common Stock, \$0.10 par value (Title of Class)

New York Stock Exchange (Exchange on which registered)

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

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. [X]

Indicate by check mark whether the registrant is an accelerated filer (as defined Exchange Act Rule 12b-2). Yes \underline{X} No

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter, assuming conversion of all of its Class B common stock held by non-affiliates into common stock of the registrant, was \$3,182,840,000.

As of March 27, 2003, registrant had 144,300,063 shares of its common stock and 15,383,296 shares of its Class B common stock outstanding.

Portions of the registrant's definitive proxy statement, which will be filed within 120 days of December 31, 2002, are incorporated by reference into Part III.

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PART I

<u>Item 1.</u> <u>DESCRIPTION OF BUSINESS</u>

General

Vishay Intertechnology, Inc. is a leading international manufacturer and supplier of passive and discrete active electronic components. Passive components include resistors, capacitors, transducers and inductors. Active components include diodes, transistors, rectifiers, power integrated circuits (ICs), infrared transceivers, infrared (IR) sensors and optocouplers. Passive electronic components and discrete active electronic components are the primary elements of almost every electronic circuit. We offer our customers "one-stop" access to one of the most comprehensive electronic component lines of any manufacturer in the United States, Europe and Asia in both the newer surface mount configuration and the traditional leaded form.

Our components are used in virtually every type of product that contains electronic circuitry, including:

• computer-related products,

automotive applications,

power management products,

• process control systems,

• telecommunications equipment,

• military and aerospace applications,

• measuring instruments,

• consumer electronics and appliances.

• industrial equipment,

• medical instruments, and

• electronic scales.

Since 1985, we have pursued a business strategy that principally consists of the following elements:

- 1. expanding within the electronic components industry, primarily through the acquisition of other manufacturers of electronic components that have established positions in major markets, reputations for product quality and reliability, and product lines with which we have substantial marketing and technical expertise;
- 2. reducing selling, general and administrative expenses through the integration or elimination of redundant sales offices and administrative functions at acquired companies;
- 3. achieving significant production cost savings through the transfer and expansion of manufacturing operations to regions such as the Czech Republic, Hungary, India, Israel, Malaysia, Mexico, the People's Republic of China, the Philippines, Portugal and the Republic of China (Taiwan), where we can take advantage of lower labor costs and available tax and other government-sponsored incentives;
- 4. maintaining significant production facilities in those regions where we market the bulk of our products in order to enhance the service and responsiveness that we provide to our customers;
 - 5. consistency rolling out new and innovative products; and
 - 6. strengthening our relationships with customers and strategic partners.

As a result of this strategy, we have grown from a small manufacturer of precision resistors and resistance strain gages to one of the world's largest manufacturers and suppliers of a broad line of electronic components.

Our significant acquisitions in the last several years include:

Siliconix and Telefunken. We acquired an 80.4% interest in Siliconix incorporated (NASDAQ; SILI) in March 1998 from Daimler-Benz A.G. Siliconix is a publicly traded chip maker, based in Santa Clara, California, which designs, markets and manufactures power and analog semiconductor products, such as metal-oxide-semiconductor field-effect transistors (MOSFETs), junction field-effect transistors (JFETs), bipolar switches, signal processing ICs and power ICs for computers, cell phones, fixed communications networks, automobiles and other electronic systems. Siliconix has manufacturing facilities in Santa Clara, California, maintains assembly and testing facilities in the Republic of China (Taiwan), is party to a joint venture in Shanghai, the People's Republic of China and has subcontractors in the Philippines, the People's Republic of China and the United States. Siliconix reported worldwide sales of \$372.9 million in 2002, \$305.6 million in 2001, and \$473.1 million in 2000.

In the same transaction, we acquired from Daimler-Benz the semiconductor business unit of TEMIC Telefunken Microelectronic GmbH headquartered in Heilbronn, Germany, but promptly disposed of its integrated circuits division. Telefunken launched our expansion into discrete active components with a product line of diodes, RF transistors, optoelectronic semiconductors, infrared data transceivers (IRDCs) and light-emitting diodes (LEDs). Our net cost of these two acquisitions was approximately \$444 million.

Electro-Films, Cera-Mite and Spectrol. In May 2000, we acquired Electro-Films, Inc., a manufacturer of thin film components and networks on ceramic and silicon. In August 2000, we acquired Cera-Mite Corporation, a worldwide supplier of ceramic capacitors, used in power supplies, electronic lighting and other applications, and thermistors (temperature-sensitive resistors) used in refrigeration, HVAC, telecommunications and other electronic applications. Separately, in August 2000, we acquired Spectrol, a manufacturer of sensing potentiometers used primarily in the automotive industry and trimmer potentiometers used in various kinds of electronic circuitry.

Tansitor and Mallory. In January 2001, we acquired Tansitor, a leading manufacturer of wet tantalum electrolytic capacitors and miniature conformal coated solid tantalum capacitors. These components have power management applications in the military, aerospace and medical industries. Later, in November 2001, we acquired Yosemite Investment, Inc. d/b/a the North American Capacitor Company, known as Mallory, a manufacturer and distributor of wet tantalum capacitors and other products. As a result of these two acquisitions, we have become the number one manufacturer of wet tantalum capacitors worldwide.

Infineon. In July 2001, we acquired the infrared components business of Infineon A.G. for approximately \$116 million. As a result, we added several new device types to our optoelectronics portfolio. We also became the largest supplier outside Japan of optocouplers and the largest supplier worldwide of IRDCs.

General Semiconductor. On November 2, 2001, we completed the acquisition of General Semiconductor, Inc., a leader in the design, manufacture and distribution of semiconductors for the power management market. In the transaction, we exchanged 0.563 of a share of Vishay common stock for each share of General Semiconductor stock. Based on the closing price of our common stock on November 2, 2001, the transaction was valued at approximately \$555 million. General Semiconductor manufactures and distributes a broad range of power management products, including rectifiers, transient voltage suppressors, small-signal transistors, diodes, MOSFETs and analog ICs. As a result of this acquisition, we became the number one manufacturer of diodes and rectifiers worldwide.

Sensortronics, Tedea-Huntleigh, BLH and Nobel, and Celtron. In January 2002, we acquired the transducer and strain gage business of Sensortronics, Inc. In June 2002, we acquired Tedea-Huntleigh BV, a leading manufacturer of load cells used in digital scales by the weighing industry. In July 2002, we purchased the BLH and Nobel businesses from Thermo Electron Corporation. BLH and Nobel are engaged in the production and sale of load cell based process weighing systems, weighing and batching instruments, web tension instruments, weighing scales, servo control systems, and components relating to load cells, including strain gages, foil gages and transducers. In October 2002, we acquired Celtron Technologies, another company engaged in the production and sale of load cells used in digital scales for the weighing industry. As a result of these acquisitions, the product portfolio of our Measurements Group has been expanded and we are now a world leader in stress analysis products and transducers used in the weighing industry (load cells).

BCcomponents. In December 2002, we completed the acquisition of BCcomponents Holdings B.V., a leading manufacturer of passive components with operations in Europe, India and the People's Republic of China. The product lines of BCcomponents include linear and non-linear resistors; ceramic, film and aluminum electrolytic capacitors; switches and trimming potentiometers. BCcomponents had annual sales in 2001 of approximately \$320 million. We acquired the outstanding shares of BCcomponents in exchange for ten-year warrants to acquire 7,000,000 shares of Vishay common stock at an exercise price of \$20.00 per share and ten-year warrants to acquire 1,823,529 shares of Vishay common stock at an exercise price of \$30.30 per share. In the transaction, outstanding obligations of BCcomponents, including indebtedness, transaction fees and expenses in the amount of approximately \$224 million were paid or assumed. Also, \$105 million in principal amount of BCcomponents' mezzanine indebtedness and certain other securities of BCcomponents were exchanged for \$105 million principal amount of floating rate unsecured loan notes of Vishay due 2102. This major acquisition has significantly enhanced our global market position in passive components.

In addition to our acquisition activity, during 2002 we took steps to assure our competitiveness, enhance our operating efficiency and strengthen our liquidity in the face of the economic downturn, which broadly impacted the electronics industry during the year. In this regard, we:

- (i) closed or consolidated several manufacturing facilities and administrative offices;
- (ii) reduced our headcount, before acquisitions, by approximately 1,400 employees; or a reduction of approximately 7%;
 - (iii) integrated our acquisitions within our existing management and operational infrastructure; and
- (iv) relying on the strength of our balance sheet, continued our search for suitable acquisition candidates.

Vishay was incorporated in Delaware in 1962 and maintains its principal executive offices at 63 Lincoln Highway, Malvern, Pennsylvania 19355-2143. Our telephone number is (610) 644-1300.

Products

We design, manufacture and market electronic components that cover a wide range of products and technologies. Our products primarily consist of:

- resistors,
- tantalum capacitors,
- multi-layer and disc ceramic capacitors (MLCCs),
- aluminum and specialty ceramic capacitors,
- film capacitors,
- power MOSFETs,
- power ICs,

- signal processing ICs,
- transistors,
- voltage suppressors,
- infrared data transceivers (IRDCs),
- optocouplers,
- IR sensors,
- · strain gages and load cells, and
- diodes and rectifiers

and, to a lesser extent:

• inductors,

plasma displays,

connectors,

• thermistors, and

• transformers,

• potentiometers.

We manufacture one of the broadest lines of surface mount devices, a format for electronic components that has evolved into the standard required by most customers. In addition, we continue to produce components in the traditional leaded form. We believe that we produce one of the broadest lines of discrete electronic components available from any single manufacturer.

Passive Components

Passive components include resistors, capacitors and inductors. They are referred to as "passive" because they do not require power to operate. These components adjust and regulate voltage and current, store energy and filter frequencies. We also include in this category the products and services of our Measurements Group that employ passive components in electro-mechanical measurements.

Resistors are basic components used in all forms of electronic circuitry to adjust and regulate levels of voltage and current. They vary widely in precision and cost, and are manufactured from numerous materials and in many forms. Resistive components are classified as variable or fixed, depending on whether or not their resistance is adjustable. Resistors can also be used as measuring devices. We manufacture a line of thermistors, which are heat sensitive resistors. Other types of resistive sensors are strain gages for measurement of mechanical stress. See "Measurements Group" below.

We manufacture virtually all types of fixed resistors, both in discrete and network forms. These resistors are produced for virtually every segment of the resistive product market, from resistors used in the highest quality precision instruments for which the performance of the resistor is the most important requirement, to low-cost resistors for which price is the most important factor.

Capacitors perform energy storage, frequency control, timing and filtering functions in most types of electronic equipment. The more important applications for capacitors are:

- electronic filtering for linear and switching power supplies;
- decoupling and bypass of electronic signals for integrated circuits and circuit boards; and
- frequency control, timing and conditioning of electronic signals for a broad range of applications.

Our capacitor products include solid tantalum surface mount chip capacitors, solid tantalum leaded capacitors, wet/foil tantalum capacitors, MLCC capacitors, disc ceramic capacitors, aluminum and specialty ceramic capacitors, and film capacitors. Each capacitor product has unique physical and electrical performance characteristics that make that type of capacitor useful for specific applications. Tantalum and MLCC capacitors are generally used in conjunction with integrated circuits in applications requiring low to medium capacitance values, "capacitance" being the measure of the capacitor's ability to store energy. The tantalum capacitor is the smallest and most stable type of capacitor for its range of capacitance and is best suited for applications requiring medium capacitance values. MLCC capacitors, on the other hand, are more cost-effective for applications requiring lower capacitance. Disc ceramic capacitors are used for high voltage applications. Aluminum capacitors are used for high capacitance applications.

Inductors use an internal magnetic field to change the phase of electric current. They are utilized in electronic circuitry to control alternating current and voltage, and to filter out unwanted electronic signals. They are also used in transformers to change voltage levels.

Measurements Group

Vishay Measurements Group is a leading manufacturer of products for precision measurement of mechanical strains. Our products include strain gages, load cells, force measurement sensors, displacement sensors, and photoelastic sensors. These products are used in experimental stress analysis systems, as well as in the electronic measurement of loads (electronic scales), acceleration and fluid pressure. The Measurements Group also provides installation accessories for its products, instrumentation to sample and record measurement output, and training seminars in stress analysis testing and transducer development and manufacture.

As a result of Vishay's acquisitions in 2002, the Measurements Group has implemented a strategy of vertical market integration, with a product range from resistance strain gages, to transducers (the metallic structures to which strain gages are cemented), to the electronic instruments and systems that measure and control output of the transducers. Vishay Measurements Group now has two operating divisions: Vishay Micro-Measurements (for strain gages, instruments and PhotoStress products) and Vishay Transducers (for load cells, weigh modules, instruments and weighing systems).

Active Components

Our active electronic components include both discrete devices and integrated circuits (ICs). They are referred to as "active" because they require power to function. Discrete devices are single components or an arrangement of components that generate, control, regulate and amplify or switch electronic signals or energy. Examples of our discrete active components include diodes, rectifiers, transient voltage suppressors, transistors and power MOSFETs. These devices are interconnected with passive components or other active components to create an electronic circuit. Our IC devices consist of a number of active and passive components interconnected on a single chip to perform a specific function. Examples of our integrated circuits include power ICs, motor control ICs and signal processing ICs. Our discrete active components and ICs are manufactured and marketed primarily through our majority-owned Siliconix subsidiary, our Telefunken unit and the General Semiconductor business.

We also include in the category of active components our line of optoelectronic components, manufactured and marketed by our Telefunken unit, and the infrared components business acquired from Infineon A.G.

Discrete Devices

Diodes and rectifiers are used to convert electrical currents from alternating current (AC) into direct current (DC) by conducting electricity in one direction and blocking it in the reverse direction. Because electrical outlets carry AC while the vast majority of electronic devices use DC, rectifiers are used in a wide variety of applications. We offer a broad line of diodes and rectifiers with differing power, speed, cost, packaging and conversion (half wave or full wave) characteristics. Our rectifiers include a series of high voltage devices that have been optimized for power correction circuits.

Transient voltage suppressors protect electronic circuits by limiting voltage to a safe level. Examples of transient events that could damage unprotected circuits include static electricity charges and natural or induced lightning. Voltage suppressors protect circuits by absorbing large amounts of energy for short periods of time. We offer a broad range of state-of-the-art transient voltage suppressors for use in most modern electronic equipment.

Small signal diodes and transistors perform amplification, signal blocking, routing and switching functions at lower current levels. Our small-signal transistors range from the older junction field-effect transistors (JFETs), to newer products such as those based upon double-diffused metal oxide semiconductor (DMOS) technology.

Discrete power MOSFETs are specialized field-effect transistors used to switch and manage power in a broad range of electronic devices. These include particularly low-voltage applications such as cell phones, portable and desktop computers, automobiles, instrumentation and industrial applications. Our innovative "trench" power MOSFET technology offers very high cell density, very low on-resistance and optimized switching parameters for high frequency DC-DC power conversion. Power MOSFETs conserve power and help prevent components from heating up.

Integrated Circuits

Power ICs are used in applications such as cell phones, where an input voltage from a battery or other supply source must be switched, interfaced or converted to a level that is compatible with logic signals used by microprocessors and other digital components. Our ICs are designed to operate at higher frequencies without compromising efficiencies. Often our power MOSFETs and power ICs can be used together as chip sets with complementary performance characteristics optimized for a specific application.

Motor control ICs control the starting, speed or position of electric motors, such as the head positioning and spindle motors in hard disk drives.

Signal processing ICs are used for analog switching and multiplexing in devices that either receive or output analog (non-digital) signals. A recent application of this technology is in broadband communications devices such as DSL modems.

Optoelectronics

Our line of optoelectronic components includes photo emitters and detectors, optocouplers, IRDCs and LEDs.

Our photo detectors are light-sensitive semiconductor devices, and include linear photo diodes for light measurement, photo-transistors for light switching applications in printers, copiers, facsimile machines, vending machines and automobiles, and high speed photo PIN diodes specially designed for infrared data transfer. Our photo detector products are available in a wide variety of sensitivity angles, light sensitivities, daylight filters and packaging shapes. Our infrared photo emitters are used for optical switching and data transfer applications, often in conjunction with our photo detectors, and in devices like infrared remote controls for televisions.

An optocoupler consists of a light emitting diode and a receiver facing each other through an insulation medium inside a light-isolated housing. The receiver may either be a photodetector or a pair of MOSFETs, and in the latter case the device is referred to as a solid-state relay (SSR). The function of an optocoupler is to electrically isolate input and output signals. Our optocouplers are used in switchable power supplies, safety circuitry and programmable controllers for computer monitors, consumer electronics, telecommunications equipment and industrial systems.

IRDCs consist of a detector photo diode, an infrared light emitting diode and a control IC. IRDCs are used for short range, two-way wireless, infrared data transfer between electronic devices such as mobile phones and other telecommunications equipment, computers and personal digital assistants (PDAs). LEDs are light emitting diodes used as light indicators in a variety of industries.

Packaging

We have taken advantage of the growth of the surface mount component market, and we are an industry leader in designing and marketing surface mount devices. Surface mount devices adhere to the surface of a circuit board rather than being secured by leads that pass through holes to the back side of the board. Surface mounting provides distinct advantages over through-hole mounting. For example, surface mounting allows the placement of more components on a circuit board, as well as on both sides of the board. This is particularly desirable in applications such as hand held computers and cell phones where there is a continuing design trend towards product miniaturization. Surface mounting also facilitates automated product assembly, resulting in lower production costs for equipment manufacturers than those associated with leaded or through-hole mounted devices. We believe that we are a market leader in the development and production of a wide range of surface mount devices, including:

- thick film chip resistors,
- thick film resistor networks and arrays,
- metal film leadless resistors (MELFs),
- wirewound chip resistors,
- power strip resistors,
- bulk metal foil chip resistors,

- molded tantalum chip capacitors,
- coated tantalum chip capacitors,
- multi-layer ceramic chip capacitors,
- thin film chip resistors,
- thin film networks,
- certain diodes and transistor products,

- current sensing chips,
- chip inductors,
- chip transformers,
- chip trimmers,
- NTC chip thermistors,
- PTC chip thermistors, and
- strain gages.

We also provide a number of component packaging styles to facilitate automated product assembly by our customers.

Military Qualifications

We have qualified certain products under various military specifications, approved and monitored by the United States Defense Electronic Supply Center (DESC), and under certain European military specifications. DESC qualification levels are based in part upon the rate of failure of products. In order to maintain the classification level of a product, we must continuously perform tests on the product and the results of these tests must be reported to DESC. If the product fails to meet the requirements for the applicable classification level, the product's classification may be reduced to a lower level. Products from some of our United States manufacturing facilities experience a reduction in product classification levels from time to time. During the time that the DESC classification level is reduced for a product with military application, net sales and earnings attributable to that product may be adversely affected.

Customers

We sell our products primarily to original equipment manufacturers (OEMs), electronic manufacturing services (EMS) companies, which manufacture for OEMs on an outsourcing basis, and independent distributors that maintain large inventories of electronic components for resale to OEMs.

To better serve our customers, we maintain production facilities in regions where we market the bulk of our products, principally in the United States, Germany, France, the United Kingdom and more recently, Asia. We work with our customers so that our products are incorporated into the design of electronic equipment at the research and prototype stages. We also employ a staff of application and field engineers to assist our customers, independent manufacturers' representatives and distributors in solving technical problems and developing products to meet specific needs.

Our largest customers vary from year to year, and no customer has long-term commitments to purchase our products. During 2002, no one customer accounted for more than 10% of our sales.

During 2002, approximately 31% of our net sales were attributable to customers in the Americas, approximately 31% were attributable to customers in Europe, and approximately 38% were attributable to customers in Asia.

Marketing

Our products are marketed through independent manufacturers' representatives compensated solely on a commission basis, by our own sales personnel and by independent distributors. We have regional sales personnel in

several North American locations that make sales directly to OEMs and provide technical and sales support for independent manufacturers' representatives throughout the United States, Mexico and Canada. As noted, we also use independent distributors to resell our products. Outside North America, we use similar channels to sell our products worldwide.

Research and Development

Many of our products and manufacturing techniques, technologies and packaging methods have been invented, designed and developed by our engineers and scientists. We maintain strategically placed design centers where proximity to customers enables us to more easily gauge and satisfy the needs of local markets. These design centers are located predominantly in the United States, France, Germany, Israel, the People's Republic of China, the Republic of China (Taiwan) and South Korea.

We also maintain research and development staffs and promote programs at a number of our production facilities to develop new products and new applications of existing products, and to improve manufacturing techniques. This decentralized system encourages individual product development at individual manufacturing facilities that occasionally have applications at other facilities. Company research and development costs (exclusive of purchased in-process research and development) were approximately \$37.1 million for 2002, \$30.2 million for 2001, and \$37.1 million for 2000. These amounts include expenditures of our Siliconix subsidiary of \$19.3 million, \$17.2 million and \$21.0 million in 2002, 2001 and 2000, respectively, principally for the development of new power products and power ICs. These amounts do not include substantial expenditures for the development and manufacturing of machinery and equipment for new processes and for cost reduction measures.

Although we have numerous United States and foreign patents covering certain of our products and manufacturing processes, no particular patent is considered material to our business.

Sources of Supplies

Although most materials incorporated in our products are available from a number of sources, certain materials, particularly tantalum and palladium, are available only from a relatively limited number of suppliers.

Tantalum

We are a major consumer of the world's annual production of tantalum. Tantalum, a metal purchased in powder or wire form, is the principal material used in the manufacture of tantalum capacitors. There are currently three major suppliers that process tantalum ore into capacitor grade tantalum powder. Due to the strong demand for our tantalum capacitors and difficulty in obtaining sufficient quantities of tantalum powder from our suppliers, we stockpiled tantalum ore in 2000 and early 2001. During 2001 and 2002, we and our competitors experienced a significant decline in the tantalum capacitor business as well as significant decreases in the market prices for tantalum. As a result, we recorded in costs of products sold write-downs of \$25,700,000 and \$52,000,000, respectively, on tantalum inventories during the years ended December 31, 2002 and 2001. We also recorded a loss on future purchase commitments of \$106,000,000 for the year ended December 31, 2002. If the downward pricing trend were to continue, the Company could again be required to write down the carrying value of its tantalum inventory and record additional losses on its long-term purchase commitments.

We have two agreements with Cabot Corporation for the supply of tantalum powder, a July 2000 agreement and a November 2000 agreement. Our purchase commitments with Cabot were entered into at a time when market demand for tantalum capacitors was high and tantalum powder was in short supply. With the decline in market demand and prices for tantalum, we began the process of negotiating modifications to the agreements with Cabot during 2001. Our major competitors in the tantalum capacitor business were also seeking modifications to their contracts with Cabot. In June 2002, following the prior initiation of legal proceedings by Cabot, we and Cabot agreed to make certain modifications to the supply agreements. These included price reductions, the extension of the term of one of the contracts, and the regular scheduling of our purchase commitments.

Palladium

Palladium, a metal used to produce multi-layer ceramic capacitors, is currently found primarily in South Africa and Russia. Palladium is a commodity product that is subject to price volatility. The price of palladium fluctuated in the range of approximately \$222 to \$1,090 per troy ounce during the three years ended December 31, 2002, and as of December 31, 2002, the price of palladium was \$236 per troy ounce. During the years ended December 31, 2002 and 2001, respectively, we recorded in costs of products sold write-downs on palladium inventories of \$1,700,000 and \$18,000,000.

Inventory and Backlog

We manufacture both standardized products and those designed and produced to meet customer specifications. We maintain an inventory of resistors and other standardized components. Backlogs of outstanding orders for our products were \$407.6 million, \$337.9 million and \$773.1 million, respectively, at December 31, 2002, 2001 and 2000. The backlog at December 31, 2002 includes \$49.8 million of backlog attributable to the business of BCcomponents, which was acquired in December 2002. The increase in backlog at December 31, 2002, exclusive of the business of BCcomponents, as compared to the prior year, primarily reflects the increase in demand during 2002 for our active components as a result of the increase in computer notebooks and feature rich cell phones with multiple functions, especially in Asia. The passive components backlog has decreased in 2002 due to a global slowdown in the electronics industry, particularly in the general personal computer and cell phone markets.

Many of the orders that comprise our backlog may be canceled by customers without penalty. Customers may on occasion double and triple order components from multiple sources to ensure timely delivery when backlog is particularly long. Customers often cancel orders when business is weak and inventories are excessive, a phenomenon that we have experienced in the current economic slowdown. Therefore, the amount of our backlog may exceed the level of orders that will ultimately be delivered. Our results of operations could be adversely impacted if customers cancel a material portion of orders in our backlog.

Competition

We face strong competition in various product lines from both domestic and foreign manufacturers that produce products using technologies similar to ours. Our main competitors for tantalum capacitors are KEMET Corporation, AVX Corporation and NEC Electronics, Inc. For MLCC capacitors, our principal competitors are KEMET, AVX, Murata and TDK Corp. For thick film chip resistors, our major competitors include Rohm Corp., Koa Speer Electronics Inc. and Yageo Corporation. For wirewound and metal film resistors, the principal competitors are I.R.C. Inc., Rohm Corp. and Ohmite Manufacturing Company. For active components, main competitors include International Rectifier, Philips, N.V., ON Semiconductor, Rohm Corp., Motorola, Inc., Fairchild Semiconductor Corp., Maxim, Shindengen Electric Manufacturing Co. Ltd., Sanken Electric Co. Ltd., ST Microelectronics N.V. and Samsung Co., Ltd. There are many other companies that produce products in the markets in which we compete.

Our competitive position depends on our product quality, know-how, proprietary data, marketing and service capabilities and business reputation, as well as on price. We compete for sales of certain products on the basis of our marketing and distribution network, which provides a high level of customer service. For example, we work closely with our customers to have our components incorporated into their electronic equipment at the early stages of design and production and maintain redundant production sites for some of our products to ensure an uninterrupted supply of products. We have also established a National Accounts Management Program, which provides our largest customers with one national account executive who can cut across business unit lines for sales, marketing and contract coordination. In addition, the breadth of our product offerings enables us to strengthen our market position by providing customers with "one-stop" access to one of the broadest selections of passive electronic components available directly from a manufacturing source.

Manufacturing Operations

We strive to balance the location of our manufacturing facilities. In order to better serve our customers, we maintain some of our production facilities in regions where we market the bulk of our products, such as the United States, Germany, France, the United Kingdom, and more recently, Asia. To maximize production efficiencies, we seek whenever practicable to establish manufacturing facilities in countries, such as the Czech Republic, Hungary,

India, Israel, Malaysia, Mexico, the People's Republic of China, the Philippines, Portugal, and the Republic of China (Taiwan), where we can take advantage of lower labor and tax costs and, in the case of Israel, to take advantage of various government incentives, including grants and tax relief.

Some of our most sophisticated manufacturing operations are the production of power semiconductor components. This manufacturing process involves two phases of production: wafer fabrication and assembly (or packaging). Wafer fabrication subjects silicon wafers to various thermal, metallurgical and chemical process steps that change their electrical and physical properties. These process steps define cells or circuits within numerous individual devices (termed "dies" or "chips") on each wafer. Assembly is the sequence of production steps that divides the wafer into individual chips and encloses the chips in structures (termed "packages") that make them usable in a circuit. Both wafer fabrication and assembly phases incorporate wafer level and device level electrical testing to ensure that device design integrity has been achieved.

At December 31, 2002, approximately 32% of our identifiable assets were located in the United States, approximately 36% were located in Europe, approximately 14% were located in Israel, and approximately 18% were located in Asia. In the United States, our manufacturing facilities are located in California, Connecticut, Indiana, Maine, Maryland, New York, Nebraska, North Carolina, Pennsylvania, Rhode Island, South Dakota, Vermont, and Wisconsin. In Europe, our main manufacturing facilities are located in Germany and France. We also have manufacturing facilities in Austria, Belgium, the Czech Republic, Hungary, India, Israel, Malaysia, Mexico, the Netherlands, the People's Republic of China, the Philippines, Portugal and the Republic of China (Taiwan). Over the past several years, we have invested substantial resources to increase capacity and to maximize automation in our plants, which we believe will further reduce production costs.

We are aggressively undertaking to have the quality systems at most of our major manufacturing facilities approved under the ISO 9001 international quality control standard. ISO 9001 is a comprehensive set of quality program standards developed by the International Standards Organization. A majority of our manufacturing operations have already received ISO 9001 approval and others are actively pursuing such approval.

In 2002, we continued the implementation of our strategy to shift manufacturing emphasis to higher automation in higher labor cost regions and to relocate a fair amount of production to regions with skilled workforces and relatively lower labor costs. As a result, we incurred restructuring costs in the year ended December 31, 2002 associated with the downsizing of manufacturing facilities in Europe and the United States. We may continue to incur such expenses in 2003.

See Note 16 to our Consolidated Financial Statements, "Business Segment and Geographic Area Data," for financial information by geographic area.

Israeli Government Incentives

We have substantial manufacturing operations in Israel, where we benefit from the government's employment and tax incentive programs designed to increase employment, lower wage rates and increase our ability to attract a highly-skilled labor force, all of which have contributed substantially to our growth and profitability. For the year ended December 31, 2002, sales of products manufactured in Israel accounted for approximately 13.0% of our net sales.

Under the terms of the Israeli government's incentive programs, once a project is approved, the recipient is eligible to receive the benefits of the related grants for the life of the project, so long as the recipient continues to meet preset eligibility standards. None of our approved projects has ever been cancelled or modified, and we have already received approval for a majority of the projects contemplated by our capital expenditure program. However, as a result of the recent economic downturn, we were forced to lay off a significant number of employees in Israel in 2001. In 2002, the Israeli government initially withheld certain grant monies claiming that we had not maintained employment at the required minimum levels; however, we were able to settle our dispute in the fourth quarter and the government agreed to continue making grant payments to us. While the number of employees continues to satisfy the eligibility requirements for our Israeli government grants, economic circumstances could compel future additional layoffs. Also, over the past few years, the Israeli government has scaled back or discontinued some of its incentive programs. There can be no assurance that we will maintain our eligibility for existing projects or that in the

future the Israeli government will continue to offer new incentive programs applicable to us or that, if it does, such programs will provide the same level of benefits we have historically received or that we will continue to be eligible to take advantage of them. Because we have received approvals for most projects currently contemplated, we do not anticipate that cutbacks in the incentive programs for new projects would have an adverse impact on our earnings and operations for at least several years.

We might be materially adversely affected if events were to occur in the Middle East that interfered with our operations in Israel. However, we have never experienced any material interruption in our Israeli operations in our 32 years of operations there, in spite of several Middle East crises, including wars.

Environment, Health and Safety

We have adopted an Environmental Health and Safety Corporate Policy that commits us to achieve and maintain compliance with applicable environmental laws, to promote proper management of hazardous materials for the safety of our employees and the protection of the environment, and to minimize the hazardous materials generated in the course of our operations. This policy is implemented with accountability directly to the Chairman of the Board of Directors. In addition, our manufacturing operations are subject to various federal, state and local laws restricting discharge of materials into the environment.

We are not involved in any pending or threatened proceedings that would require curtailment of our operations. We continually expend funds to ensure that our facilities comply with applicable environmental regulations. In regard to all of our facilities, we have completed our undertaking to comply with environmental regulations relating to the elimination of chlorofluorocarbons (CFCs) and ozone depleting substances (ODS) pursuant to the Clean Air Act amendments of 1990. We have completely eliminated the use of CFCs and ODS in our manufacturing processes, and all facilities are currently in compliance with the Clean Air Act.

While we believe that we are in material compliance with applicable environmental laws, we cannot accurately predict future developments and do not necessarily have knowledge of past occurrences on sites that we currently occupy. More stringent environmental regulations may be enacted in the future, and we cannot determine the modifications, if any, in our operations that any such future regulations might require, or the cost of compliance with such regulations. Moreover, the risk of environmental liability and remediation costs is inherent in the nature of our business and, therefore, there can be no assurance that material environmental costs, including remediation costs, will not arise in the future.

We have been named a Potentially Responsible Party (PRP) at nine Superfund sites, including two Siliconix facilities, and have become responsible for certain obligations as a PRP in connection with our acquisition of General Semiconductor. We expend minimal amounts in connection with several of these sites and do not expect costs associated with the others to be material.

General Semiconductor has also been named as a defendant in two actions in the United States District Court for the Eastern District of New York in connection with its former operations at a facility in Hicksville, New York. The plaintiffs in these actions allege that they have suffered personal injury and property damage as a result of the facility's operations. Although we will vigorously defend these actions, we do not currently possess sufficient information to estimate reasonably the amount of or timing of liabilities that may be associated with these litigations. It is our policy to record appropriate liabilities for environmental matters when damage claim payments are probable and the costs can be reasonably estimated.

The ultimate cost of site cleanup is difficult to predict given the uncertainties regarding the extent of the required cleanup, the interpretation of applicable laws and regulations and alternative cleanup methods. Based upon our experience with the foregoing environmental matters, we have concluded that there is at least a reasonable possibility that we will incur remedial costs in the range of \$30 million to \$35 million. As of December 31, 2002, we concluded that the best estimate within this range is \$34.4 million, which is included in other long-term liabilities on the Consolidated Balance Sheet. The majority of the environmental reserve is due to the acquisitions of General Semiconductor, Inc. and BCcomponents. In view of our financial position and reserves for environmental matters of \$34.4 million, we have concluded that any potential payment of such estimated amounts will not have a material adverse effect on our consolidated financial position, results of operations or liquidity.

With each acquisition, we attempt to identify potential environmental concerns and to minimize, or obtain indemnification for, the environmental matters we may be required to address. In addition, we establish reserves for specifically identified potential environmental liabilities. We believe that the reserves we have established are adequate. Nevertheless, we often unavoidably inherit certain pre-existing environmental liabilities, generally based on successor liability doctrines. Although we have never been involved in any environmental matter that has had a material adverse impact on our overall operations, there can be no assurance that in connection with any past or future acquisition we will not be obligated to address environmental matters that could have a material adverse impact on our operations.

Employees

As of December 31, 2002, we employed approximately 25,250 full time employees, of whom approximately 20,730 were located outside the United States. Some of our employees outside the United States are members of trade unions and employees at one small U.S. facility are represented by a union. Our relationship with our employees is good. However, no assurance can be given that, if we continue to restructure our operations in response to changing economic conditions, labor unrest or strikes, especially at European facilities, will not occur. See "Legal Proceedings."

Company Information and Website

We file annual, quarterly, and current reports, proxy statements, and other documents with the Securities and Exchange Commission (SEC) under the Securities Exchange Act of 1934 (the Exchange Act). The public may read and copy any materials that we file with the SEC at the SEC's Public Reference Room at 450 Fifth Street, NW, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Also, the SEC maintains an Internet website that contains reports, proxy and information statements, and other information regarding issuers, including us, that file electronically with the SEC. The public can obtain any documents that we file with the SEC at http://www.sec.gov.

In addition, our company website can be found on the Internet at www.vishay.com. The website contains information about us and our operations. Copies of each of our filings with the SEC on Form 10-K, Form 10-Q and Form 8-K, and all amendments to those reports, can be viewed and downloaded free of charge as soon as reasonably practicable after the reports and amendments are electronically filed with or furnished to the SEC. To view the reports, access www.vishay.com, click on Company Info, then Investor Relations and then SEC Filings.

Any of the above documents can also be obtained in print by any shareholder who requests them from our Investor Relations Department at the following address:

Corporate Investor Relations Vishay Intertechnology, Inc. 63 Lincoln Highway Malyern, PA 19355-2143

Item 2. PROPERTIES

As of December 31, 2002, we maintained approximately 74 manufacturing facilities. The principal locations of such facilities, along with available space including administrative offices, are:

Owned Locations	Approx. Available Space (Square Feet)
<u>United States</u>	
Columbus and Norfolk, NE*	298,000
Sanford, ME	225,000
Santa Clara, CA	220,000
Grafton and Oconto, WI*	165,000
Wendell and Statesville, NC*	159,000
Monroe, CT	91,000
Greencastle, IN	90,000
Malvern, PA	79,000
* 2 locations Non-U.S.	
Israel (5 locations)	1,060,000
Germany (8 locations)	781,000
France (4 locations)	414,000
Republic of China (Taiwan) (2 locations)	391,000
Czech Republic (5 locations)	368,000
Hungary (2 locations)	325,000
Portugal	301,000
Netherlands	286,000
People's Republic of China (2 locations)	211,000
Belgium (2 locations)	180,000
Austria	153,000
Philippines	149,000
India	140,000
Malaysia	115,000

We own an additional 288,000 square feet of manufacturing facilities located in Maryland, New York, Rhode Island, South Dakota, Vermont and Mexico.

Leased facilities in the United States include 217,000 square feet of space located in California, Massachusetts, New York and South Dakota. Foreign leased facilities consist of 778,000 square feet in China, 127,000 square feet in Mexico, 13,000 square feet in the United Kingdom, 196,000 square feet in Germany, 75,000 square feet in the Czech Republic, 39,000 square feet in Israel and 41,000 square feet in Sweden.

In the opinion of management, our properties and equipment generally are in good operating condition and are adequate for our present needs. We do not anticipate difficulty in renewing existing leases as they expire or in finding alternative facilities.

<u>Item 3.</u> <u>LEGAL PROCEEDINGS</u>

From time to time we are involved in routine litigation incidental to our business. Management believes that such matters, either individually or in the aggregate, should not have a material adverse effect on our business or financial condition.

Our 80.4% owned subsidiary, Siliconix, is a party to two environmental proceedings. The first involves property that Siliconix vacated in 1972. In July 1989, the California Regional Water Quality Control Board (RWQCB) issued Cleanup and Abatement Order No. 89-115 both to Siliconix and the current owner of the property. The Order alleged that Siliconix contaminated both the soil and the groundwater on the property by the improper disposal of certain chemical solvents. The RWQCB considered both parties to be liable for the contamination and sought to have them decontaminate the site to acceptable levels. Siliconix subsequently reached a settlement of this matter with the current owner of the property. The settlement provided that the current owner will indemnify Siliconix and its employees, officers, and directors against any liability that may arise out of any governmental agency actions brought for environmental cleanup of the subject site, including liability arising out of RWQCB Order No. 89-115, to which Siliconix remains nominally subject.

The second proceeding involves Siliconix's Santa Clara, California facility, which Siliconix has owned and occupied since 1969. In February 1989, the RWQCB issued Cleanup and Abatement Order No. 89-27 to Siliconix. The Order is based on the discovery of contamination of both the soil and the groundwater on the property by certain chemical solvents. The Order calls for Siliconix to specify and implement interim remedial actions and to evaluate final remedial alternatives. The RWQCB issued a subsequent order requiring Siliconix to complete the decontamination. Siliconix has substantially completed its compliance with the RWQCB's orders.

Our subsidiary General Semiconductor has been named a PRP at several Superfund sites and as a defendant in two lawsuits in the United States District Court for the Eastern District of New York. See "Environment, Health and Safety."

In February and March 2001, several purported class action complaints were filed in the Delaware Court of Chancery and the California Superior Court against us, Siliconix and the directors of Siliconix in connection with our proposal in February 2001 to purchase all issued and outstanding shares of Siliconix that we did not already own. The class actions alleged that our proposed offer was unfair and a breach of fiduciary duty. One of the Delaware class actions also alleged that we had usurped Siliconix inventory and patents, appropriated Siliconix's separate corporate identity, and obtained a below-market loan from Siliconix. The actions sought injunctive relief, damages and other relief. The Delaware Chancery Court denied a preliminary injunction motion seeking to enjoin our tender offer, which was commenced in May 2001 but not successfully completed. In December 2002, the Delaware Chancery Court dismissed without prejudice the Delaware litigation. Also in December 2002, the plaintiffs in the action filed in the California Superior Court filed a motion for dismissal of the action without prejudice. Defendants have consented to that motion, which is still pending.

Item 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None.

Item 4A. EXECUTIVE OFFICERS OF THE REGISTRANT

The following table sets forth certain information regarding our executive officers as of March 31, 2003.

<u>Name</u>	<u>Age</u>	Positions Held
Felix Zandman*	74	Chairman of the Board and Chief Executive Officer
Avi D. Eden*	55	Vice-Chairman of the Board, Executive Vice President and General Counsel
Gerald Paul*	54	Chief Operating Officer, President and Director
Marc Zandman	41	Vice-Chairman of the Board, President-Vishay Israel Ltd.
Richard N. Grubb*	56	Executive Vice President, Treasurer, Chief Financial Officer and Director
Robert A. Freece*	62	Senior Vice President and Director
William J. Spires	61	Vice President and Secretary

^{*} Member of the Executive Committee of the Board of Directors.

Dr. Felix Zandman, a founder of the Company, has been the Chief Executive Officer and a Director of the Company since its inception. Dr. Zandman had been President of the Company from its inception until March 16, 1998, when Dr. Gerald Paul was appointed President of the Company. Dr. Zandman has been Chairman of the Board since March 1989.

Avi D. Eden has been a Director and General Counsel of the Company since June 1988, and has been Vice-Chairman of the Board and an Executive Vice President of the Company since August 1996.

Dr. Gerald Paul has served as a Director of the Company since May 1993 and has been Chief Operating Officer and an Executive Vice President of the Company since August 1996. On March 16, 1998, Dr. Paul was appointed President of the Company. He was President of Vishay Electronic Components, Europe from January 1994 to August 1996. Dr. Paul has been Managing Director of Draloric Electronic GmbH, an affiliate of the Company, since January 1991. Dr. Paul has been employed by Draloric since February 1978.

Marc Zandman was appointed Vice-Chairman of the Board as of March 1, 2003. He has been a Director of the Company since May 2001, President of Vishay Israel Ltd. since April 1998, and Group Vice President of Measurements Group since August 2002. Mr. Zandman has served in various other capacities with the Company since August 1984. He is the son of Dr. Felix Zandman, the Company's Chief Executive Officer.

Richard N. Grubb has been a Director, Vice President, Treasurer and Chief Financial Officer of the Company since May 1994, and has been an Executive Vice President of the Company since August 1996. Mr. Grubb has been associated with the Company in various capacities since 1972.

Robert A. Freece has been a Director of the Company since 1972. He was a Vice President of the Company from 1972 until 1994, and has been a Senior Vice President since May 1994.

William J. Spires has been a Vice President and Secretary of the Company since 1981. Mr. Spires has been Vice President - Industrial Relations since 1980 and has been employed by the Company since 1970.

PART II

<u>Item 5.</u> <u>MARKET FOR REGISTRANT'S COMMON STOCK AND RELATED SECURITY HOLDER MATTERS</u>

Our common stock is listed on the New York Stock Exchange under the symbol VSH. The following table sets forth the high and low sales prices for our common stock as reported on the New York Stock Exchange Composite Tape for the quarterly periods within the 2001 and 2002 calendar years indicated. We do not currently pay cash dividends on our capital stock. Our policy is to retain earnings to support the growth of our business and we do not intend to change this policy at the present time. In addition, we are restricted from paying cash dividends under the terms of our revolving credit agreement. See Note 6 to our Consolidated Financial Statements. Holders of record of our common stock totaled approximately 1,791 at March 27, 2003.

COMMON STOCK MARKET PRICES

	Calenda	ar 2001	Calend	lar 2002
	<u>High</u>	Low	<u>High</u>	Low
First Quarter	\$22.75	\$13.75	\$22.50	\$17.05
Second Quarter	\$27.98	\$17.00	\$26.15	\$19.31
Third Quarter	\$25.25	\$16.08	\$22.00	\$ 8.51
Fourth Quarter	\$21.88	\$16.86	\$15.10	\$ 6.70

At March 27, 2003, we had outstanding 15,383,296 shares of Class B common stock, par value \$.10 per share, each of which entitles the holder to ten votes. The Class B common stock generally is not transferable except in certain very limited instances, and there is no market for those shares. The Class B common stock is convertible, at the option of the holder, into common stock on a share for share basis. Substantially all of such Class B common stock is owned by Dr. Felix Zandman, our Chairman and Chief Executive Officer, the estate of Mrs. Luella B. Slaner, a former director, and trusts for the benefit of the grandchildren of Mrs. Slaner, either directly or beneficially.

See Item 12 for certain equity compensation information with respect to equity compensation plans approved by security holders and equity compensation plans not approved by security holders.

Item 6. SELECTED FINANCIAL DATA

The following table sets forth selected consolidated financial information of the Company as of and for the fiscal years ended December 31, 2002, 2001, 2000, 1999 and 1998. This table should be read in conjunction with our Consolidated Financial Statements and the related notes thereto included elsewhere in this Form 10-K.

_	As of and for the Year Ended December 31,				
Income Statement Data (in thousands, except per share amounts):	<u>2002</u> (1)	<u>2001</u> (2)	<u>2000</u>	<u>1999</u> (3)	1998 (4)
Net sales	\$1,822,813	\$1,655,346	\$2,465,066	\$1,760,091	\$1,572,745
Interest expense	28,761	16,848	25,177	53,296	49,038
(Loss) earnings before income taxes and minority interest Income taxes (benefit)	(100,045) (16,900)	10,103 5,695	690,225 148,186	134,711 36,940	42,646 30,624
Minority interest	9,469	3,895	24,175	14,534	3,810
Net (loss) earnings	(92,614)	513	517,864	83,237	8,212
Basic (loss) earnings per share (5) Diluted (loss) earnings per share (5)	\$(0.58) \$(0.58)	\$0.00 \$0.00	\$3.83 \$3.77	\$ 0.66 \$ 0.65	\$ 0.07 \$ 0.07
Weighted average shares outstanding – basic (5)	159,413	141,171	135,295	126,678	126,665
Weighted average shares outstanding – disluted (5)	159,413	142,514	137,463	128,233	126,797
Balance Sheet Data (in thousands):					
Total assets	\$4,315,159	\$3,951,523	\$2,783,658	\$2,323,781	\$2,462,744
Long-term debt	706,316	605,031	140,467	656,943	814,838
Working capital	897,456	1,096,034	1,057,200	604,150	650,483
Stockholders' equity	2,358,787	2,366,545	1,833,855	1,013,592	1,002,519

⁽¹⁾ Includes the results from January 1, 2002 of Infineon Malaysia, January 31, 2002 of Sensortronics, July 1, 2002 of Tedea Huntleigh, August 1, 2002 of BLH/Nobel, and October 1, 2002 of Celtron. Also includes restructuring expenses, net of taxes of \$11,984,000; write-down of raw materials inventory, net of taxes of \$22,533,000; accrual of loss on long-term purchase commitments, net of taxes of \$91,160,000; and other expenses, net of taxes, of \$10,426,000 for a total of \$136,103,000 (\$0.85 per share).

⁽²⁾ Includes the results from January 1, 2001 of Tansitor, July 27, 2001 of Infineon U.S., November 2, 2001 of General Semiconductor, and November 7, 2001 of Mallory. Also includes restructuring expenses, net of taxes, of \$39,972,000; write-down of raw materials inventory, net of taxes, of \$57,431,000; purchased research and development (no tax effect) of \$16,000,000; and other expenses, net of taxes, of \$5,373,000 for a total of \$118,776,000 (\$0.84 per share).

⁽³⁾ The sale of Nicolitch, S.A. and a tax rate change in Germany reduced net earnings by \$14,562,000 (\$0.11 per share).

⁽⁴⁾ Includes the results from March 1, 1998 of Siliconix and Telefunken and special charges after taxes of \$55,335,000 (\$0.44 per share).

⁽⁵⁾ Adjusted to reflect a three-for-two stock split distributed June 9, 2000, a five-for-four stock split distributed June 22, 1999 and a 5% stock dividend paid on June 11, 1998.

<u>Item 7.</u> MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Overview

Market conditions in the electronics industry remained difficult in 2002. The continuing worldwide economic slowdown, general lack of investor confidence, consumer ambivalence and political instabilities were reflected in the markets we serve. With regard to particular industries in 2002, our management perceived stability in the automotive market, continuing weakness in the markets for telecom equipment and consumer products generally, and signs of modest recovery in computer laptops and game consoles. Geographically, our business in the Americas and Europe remained at depressed levels, while our Asian business faired relatively better. Our visibility of future demand is limited, and management cannot gauge with any confidence when the current cyclical downturn is likely to reverse itself.

Product Demand and Pricing

Sales volume and pricing are the top line indicators of demand for our products. Compared to the substantial drop-off in business in 2001, 2002 results remained relatively weak but without major signs of increasing deterioration. Sales rose slightly in 2002 as compared to 2001, with higher volumes offsetting the effects of still declining prices. The increased volumes were due in part to the effects of acquisition activity. Average selling prices continued their decline in 2002, but at a rate that was less than in 2001. We experienced a weighted average pricing decline in 2002 compared to 2001 of 9%, while the decline for 2001 compared to 2000 was 3%.

Backlog, which is one indication of trends in customer demand, was relatively stable in 2002 as compared to 2001, but still down substantially from 2000. In uncertain economic times, such as those we experienced in 2002 and 2001, orders are more susceptible to cancellation. Accordingly, backlog as a measure of future sales in these circumstances becomes less reliable.

Another important indicator of demand in our industry is the book-to-bill ratio, which is the ratio of the amount of product ordered during a period as compared with the product that we ship during that period. A book-to-bill ratio that is greater than one indicates that our orders are building and that we are likely to see increasing revenues in future periods. Conversely, a book-to-bill ratio that is less than one is an indicator of declining demand and may foretell declining sales.

The quarter-to-quarter trends in backlog and book-to-bill ratio can also be an important indicator of the likely direction of our business. The following table shows the end-of-period backlog and the book-to-bill ratio for our business as a whole during the five quarters beginning with the fourth quarter of 2001 and through the fourth quarter of 2002. The relatively flat backlog amounts and book-to-bill ratios hovering at or slightly below one are consistent with a business environment that remains stagnant and with no clear signs of recovery.

T 1 05 : 1	4 th Quarter 2001	1 st Quarter 2002	2 nd Quarter 2002	3 rd Quarter 2002	4 th Quarter 2002
End of Period Backlog	\$337,883,000 (1)	\$396,900,000	\$421,500,000	\$378,500,000	\$407,600,000 (2)
Book-to-Bill Ratio	0.89	1.14	1.02	0.90	0.93

- (1) Includes \$70,360,000 of backlog attributable to the business of General Semiconductor, which was acquired November 2, 2001.
- (2) Includes \$49,800,000 of backlog attributable to the business of BCcomponents, which was acquired in December 2002.

Segments

Our management evaluates our operating results along the lines of two major segments, passive components and active components. Passive components include resistors, capacitors and inductors. These are necessary elements of all electronic circuits and are referred to as passive because they do not require power to

operate. We include in this segment our Measurements Group, which manufactures and markets strain gages, load cells, transducers, instruments and weighing systems. The core components of these devices are resistors that are sensitive to various types of mechanical stress. We began our business as a manufacturer of passive components, and this remains a significant part of our business. In December 2002, we completed our first major acquisition in the passive segment in over ten years with the purchase of BCcomponents Holdings B.V., a manufacturer of a broad line of resistors and capacitors. We also completed a series of smaller acquisitions in the Measurements Group in 2002, including Celtron Technologies, the BLH and Nobel businesses of Thermo Electron Corporation, Tedea-Huntleigh BV and the transducer and strain gage businesses of Sensortronics, Inc. With these acquisitions, we established ourselves as one of the world's leading manufacturers and suppliers of strain gage products.

We are now also one of the world's leading manufacturers of active electronic components. These include transistors, diodes, rectifiers, certain types of integrated circuits and optoelectronic products. These components are referred to as active because they require power to function. We entered the active component business in 1997 when Vishay purchased a 65% interest in Lite-On Power Semiconductor Corporation (LPSC), a Taiwan-based company that is a major supplier of discrete active electronic components in Asia. In March 2000, we agreed to sell our interest in LPSC to Lite-On JV Corporation (the Lite-On Group), the owner of the remaining 35% interest in LPSC, for consideration consisting of cash and the assignment or transfer to Vishay of the Lite-On Group's rights under stock appreciation rights. In 1998, we increased our entry into the active components business with the acquisition from Daimler-Benz of TEMIC Telefunken Microelectronics GmbH, a manufacturer of optoelectronic components and small signal transistors, and of an 80.4% interest in Siliconix Incorporated, a manufacturer of power integrated circuits. In 2001, we substantially increased our presence in the active component market, first with the acquisition in July of the optoelectronic infrared business of Infineon A.G., and later with the acquisition in November of General Semiconductor, Inc., a manufacturer of rectifiers and power management components whose business is complementary to that of Siliconix. As a percentage of our total sales, active components were 58% in 2002, 39% in 2001 and 34% in 2000.

The passive and active segments of our business have historically responded differently to phases of the business cycle. Having strong capabilities in both areas not only gives us a broad line of products to offer our customers, it also smoothes, to some extent, the business swings that we experience. When business slows down, active components are usually first to feel the effects of the downturn that are later experienced by passive components. Similarly, when business begins to increase, our semiconductor products usually lead the recovery, followed some time later by resistors, inductors and capacitors. Results in 2002 were on the whole better in the active segment than the passive segment, but results and trends varied for products within the two segments. Our resistor and inductor business stabilized in 2002, but capacitors continued to deteriorate. As in the past, specialty products performed reasonably well despite the economic downturn, but commodity products continued to suffer from strong pricing pressures. The active side of our business evidenced improvement in 2002, mainly at Siliconix and to a lesser extent in our remaining semiconductor operations. Even in the active segment, however, backlog and book-to-bill ratios do not reflect strong near-term recovery.

The following table shows our sales and book-to-bill ratios broken out by segment for the five quarters beginning with the fourth quarter of 2001 and through the fourth quarter of 2002:

Sales (\$)/ Book-to-bill	4 th Quarter 2001	1 st Quarter 2002	2 nd Quarter 2002	3 rd Quarter 2002	4 th Quarter 2002
Passive	\$178,295,000	\$184,572,000	\$187,430,000	\$196,702,000	\$198,542,000
Components	0.83	1.02	0.98	0.96	1.00
Active	\$202,856,000 ⁽¹⁾	\$249,568,000	\$270,447,000	\$274,717,000	\$260,835,000
Components	0.94 ⁽¹⁾	1.22 ⁽²⁾	1.04	0.85	0.88

⁽¹⁾ Includes \$51,274,000 attributable to General Semiconductor for active components. Excluding General Semiconductor, the book-to-bill ratio for active components during the fourth quarter of 2001 would have been 0.95.

⁽²⁾ The book-to-bill ratio for the active components for the quarter ended March 31, 2002 reflected, in part, an unusual spike in orders in March 2002.

The increase in backlog in the actives segment reflects the increase in demand for computer notebooks and feature rich cell phones with multiple functions, especially in Asia. The decrease in passives backlog is due to the global slowdown in the electronics industry, particularly in the general personal computer and cell phone markets.

Cost and Inventory Management

We place a strong emphasis on reducing our costs. One way we do this is by moving production to the extent possible from high labor cost markets, such as the United States and Western Europe, to lower labor cost markets, such as Israel, Mexico, the Republic of China (Taiwan), the People's Republic of China and Eastern Europe. The percentage of our total headcount in lower labor cost countries is a measure of the extent to which we are successful in implementing this program. This percentage was 65% at the end of 2002 as compared to 61% at the end of 2001 and 57% at the end of 2000. We expect that this trend will continue with the acquisition in December 2002 of BCcomponents, where we intend to move production to lower cost jurisdictions, primarily in Asia.

We are placing particular emphasis on cost reduction in our capacitor lines, which have been hardest hit by the current downturn and where the business continues to suffer from worldwide overcapacity. We expect to complete the transfer of our power capacitor production from Western Europe to the Czech Republic by mid-year and to begin moving our molded tantalum capacitor business to the People's Republic of China. We also expect to consolidate our existing film capacitor line within the newly acquired business of BCcomponents.

We also focus on our inventory turns as a measure of how well we are managing our inventory. We define inventory turns for a financial reporting period as our cost of products sold for that period divided by our average inventory for the period. A higher level of inventory turns reflects more efficient use of our capital. In 2002, inventory turns improved to 2.52 from 2.26 in 2001, which we attribute to somewhat improved selling conditions and enhanced selling efficiencies implemented during the year.

Israeli Government Incentives

Our production facilities in Israel benefit from incentives offered by the Israeli government for creation of jobs and capital investment in that country. These benefits take the form of government grants and reduced tax rates that are lower than those in the United States. These reduced tax rates apply to projects specifically approved by the Israeli government and, depending on project size, are available for periods of ten or fifteen years. Due to the write-down of inventories and the loss on long-term purchase commitments in 2002, the application of the Israeli tax rates rather than United States tax rates resulted in an increase in net loss of \$24,769,000. In 2001 and 2000, lower tax rates in Israel, as compared to the statutory rate in the United States, resulted in an increase in net earnings of \$3,009,000 and \$89,745,000, respectively.

Israeli government grants are awarded to specific projects. These grants are intended to promote sales and employment in Israel's industrial sector and are conditioned on the recipient maintaining certain prescribed employment levels. Grants are paid when the related projects become operational, and the Israeli government approves the project. Israeli government grants, recorded as a reduction in the costs of products sold, were \$17,322,000, \$19,064,000 and \$15,721,000 in the years 2002, 2001 and 2000, respectively. At December 31, 2002, our balance sheet reflected \$42,345,000 in deferred grant income.

During the second quarter of 2002, the government of Israel informed us that since the headcount in our Israeli subsidiaries decreased significantly over the previous 18 months, the government intended to withhold a \$15,000,000 grant otherwise due to us. The grant, which was made by the Israeli government under an economic stimulus program, was conditioned in part on the employment levels at certain of our Israeli facilities. The Israeli government argued that we had not maintained employment at the required minimum levels. During the fourth quarter of 2002, we settled our dispute with the government of Israel by negotiating certain of our commitments, and the government agreed to continue making grant payments to us. We therefore recorded a catch up adjustment of approximately \$1,070,000 of grant income for the fourth quarter of 2002 and reversed the allowances against the grant and deferred income reflected on the September 30, 2002 balance sheet.

If we were no longer able to maintain the required level of employment in the future, we could be required to return some grant funds that were previously awarded to us. The effect of the return of these funds would be to reduce our income in future years. Also, if the current business climate continues, we might not initiate new projects that qualify for grants or reduced tax rates or the Israeli government could curtail or eliminate the programs from which we have benefited in the past.

Write-Downs of Inventory and Purchase Commitments

Tantalum is the principal material used in the manufacture of tantalum capacitors. We generally purchase this metal in powder or wire form, although in 2000 and early 2001, when we perceived possible supply shortages, we also stockpiled quantities of tantalum ore. In July and November of 2000, we entered into purchase contracts with Cabot Corporation for tantalum powder and wire that committed us to minimum purchases of these materials at fixed prices through 2005. We regularly utilize tantalum powder and wire in the production of tantalum capacitors but have not used our stockpile of tantalum ore since 2000. Palladium is a precious metal used in the production of multi-layer ceramic capacitors that we purchase under short-term contracts.

In 2001, as a result of the general downturn in the electronics business, we experienced a significant decrease in capacitor sales. Prices of tantalum ore, powder and wire and of palladium also experienced significant declines. Accordingly, we recorded write-downs of our raw material inventories of these metals including \$38,000,000 for tantalum ore, \$14,000,000 for tantalum wire and powder and \$18,000,000 for palladium.

In June 2002, following initiation of a lawsuit by Cabot regarding its tantalum supply contracts with Vishay, we agreed with Cabot to modify the contracts, including reducing prices, providing for purchases at regular intervals and extending one of the contracts through 2006. In the fourth quarter of 2002, our management concluded that the depressed prices for tantalum were not attributable to temporary imbalances in distributor inventories for tantalum capacitors and that the prices for tantalum were likely to remain at their currently depressed levels for the foreseeable future. Also during the fourth quarter, one of our competitors settled its dispute with Cabot regarding long-term tantalum purchase commitments at prices that we understand are in the same range as the prices under our June 2002 settlement with Cabot. Our management therefore concluded that it was unlikely to obtain further price concessions from Cabot. Accordingly, we determined that it was appropriate to accrue a loss of our purchase commitments under our supply contracts with Cabot to reflect the difference between the prices that we are required to pay under the contracts and current market prices for tantalum. For the same reasons, we also determined to further write down our raw material inventories of tantalum ore, powder and wire. These charges amounted to approximately \$106,000,000 for the purchase commitments and \$25,700,000 for inventory. In 2002, we also recorded a write-down of \$1,700,000 on palladium inventories.

We anticipate, based on current and foreseeable demand for tantalum capacitors, that our minimum purchase commitments under the contracts with Cabot will substantially exceed our requirements over the terms of the contracts. See "Contractual Commitments" below. Also, we do not anticipate utilizing our stockpile of tantalum ore at any time in the foreseeable future. Tantalum ore, powder and wire have an indefinite shelf life; therefore, we believe that we will eventually utilize all of the material in our inventory or purchased under the contracts. Our visibility of future demand is limited, however, and actual consumption may differ substantially from the amounts that we now estimate.

Foreign Currency

In 2002, we realized approximately 69% of our revenues from customers outside the United States. Any third party sales not using the U.S. dollar as the functional currency must be reported in the local currency and be translated at the weighted average exchange rate. This translation will have an impact on the net sales line of the income statement and also on the expense lines of the income statement. We generally do not purchase foreign currency exchange contracts or other derivative instruments to hedge our exposure to foreign currency fluctuations.

Critical Accounting Policies

Our significant accounting policies are summarized in Note 1 to our Consolidated Financial Statements. We identify here a number of policies that entail significant judgments or estimates.

Revenue recognition

We record revenues at the time that we ship products to our customers. Many of our shipments are to distributors, who purchase for resale to end-users. The distributors have certain limited rights to return products. They are also entitled to certain price protection benefits, which give them credit for unsold products that they continue to hold in inventory when we reduce our book prices for these items. At the time we record sales to these distributors, we also recognize allowances against net sales for estimated product returns and price protection. To estimate these allowances, we review historical returns and price adjustments on both a consolidated level and on an individual distributor level as well as the general business and economic climate. These procedures require the exercise of significant judgments, but we believe they enable us to estimate reasonably future credits for returns and price adjustments.

Accounts Receivable

Our receivables represent a significant portion of our current assets. We are required to estimate the collectability of our receivables and to establish allowances for the amount of receivables that will prove uncollectible. We base these allowances on our historical collection experience, the length of time our receivables are outstanding, the financial circumstances of individual customers, and general business and economic conditions.

Inventories

We value our inventories at the lower of cost or market, with cost determined under the first-in first-out method and market based upon net realizable value. The valuation of our inventories requires our management to make market estimates. For instance, in the case of tantalum powder, we estimate market value by obtaining current quotations from available sources of supply. For work in progress goods, we are required to estimate the cost to completion of the products and the prices at which we will be able to sell the products. For finished goods, we must assess the prices at which we believe the inventory can be sold. As noted, we recorded substantial write-downs of our tantalum and palladium inventories in 2002.

Estimates of Restructuring Expense and Purchase Related Restructuring Costs

In 2002, we recorded restructuring costs of approximately \$48,000,000 related to our acquisitions and \$30,970,000 related to our existing businesses. Our acquisition-related restructuring costs included, among other things, costs related to our acquisition of BCcomponents in December 2002. Our restructuring activities related to our existing business were designed to reduce both our fixed and variable costs, particularly in response to the reduced demand for our products occasioned by the continuing electronics industry downturn in 2002. These included the disposition of fixed assets and the termination of employees. Acquisition-related costs are included in the allocation of the cost of the acquired business and generally add to goodwill. Other restructuring costs are expensed during the period in which we determine that we will incur those costs, and all of the requirements for accrual are met.

Because these costs are recorded based upon estimates, our actual expenditures for the restructuring activities may differ from the initially recorded costs. If this happens, we will have to adjust our estimates in future periods. In the case of acquisition-related restructuring costs, this would generally require a change in value of the goodwill appearing on our balance sheet, but would not affect our earnings. In the case of other restructuring costs, we could be required either to record additional expenses in future periods, if our initial estimates were too low, or to reverse part of the charges that we recorded initially, if our initial estimates were too high.

Raw Material Write-downs

As indicated, in the fourth quarter of 2002 we took charges of approximately \$106,000,000 against contractual commitments to purchase tantalum powder and wire through 2006 and wrote-off approximately \$25,700,000 of our existing inventory of tantalum ore, powder and wire. We did this because the current market prices of tantalum are substantially below the prices at which we are committed to purchase tantalum in the future under long-term contracts and the prices at which we were carrying our tantalum raw materials inventory. These actions involved significant judgments on our part, including decisions of whether to take these charges and write-downs, their timing and their amount.

We made the decision to take the charges and write-downs after our management concluded that the substantial fall-off in the demand for tantalum capacitors was likely to continue for the foreseeable future. Combining this assessment with the worldwide over-capacity in tantalum production, we could not foresee when tantalum prices might recover from their currently depressed levels. We made this determination in the fourth quarter of 2002 after it was apparent that the inventory levels of our customers had dropped without any effect on the demand or pricing for tantalum capacitors and after the settlement of our competitor's tantalum pricing litigation, described above. Although we believe that both the charges and write-downs as well as their timing were appropriate under the circumstances, our visibility for future demand and pricing is limited and the judgments made by our management necessarily involved subjective assessments.

The write-down of our current tantalum inventory and the charges with respect to our future tantalum commitments were calculated based on current market prices for tantalum. There is no established market on which tantalum raw materials are regularly traded and quoted. We based our determination of current market price on quotations from two suppliers of these materials. We cannot say that the prices at which we could currently enter into contracts for the purchase of tantalum would be the same as these quoted prices. Also, in quantifying the charges that we took against our future purchase commitments, we assumed for lack of any other benchmark that current market prices would continue through 2006, when our purchase commitments end. Had we made other assumptions on current and future prices for tantalum, the amount of the inventory write-downs and the charges against our purchase commitments would have been different.

If tantalum prices were to recover in the future, we would not reverse the write-downs that we have taken on our raw materials inventory or the charges that we have recorded against our purchase commitments, so that our cost of materials will continue to reflect these write-downs and charges regardless of future price increases in tantalum. This could have the effect of increasing the earnings that we realize in future periods from what they would have been had we not taken these actions until future raw material prices were known with certainty. We could also be required to take further write-downs and charges if tantalum prices experience further declines.

Goodwill

Goodwill represents the excess of the cost of businesses acquired over the fair value of the related net assets at the date of acquisition. In accordance with Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets*, we no longer amortize goodwill, but test for impairment of goodwill using a market multiple approach.

Long-Lived Assets

We assess the impairment of our long-lived assets, other than goodwill and trademarks, including property, plant and equipment, and identifiable intangible assets subject to amortization whenever events or changes in circumstances indicate the carrying value may not be recoverable. Factors we consider important which could trigger an impairment review include significant changes in the manner of our use of the acquired asset, changes in historical or projected operating performance and significant negative economic trends.

Results of Operations

Income statement captions as a percentage of sales and the effective tax rates were as follows:

	Year Ended December 31			
·	<u>2002</u>	<u>2001</u>	<u>2000</u>	
Costs of products sold	79.8%	77.0%	59.2%	
Gross profit	20.2	23.0	40.8	
Selling, general and				
administrative expenses	17.1	16.8	12.1	
Operating (loss) income	(4.4)	0.9	28.3	
(Loss) earnings before income taxes (benefit) and minority				
interest	(5.5)	0.6	28.0	
Net (loss) earnings	(5.1)	0.0	21.0	
Effective tax rate	(16.9)	56.4	21.5	

Net Sales, Gross Profits and Margins

Sales for the year ended December 31, 2002 increased by \$167,467,000 or 10.1% over the prior year. This combines a substantial increase in sales in the active segment, attributable in large measure to 2001 acquisitions reflected only partially in 2001 but fully in 2002, and a continuing drop in sales in the passive segment in 2002. The weakening of the U.S. dollar against foreign currencies for the year ended December 31, 2002, in comparison to the prior year, resulted in increases in reported sales of \$18,000,000.

Costs of products sold as a percentage of net sales were 79.8% for the year ended December 31, 2002 as compared to 77.0% for the prior year. Gross profit, as a percentage of net sales, for the year ended December 31, 2002 was 20.2% as compared to 23.0% for the prior year. The erosion in overall profit margins reflects the continuing weakness in the passive segment, offset in substantial part by improvements in the active segment. Both volume reduction and further declines in average selling prices contributed to the declining profit margins in the passive segment. Profit margins in the active segment benefited from higher volumes, even as average selling prices continued to decline in various product lines. For the year ended December 31, 2002, costs of products sold included \$27,400,000 for the write-down of tantalum and palladium inventories as compared to \$70,000,000 for the write-down of tantalum inventories in 2001.

Sales for the year ended December 31, 2001 decreased \$809,720,000 or 32.9% from the prior year, reflecting the downturn in the electronics industry that we experienced in 2001. The strengthening of the U.S. dollar against foreign currencies for the year ended December 31, 2001, in comparison to the prior year, resulted in decreases in reported sales of \$16,338,000. We experienced lower sales in both our active and passive components businesses. The decline was particularly pronounced in our commodity business for passive components such as capacitors and resistors. The decline in the year-to-year sales numbers reflects both lower unit sales volume and substantial downward pricing pressure. The decline was evidenced in virtually all of our end markets, but was particularly pronounced in wireless communications and computers.

Costs of products sold as a percentage of net sales were 77.0% for the year ended December 31, 2001 as compared to 59.2% for the prior year. Gross profit, as a percentage of net sales, for the year ended December 31, 2001 was 23.0% as compared to 40.8% for the prior year. The erosion in profit margins, in both the active and passive segments, reflected reduced volume and lower prices in 2001, offset, to some extent, by a reduction in fixed costs during the year. For the year ended December 31, 2001, costs of products sold included \$70,000,000 for the write-down of tantalum and palladium inventories.

See "Israeli Government Incentives" regarding Israeli government grants, which are recorded as a reduction in costs of products sold.

The following tables show sales and gross profit margins separately for our passive and active segments.

Passive Components

		Year Ended December 31			
	<u>2002</u>	<u>2001</u>	<u>2000</u>		
Net Sales	\$767,246,000	\$1,010,634,000	\$1,627,860,000		
Gross Profit Margin	8.9%	20.6%	41.7%		

Net sales of passive components for the year ended December 31, 2002 decreased by \$243,388,000 or 24.1% from comparable sales of the prior year. The decrease in net sales was attributable to a combination of lower volume and a continuing slide in prices. While our resistor and inductor business has stabilized and even showed signs of improvement in the second half of the year over the prior year's depressed results, the capacitor business continues to be extremely problematic. This business is suffering from the poor environment for electronics generally, and worldwide overcapacity for capacitor production and supply in particular. However, with a slowing of the erosion in average selling prices for capacitors in the fourth quarter of 2002, it is possible that the capacitor business may also be stabilizing, albeit at a low level. Additionally, write-downs of \$27,400,000 on tantalum and palladium inventories were taken during the year ended December 31, 2002, negatively impacting gross profit. Gross profit margin for the segment in 2002 combined a positive profit margin of 19% for resistors and inductors and a negative 6% for capacitors.

The passive segment includes our Measurements Group, which experienced significant acquisition activity in 2002. See "Overview-Segments" above. Excluding these acquisitions, sales in the passive segment decreased by \$288,939,000 or 29% from the prior year. The acquisition of BCcomponents, a worldwide manufacturer of resistors and capacitors, in December 2002 had no effect on the 2002 results for the passive segment.

Net sales of passive components for the year ended December 31, 2001 decreased by \$617,227,000 or 37.9% from comparable sales of the prior year. The decrease in net sales was primarily due to low volume and strong pricing pressure with respect to commodity products and, in particular, for tantalum molded capacitor products. The decrease in the passive components business gross profit margins in 2001 was related to strong pricing pressure, particularly with respect to commodity products, excess capacity and higher costs for palladium and tantalum powder. Additionally, write-downs of \$70,000,000 on tantalum and palladium inventories were taken during the year ended December 31, 2001, negatively impacting gross profit.

Active Components

	<u> </u>	Year Ended December 31			
	<u>2002</u>	<u>2001</u>	<u>2000</u>		
Net Sales	\$1,055,567,000	\$644,712,000	\$837,206,000		
Gross Profit Margin	28.4%	26.9%	39.0%		

Net sales of the active components business for the year ended December 31, 2002 increased by \$410,855,000 or 63.7% from comparable sales of the prior year. The increase was in substantial measure due to the acquisitions of General Semiconductor and the Infineon infrared business in 2001, which were included in our results for all of 2002 but for only portions of 2001. However, it also reflects sales recovery at our existing semiconductor operations. The increased volume that we experienced in 2002 was offset to some extent by modest declines in average selling prices in various product lines. The improvement in gross profit margins to 28.4% from 26.9% is attributable primarily to improvements at our 80.4% owned Siliconix subsidiary and to a lesser extent at our other semiconductor operations. Siliconix's net sales for 2002 were \$372,944,000 as compared to \$305,566,000 in 2001, a 22.1% increase, and its gross profit margins rose from 24.6% for the year ended December 31, 2001 to 30.9% for the year ended December 31, 2002.

Revenues in the active segment for 2002 included revenues of \$350,885,000 from the Infineon infrared business and General Semiconductor, compared to revenues of \$82,655,000 from these businesses in 2001. Excluding the contribution of these acquisitions, net sales in 2002 would have increased by 25.4% as compared to 2001 and gross profit margin would have been 29.5%.

Net sales of the active components business for the year ended December 31, 2001 decreased by \$192,494,000 or 23% from comparable sales of the prior year. The decrease in the active components business net sales was primarily due to the decrease in net sales of Siliconix. Siliconix's net sales for the year ended December 31, 2001 were \$305,566,000 as compared to \$473,145,000, a 35.4% decrease. The decrease from the prior year was primarily due to the downturn in the computer and cell phone handset markets, which resulted in reduced demand for our products, and overly optimistic industry forecasts for the cell phone handset market, which led to excess handset inventories.

Revenues in the active segment for 2001 reflect revenues of \$82,655,000 from the Infineon infrared business acquired in July 2001 and General Semiconductor acquired in November 2001. Excluding the contribution of these acquisitions, net sales in 2001 would have decreased by 32.9% as compared to 2000 and gross profit margin would have been 26.9%.

Selling, General and Administrative Expenses

Selling, general, and administrative expenses for the year ended December 31, 2002 were 17.1% of net sales as compared to 16.8% of net sales for the prior year. The amount of these expenses increased by \$33,080,000 for the year ended December 31, 2002 as compared to the prior year. The higher percentage and amount in 2002 was due primarily to acquisition activity. We continue to implement cost reduction initiatives company-wide, with particular emphasis on reducing headcount in high labor cost countries.

Selling, general, and administrative expenses for the year ended December 31, 2001 were 16.8% of net sales as compared to 12.1% of net sales for the prior year. The higher percentage in 2001 was due to reduced sales levels. Selling, general and administrative expenses decreased by \$19,144,000 for the year ended December 31, 2001 as compared to the prior year.

Restructuring Expense

Our restructuring activities have been designed to cut both fixed and variable costs, particularly in response to the reduced demand for products occasioned by the electronics industry downturn beginning in 2001. These activities included the closing of facilities and the termination of employees. Restructuring costs are expensed during the period in which we determine that we will incur those costs and all applicable requirements of accrual accounting for recognizing such expenses are satisfied. Because costs are recorded based upon estimates, actual expenditures for the restructuring activities may differ from the initially recorded costs. If the initial estimates were too low or too high, we could be required either to record additional expenses in future periods or to reverse previously recorded expenses. We anticipate that we will realize the benefits of the restructuring through lower labor costs and other operating expenses in future periods, although it is not possible to quantify the expected savings.

We recorded restructuring expense for the year ended December 31, 2002 of \$30,970,000. These expenses are comprised of termination costs for 1,438 employees in Europe, Israel and the United States. Through the end of 2002, we paid \$18,440,000 of these costs, corresponding to the termination of 783 employees. The balance remaining at December 31, 2002 is expected to be paid out by the end of 2003. We recorded \$61,908,000 in restructuring expense in 2001, including costs for both employee termination and facility closure. The remaining balance at December 31, 2002 of \$1,564,000 is expected to be paid out by the end of 2003. For additional detail on restructuring expense in 2001 and 2002, see Note 4 to our Consolidated Financial Statements.

Restructuring expense is separate from plant closure, employee termination and similar integration costs we incur in connection with our acquisition activities. These amounts are included in the costs of our acquisitions and do not affect earnings or losses on our statement of operations. For a discussion of these costs in 2001 and 2002, see Note 2 to our Consolidated Financial Statements.

Interest Expense

Interest expense for the year ended December 31, 2002 increased by \$11,913,000 compared to the prior year. This increase was a result of higher average outstanding bank borrowings attributable to our acquisition activity, offset in part by somewhat lower interest rates.

Interest expense for the year ended December 31, 2001 decreased by \$8,329,000 compared to the prior year. This decrease was a result of lower average outstanding bank borrowings and lower interest rates on borrowings in 2001 as compared to the prior year. During the second quarter of 2001, we paid down the debt then outstanding under our revolving credit agreement with the proceeds received from the issuance of Liquid Yield Option Notes (LYONs). We also added \$172,500,000 principal amount of 5.75% Convertible Subordinated Debentures and \$85,000,000 of bank debt in November 2001 from the acquisition of General Semiconductor.

Other Income

Other income for the year ended December 31, 2002 was \$8,664,000 as compared to \$12,701,000 for the comparable prior year period. Other income for the year ended December 31, 2001 was \$12,701,000 as compared to \$18,904,000 for the comparable prior year period. Other income in both 2002 and 2001 consisted primarily of interest income, as well as gains on disposal of property and equipment, and foreign exchange gains. For additional information, see Note 8 to our Consolidated Financial Statements.

Minority Interest

Minority interest increased by \$5,574,000 for the year ended December 31, 2002 as compared to the prior year, primarily due to the increase in net earnings of Siliconix, of which we own 80.4%. Minority interest decreased by \$20,280,000 for the year ended December 31, 2001 as compared to the prior year, primarily due to the decrease in net earnings of Siliconix.

Income Taxes

The effective tax rate for the year ended December 31, 2002 was 16.9%, reflecting an income tax benefit, compared to 56.4% for the prior year, reflecting income tax expense. The low effective rate in 2002 is primarily a consequence of the losses before income taxes in low tax jurisdictions. While we continue to benefit from low tax rates in Israel, we recognized a large taxable loss in Israel in 2002, with the effect of reducing our overall tax benefit on our losses. The more favorable Israeli tax rates are applied to specific approved projects and are normally available for a period of ten or fifteen years (see the discussion of our Israeli tax benefits in "Overview-Israeli Government Incentives" above). Comparatively, in 2001, the high effective tax rate was due to low net earnings and the non-tax deductibility of purchased research and development expense related to the General Semiconductor acquisition.

The effective tax rate for the year ended December 31, 2001 was 56.4% as compared to 21.5% for the prior year. The increase in the tax rate for 2001 reflected a significant decrease in net earnings, as compared to 2000, in low tax jurisdictions, and the non-tax deductibility of the purchased research and development expense (\$16,000,000) related to the acquisition of General Semiconductor. The low tax rates in Israel applicable to us, as compared to the statutory rate in the United States, resulted in increases in net earnings of \$3,009,000 and \$89,745,000 for the years ended December 31, 2001 and 2000, respectively.

Financial Condition and Liquidity

Cash flows from operations were \$366,871,000 for the year ended December 31, 2002 compared to \$161,418,000 for the prior year. The increase in cash generated from operations reflects improved working capital management, including reductions in inventory and accounts receivable. The inventory reduction reflects production adjustments we implemented in response to the business slowdown in order to control inventory levels. Net purchases of property and equipment for the year ended December 31, 2002 were \$110,074,000 compared to \$162,493,000 in the prior year. The decrease reflects an effort to rationalize our capital spending to the realities of

the current economic environment, while making prudent investments in our capital infrastructure in order to remain competitive and efficient. We also used \$278,735,000 in cash for acquisitions in 2002, primarily for our acquisitions of BCcomponents in December 2002 and other smaller acquisitions in our Measurements Group during the year. The acquisitions were funded in part by our cash balances and in part from borrowings. See Note 2 to our Consolidated Financial Statements for discussion of these acquisitions.

We made net payments of \$14,000,000 on our revolving credit lines during 2002, funded from cash flow from operations. See Notes 2 and 4 to our Consolidated Financial Statements for discussion of acquisition related restructuring costs paid during 2002 and expected to be paid in the future. Other accrued expenses include \$95,470,000 of acquisition-related costs and other restructuring costs expected to be paid in cash subsequent to 2002.

In May 2001, we completed the offering of \$550 million aggregate principal amount at maturity of Liquid Yield Option Notes (LYONs) at an offering price of \$551.26 per \$1,000 aggregate principal amount at maturity of notes. The net proceeds to us of this offering were approximately \$294.1 million. The LYONs are convertible into approximately 9.7 million shares of our common stock. The LYONs may be put to us at their accreted value on June 4 of each of 2004, 2006, 2011 and 2016 at a purchase price per \$1,000 aggregate principal amount at maturity of \$602.77, \$639.76, \$742.47 and \$816.67, respectively. See Note 6 to our Consolidated Financial Statements for discussion of the terms of the LYONs.

We completed our acquisition of General Semiconductor on November 2, 2001 in a stock-for-stock transaction resulting in the issuance of 21,305,127 shares of our common stock. General Semiconductor had outstanding \$172.5 million principal amount 5.75% convertible notes, which as a result of the acquisition are now convertible into approximately 6.3 million shares of our common stock. As required by the terms of the notes, following the merger, General Semiconductor made an offer to repurchase the notes at 101% of their principal amount plus accrued interest. As a result of this offer, we acquired notes with a principal amount of \$1.5 million in January 2002.

In connection with our acquisition of BCcomponents in December 2002, we issued \$105,000,000 principal amount of our floating rate unsecured loan notes due 2102. The notes bear interest at LIBOR plus 1.5% through December 31, 2006 and at LIBOR thereafter. The interest payable on the notes could be further reduced to 50% of LIBOR after December 31, 2010 if the price of our common stock trades above a specified target price, as provided in the notes. The notes are subject to a put and call agreement under which the holders may at any time put the notes to us in exchange for 6,176,471 shares of our common stock in the aggregate, and we may call the notes in exchange for cash or for shares of our common stock after 15 years from the date of issuance.

Also in December 2002, we amended our long-term revolving credit and swing line facility to, among other things, reduce the aggregate bank commitments under this facility from \$660,000,000 to \$500,000,000. This amount may be increased in the future under certain circumstances. As of December 31, 2002, we had \$111,000,000 outstanding under this facility. Letters of credit totaling \$30,633,000 were outstanding at December 31, 2002. Borrowings under the facility bear interest at variable rates based, at our option, on the prime rate or a eurocurrency rate, and in the case of any swing line advance, the quoted rate. The borrowings are secured by pledges of stock in certain of our significant subsidiaries and indirect subsidiaries and guaranteed by certain of our significant subsidiaries. We are required to pay facility fees on the long-term facility. The credit facility restricts us from paying cash dividends, and requires us to comply with certain financial covenants. The facility expires on June 1, 2005, although we may request year-to-year renewals. See Note 6 to our Consolidated Financial Statements for additional information.

At December 31, 2002, we had a current ratio (current assets to current liabilities) of 2.6 to 1, compared with a ratio of 3.3 to 1 at December 31, 2001. The decrease in 2002 is attributable to cash spent on acquisitions, lower inventories resulting from our inventory management efforts and lower accounts receivable. Our ratio of long-term debt, less current portion, to stockholders' equity was 0.30 to 1 at December 31, 2002 compared to 0.26 to 1 at December 31, 2001. The increase in long-term debt ratio reflects the issuance of the floating rate notes in connection with the BCcomponents acquisition and the net loss for 2002.

Contractual Commitments

As of December 31, 2002 the Company had contractual obligations in the form of non-cancelable operating leases (see Note 13 to our Consolidated Financial Statements) and long-term contracts for the purchase of tantalum powder and wire (see Note 15 to our Consolidated Financial Statements), as follows:

(in thousands)

Pay	ments	Due	hv	Period	1
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	Total	Less than 1 year	1-3 years	4-5 years	After 5 years
Operating Leases	\$ 76,974	\$ 21,978	\$ 28,094	\$22,163	\$4,739
Tantalum purchases	380,800	100,300	220,400	60,100	
Total	\$457,774	\$122,278	\$248,494	\$82,263	\$4,739

Inflation

Normally, inflation does not have a significant impact on our operations as our products are not generally sold on long-term contracts. Consequently, we can adjust our selling prices, to the extent permitted by competition, to reflect cost increases caused by inflation.

Safe Harbor Statement

From time to time, information provided by us, including but not limited to statements in this report, or other statements made by or on our behalf, may contain "forward-looking" information within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements involve a number of risks, uncertainties and contingencies, many of which are beyond our control, which may cause actual results, performance or achievements to differ materially from those anticipated. Set forth below are important factors that could cause our results, performance or achievements to differ materially from those in any forward-looking statements made by us or on our behalf.

Economic Environment, Competition, Backlog

- We and others in the electronic and semiconductor component industry have for the past several years experienced a decline in product demand on a global basis, resulting in order cancellations and deferrals. This decline is primarily attributable to a slowing of growth in the personal computer and cellular telephone product markets. This slowdown may continue and may become more pronounced. The current slowdown in demand, as well as recessionary trends in the global economy, makes it more difficult for us to predict our future sales, which also makes it more difficult to manage our operations, and could adversely impact our results of operations.
- Our business is highly competitive worldwide, with low transportation costs and few import
 barriers. We compete principally on the basis of product quality and reliability, availability,
 customer service, technological innovation, timely delivery and price. The electronic
 components industry has become increasingly concentrated and globalized in recent years and
 our major competitors, some of which are larger than us, have significant financial resources
 and technological capabilities.
- Many of the orders that comprise our backlog may be canceled by customers without penalty.
 Customers may on occasion double and triple order components from multiple sources to ensure timely delivery when backlog is particularly long. Customers often cancel orders when

business is weak and inventories are excessive, a phenomenon that we are experiencing in the current economic slowdown. Therefore, we cannot be certain the amount of our backlog does not exceed the level of orders that will ultimately be delivered. Our results of operations could be adversely impacted if customers cancel a material portion of orders in our backlog.

Product Development, Business Expansion, Military Qualifications

- Our future operating results are dependent, in part, on our ability to develop, produce and market new and innovative products, to convert existing products to surface mount devices and to customize certain products to meet customer requirements. There are numerous risks inherent in this complex process, including the risks that we will be unable to anticipate the direction of technological change or that we will be unable to timely develop and bring to market new products and applications to meet customers' changing needs.
- Our long-term historical growth in revenues and net earnings has resulted, in large part, from
 our strategy of expansion through acquisitions. However, we cannot assure you that we will
 identify or successfully complete transactions with suitable acquisition candidates in the
 future. We also cannot assure you that acquisitions we complete will be successful. If an
 acquired business fails to operate as anticipated or cannot be successfully integrated with our
 other businesses, our results of operations, enterprise value, market value and prospects could
 all be materially and adversely affected.
- If we were to undertake a substantial acquisition for cash, the acquisition would likely need to be financed in part through bank borrowings or the issuance of public or private debt. This would likely decrease our ratio of earnings to fixed charges and adversely affect other leverage criteria. Under our existing credit facility, we are required to obtain our lenders' consent for certain additional debt financing, to comply with other covenants including the application of specific financial ratios, and are restricted from paying cash dividends on our capital stock. We cannot assure you that the necessary acquisition financing would be available to us on acceptable terms when required. If we were to undertake an acquisition for equity, the acquisition may have a dilutive effect on the interests of the holders of our common stock.
- Any drop in demand or increase in supply of our products due to the overcapacity of our competitors could cause a dramatic drop in average sales prices causing a decrease in gross margins.
- We have qualified certain of our products under various military specifications. Products
 from some of our United States manufacturing facilities experience a reduction in product
 classification levels from time to time. During the time that the classification level is reduced
 for a product with military application, net sales and earnings attributable to that product may
 be adversely affected.

Foreign Operations and Sales

• We have operations in 17 countries around the world outside the United States, and approximately 69% of our revenues during 2002 were derived from sales to customers outside the United States. Some of the countries in which we operate have in the past experienced and may continue to experience political, economic and military instability or unrest. These conditions could have an adverse impact on our ability to operate in these regions and, depending on the extent and severity of these conditions, could materially and adversely affect our overall financial condition and operating results. In particular, current tensions in the Middle East could adversely affect our business operations in Israel and elsewhere.

• We have increased our operations in Israel over the past several years. The low tax rates in Israel applicable to earnings of our operations in that country compared to the rates in the United States, have historically had the effect of increasing our net earnings, although that was not the effect in 2002. In addition, we have taken advantage of certain incentive programs in Israel, which take the form of grants designed to increase employment in Israel. Any significant increase in the Israeli tax rates or reduction or elimination of the Israeli grant programs that have benefited us could have an adverse impact on our results of operations. See Note 1 to our Consolidated Financial Statements for a description of our accounting policy for grants received by certain subsidiaries from governments outside the United States.

Restructuring and Cost Reduction Activities

- Our strategy is aimed at achieving significant production cost savings through the transfer and expansion of manufacturing operations to and in countries with lower production costs, including the Czech Republic, Hungary, India, Israel, Malaysia, Mexico, the People's Republic of China, the Philippines, Portugal and the Republic of China (Taiwan). In this process, we may experience under-utilization of certain plants and factories in high labor cost regions and capacity constraints in plants and factories located in lower labor cost regions. This may result, initially, in production inefficiencies and higher costs. These costs include those associated with compensation in connection with work force reductions and plant closings in the higher labor cost regions, start-up expenses, manufacturing and construction delays, and increased depreciation costs in connection with the initiation or expansion of production in lower labor cost regions.
- As we implement transfers of certain of our operations, we may experience strikes or other types of labor unrest as a result of lay-offs or termination of employees in higher labor cost countries.
- Our strategy also focuses on the reduction of selling, general and administrative expenses
 through the integration or elimination of redundant sales offices and administrative functions
 at acquired companies. Our inability to achieve these goals could have an adverse effect on
 our results of operations.

Raw Materials

- Our results of operations may be adversely impacted by:
 - 1. difficulties in obtaining raw materials, supplies, power, natural resources and any other items needed for the production of our products;
 - 2. the effects of quality deviations in raw materials, particularly tantalum powder, palladium and ceramic dielectric materials; and
 - 3. the effects of significant fluctuations in the prices for tantalum or palladium on existing inventories and purchase commitments for these materials. See "Description of the Business Sources of Supplies" above.

Environmental Issues

Our manufacturing operations, products and/or product packaging are subject to
environmental laws and regulations governing air emissions, wastewater discharges, the
handling, disposal and remediation of hazardous substances, wastes and certain chemicals
used or generated in our manufacturing processes, employee health and safety labeling or
other notifications with respect to the content or other aspects of our processes, products or
packaging, restrictions on the use of certain materials in or on design aspects of our products

or product packaging and responsibility for disposal of products or product packaging. More stringent environmental regulations may be enacted in the future, and we cannot presently determine the modifications, if any, in our operations that any such future regulations might require, or the cost of compliance with these regulations. In order to resolve liabilities at various sites, we have entered into various administrative orders and consent decrees, some of which may be, under certain conditions, reopened or subject to renegotiation.

The Class B Common Stock

- We have two classes of common stock: common stock and Class B common stock. The holders of common stock are entitled to one vote for each share held, while the holders of Class B common stock are entitled to 10 votes for each share held. Currently, Dr. Zandman, our Chairman and CEO, owns or has voting power over substantially all of our Class B common stock and accordingly controls approximately 49.1% of our outstanding voting power. As a result, Dr. Zandman is able to effectively control stockholder action.
- Effective control of our company by holders of the Class B common stock may make us less attractive as a target for a takeover proposal. It may also make it more difficult or discourage a merger proposal or proxy contest for the removal of the incumbent directors. Accordingly, this may deprive the holders of common stock of an opportunity they might otherwise have to sell their shares at a premium over the prevailing market price in connection with a merger or acquisition of the Company with or by another company.

New Accounting Standards

In April 2002, the FASB issued SFAS No. 145, *Rescission of FASB Statements No. 4, 44, and 64, Amendment of FASB Statement No. 13, and Technical Corrections.* In addition to other technical provisions, this Statement rescinds SFAS No. 4, which required all gains and losses from extinguishment of debt to be aggregated and, if material, classified as an extraordinary item, net of tax. The provisions of SFAS 145 were adopted by the Company on January 1, 2003.

In July 2002, the FASB issued SFAS No. 146, Accounting for Costs Associated with Exit or Disposal Activities. This statement nullifies EITF Issue No. 94-3, Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring). SFAS 146 requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred rather than at the date of an entity's commitment to an exit plan. The provisions of SFAS 146 will be adopted by the Company for exit or disposal activities initiated after December 31, 2002.

In December 2002, the FASB issued SFAS No. 148, *Accounting for Stock-Based Compensation - Transition and Disclosure*. SFAS 148 amends SFAS No. 123, *Accounting for Stock-Based Compensation*, to provide alternative methods of transition to SFAS 123's fair value method of accounting for stock-based employee compensation. The Company is evaluating the potential impact of adopting the fair value method of accounting for its stock-based employee compensation.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market Risk Disclosure

Our cash flows and earnings are subject to fluctuations resulting from changes in foreign currency exchange rates and interest rates. We manage our exposure to these market risks through internally established policies and procedures and, when deemed appropriate, through the use of derivative financial instruments. Our policies do not allow speculation in derivative instruments for profit or execution of derivative instrument contracts for which there are no underlying exposures. We do not use financial instruments for trading purposes and we are not a party to any leveraged derivatives. We monitor our underlying market risk exposures on an ongoing basis and believe that we can modify or adapt our hedging strategies as needed.

We are exposed to changes in U.S. dollar LIBOR interest rates on our floating rate revolving credit facility. At December 31, 2002, the outstanding balance under this facility was \$111,000,000. On a selective basis, we from time to time enter into interest rate swap or cap agreements to reduce the potential negative impact increases in interest rates could have on our outstanding variable rate debt. The impact of interest rate instruments on our results of operations in each of the three years ended December 31, 2002, 2001 and 2000 was not significant. See Notes 6 and 14 to our Consolidated Financial Statements for components of our long-term debt and interest rate swap arrangements.

In August 1998, we entered into six interest rate swap agreements with a total notional amount of \$300,000,000 to manage interest rate risk related to our multicurrency revolving line of credit. As of December 31, 2002, five of these six agreements had been terminated. The remaining agreement, which expires in August 2003, has a notional amount of \$100,000,000 and requires us to make payments to the counterparty at variable rates based on USD-LIBOR-BBA rates. At December 2002, 2001, and 2000, we paid a weighted average fixed rate of 5.77% and received a weighted average variable rate of 1.40%, 1.93%, and 6.66%, respectively. The fair value of our interest rate swap agreements, based on current market rates, approximated a net payable of \$3,309,000 at December 31, 2002 and a net payable of \$4,686,000 at December 31, 2001. During the year ended December 31, 2001, the Company recorded a pre tax loss of \$3,668,000 relating to an ineffective hedge for a portion of time relating to an interest rate swap agreement (see Note 8 to our Consolidated Financial Statements).

Foreign Exchange Risk

We are exposed to foreign currency exchange rate risks. Our significant foreign subsidiaries are located in Germany, France, Israel and Asia. In most locations, we have introduced a "netting" policy where subsidiaries pay all intercompany balances within thirty days. As of December 31, 2002, we did not have any outstanding foreign currency forward exchange contracts.

In the normal course of business, our financial position is routinely subjected to a variety of risks, including market risks associated with interest rate movements, currency rate movements on non-U.S. dollar denominated assets and liabilities and collectability of accounts receivable.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The following Consolidated Financial Statements of the Company and our subsidiaries, together with the report of independent auditors thereon, are presented under Item 15 of this report:

Report of Independent Auditors.

Consolidated Balance Sheets -- December 31, 2002 and 2001.

Consolidated Statements of Operations -- for the years ended December 31, 2002, 2001 and 2000.

Consolidated Statements of Cash Flows -- for the years ended December 31, 2002, 2001 and 2000.

Consolidated Statements of Stockholders' Equity -- for the years ended December 31, 2002, 2001 and 2000.

Notes to Consolidated Financial Statements -- December 31, 2002.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

PART III

Item 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

Information required under this Item with respect to Directors is contained in our definitive proxy statement, which will be filed within 120 days of December 31, 2002, our most recent fiscal year, and is incorporated herein by reference.

Information required under this Item with respect to our Executive Officers is set forth in Part I, Item 4A hereof under the caption, "Executive Officers of the Registrant."

Item 11. EXECUTIVE COMPENSATION

Information required under this Item is contained in our definitive proxy statement, which will be filed within 120 days of December 31, 2002, our most recent fiscal year, and is incorporated herein by reference.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information required under this Item concerning security ownership of certain beneficial owners and management is contained in our definitive proxy statement, which will be filed within 120 days of December 31, 2002, our most recent fiscal year, and is incorporated herein by reference.

Equity Compensation Plan Information

The following table sets forth certain equity compensation plan information with respect to both equity compensation plans approved by security holders and equity compensation plans not approved by security holders.

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a) (c)
Equity compensation plans approved by security holders:			
1997 Stock Option Program ⁽¹⁾	2,159,000	\$12.51	-
1998 Stock Option Program ⁽¹⁾	3,027,000	\$15.62	1,036,000
General Semiconductor Stock Plan ⁽²⁾	4,045,000	\$18.31	-
Subtotal	9,231,000	\$16.07	1,036,000
Equity compensation plans not approved by security holders:			
None	-	-	-
Subtotal	9,231,000	\$16.07	1,036,000
Total	9,231,000	\$16.07	1,036,000

⁽¹⁾ See Note 12 to our Consolidated Financial Statements for further description of these plans.

⁽²⁾ The General Semiconductor Stock Plan was assumed in the Company's acquisition of General Semiconductor Inc. on November 2, 2001. See Note 12 to our Consolidated Financial Statements for further description of this plan.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Information required under this Item is contained in our definitive proxy statement, which will be filed within 120 days of December 31, 2002, our most recent fiscal year, and is incorporated herein by reference.

Item 14. DISCLOSURE CONTROLS AND PROCEDURES

An evaluation was performed as of a date within 90 days prior to the filing date of this report, under the supervision and with the participation of our management, including the CEO and CFO, of the effectiveness of the design and operation of our disclosure controls and procedures. Based on that evaluation, our management, including the CEO and CFO, concluded that our disclosure controls and procedures are effective in ensuring that all material information required to be filed in this report has been made known to them in a timely fashion.

There have been no significant changes in our internal controls or in other factors that could significantly affect internal controls subsequent to the date management completed their evaluation.

PART IV

Item 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K

- (a) All Consolidated Financial Statements of the Company and its subsidiaries for the year ended December 31, 2002 are filed herewith. See Item 8 of this Report for a list of such financial statements.
 - (2) All financial statement schedules for which provision is made in the applicable accounting regulation of the Securities and Exchange Commission are not required under the related instructions or are inapplicable and therefore have been omitted.
 - (3) Exhibits -- See response to paragraph (c) below.
- (b) Report on Form 8-K, dated December 23, 2002, reporting Item 2 (Acquisition or Disposition of Assets), Item 5 (Other Events), and Item 7 (Financial Statements and Exhibits). Financial Statements of Business Acquired and Pro Forma Financial Information were filed by amendment to the Form 8-K, dated February 26, 2003.
- (c) Exhibits:
- 2.1 Agreement and Plan of Merger, dated as of July 31, 2001, by and among Vishay Intertechnology, Inc., Vishay Acquisition Corp., and General Semiconductor, Inc. Incorporated by reference to Annex A to the Joint Proxy Statement/Prospectus forming a part of the Registration Statement on Form S-4 (No. 333-69004) filed on September 6, 2001.
- 2.2 Share Sale and Purchase Agreement between Phoenix Acquisition Company S.ar.l; Other Investors (as defined); Mezzanine Lenders (as defined); Vishay Intertechnology, Inc.; Vishay Europe Gmbh; and BCcomponents International B.V., dated as of November 10, 2002. Incorporated by reference to Exhibit 2.1 to Form 8-K File filed December 23, 2002.
- 2.3 Amendment to the Share Sale and Purchase Agreement between Phoenix Acquisition Company S.ar.l; Other Investors (as defined); Mezzanine Lenders (as defined); Vishay Intertechnology, Inc.; Vishay Europe Gmbh; and BCcomponents International B.V., dated as of December 4, 2002. Incorporated by reference to Exhibit 2.2 to Form 8-K File filed December 23, 2002.
- 3.1 Composite Amended and Restated Certificate of Incorporation of the Company dated August 3, 1995. Incorporated by reference to Exhibit 3.1 to the Company's quarterly report on Form 10-Q for the quarter ended June 30, 1995 (the "1995 Form 10-Q"). Certificate of Amendment of Composite Amended and Restated Certificate of Incorporation of the Company. Incorporated by reference to Exhibit 3.1 to Form 10-Q for the quarter ended June 30, 1997 (the "1997 Form 10-Q"). Certificate of Amendment of the Amended and Restated Certificate of Incorporation of the Company. Incorporated by reference to Exhibit 3.1 to Form 8-K File filed November 13, 2001.
- 3.2 Amended and Restated Bylaws of Registrant. Incorporated by reference to Exhibit 3.1 to the Company's quarterly report on Form 10-Q for the quarter ended March 31, 2001.
- 4.1 Indenture dated as of June 4, 2001 between Vishay Intertechnology, Inc. and Bank of New York as Trustee. Incorporated by reference to Exhibit 4.1 to Current Report of Registrant on Form 8-K filed on June 18, 2001 under the Securities Exchange Act of 1934 except that clause (x) of Section 5 thereof is corrected to read "(x) 0.0625% of the average LYON Market Price for the Five Day Period with respect to such Contingent Interest Period and".

- 4.2 Indenture dated as of December 14, 1999 between General Semiconductor, Inc. and The Bank of New York as Trustee. Incorporated by reference to Exhibit 4.5 to the Registration Statement on Form S-3 (No. 333-94513) filed by General Semiconductor, Inc. on January 12, 2000.
- 4.3 First Supplemental Indenture dated as of November 2, 2001 among General Semiconductor, Inc., Vishay Intertechnology, Inc., and The Bank of New York as Trustee to Indenture dated as of December 14, 1999. Incorporated by reference to Exhibit 4.3 to the Company's annual report on Form 10-K for the year ended December 31, 2001.
- 4.4 Second Supplemental Indenture dated as of January 8, 2002 among General Semiconductor, Inc., Vishay Intertechnology, Inc., and The Bank of New York as Trustee to Indenture dated as of December 14, 1999. Incorporated by reference to Exhibit 4.4 to the Company's annual report on Form 10-K for the year ended December 31, 2001.
- 10.1 Performance-Based Compensation Plan for Chief Executive Officer of Registrant. Incorporated by reference to Exhibit 10.1 to Form 10-K for fiscal year ended December 31, 1993.
- 10.2 Vishay Intertechnology, Inc. Amended and Restated Long Term Revolving Credit Agreement, dated as of June 1, 1999, by and among Vishay and the Permitted Borrowers (as defined therein), the Lenders (as defined therein), and Comerica Bank, as administrative agent. Incorporated by reference to Exhibit 10.1 to the Company's Registration Statement on Form S-3 (No. 333-52594) filed December 22, 2000.
- 10.3 First Amendment to Amended and Restated Vishay Intertechnology, Inc. Long Term Revolving Credit Agreement and Other Loan Documents, dated as of August 31, 2000, by and among the Company and the Permitted Borrowers (as defined therein), Comerica Bank and the other Lenders signatory thereto, and Comerica Bank, as administrative agent. Incorporated by reference to Exhibit 10.2 to the Company's Registration Statement on Form S-3 (No. 333-52594) filed December 22, 2000.
- 10.4 Second Amendment to Amended and Restated Vishay Intertechnology, Inc. Long Term Revolving Credit Agreement and Consent, made as of December 13, 2002, by and among Vishay Intertechnology, Inc. the Permitted Borrowers (as defined), Comerica Bank and the Lenders signatory thereto and Comerica Bank as administrative agent. Incorporated by reference to Exhibit 4.6 to Form 8-K filed on December 13, 2002.
- 10.5 Employment Agreement, dated as of March 15, 1985, between the Company and Dr. Felix Zandman. Incorporated by reference to Exhibit 10.12 to the Company's Registration Statement on Form S-2 (No. 33-13833).
- 10.6 Vishay Intertechnology, Inc. 1995 Stock Option Program. Incorporated by reference to the Company's Definitive Proxy Statement on Schedule 14ADR filed April 7, 1995.
- 10.7 Vishay Intertechnology, Inc. 1997 Stock Option Program. Incorporated by reference to the Company's Definitive Proxy Statement on Schedule 14A filed April 16, 1998.
- 10.8 Vishay Intertechnology, Inc. 1998 Stock Option Program. Incorporated by reference to the Company's Definitive Proxy Statement on Schedule 14A filed April 16, 1998.
- 10.9 Money Purchase Plan Agreement of Measurements Group, Inc. Incorporated by reference to Exhibit 10(a)(6) to Amendment No. 1 to the Company's Registration Statement on Form S-7 (No. 2-69970).

- 10.10 Agreement Amending Supply Agreements among Cabot Corporation through its Cabot Performance Materials Division, Vishay Sprague, Inc. and Vishay Intertechnology, Inc. dated as of June 6, 2002.
- 21. Subsidiaries of the Registrant.
- 23. Consent of Independent Auditors.
- 99.1 Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 Dr. Felix Zandman, Chief Executive Officer.
- 99.2 Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 Richard N. Grubb, Chief Financial Officer.

SIGNATURES

Pursuant to the requirement of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

VISHAY INTERTECHNOLOGY, INC.

March 31, 2003 /s/ Felix Zandman

Felix Zandman, Chairman of the Board and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated below.

March 31, 2003	/s/ Felix Zandman Felix Zandman, Chairman of the Board and Chief Executive Officer (Principal Executive Officer)
March 31, 2003	/s/ Avi D. Eden Avi D. Eden, Vice-Chairman of the Board, Executive Vice President and General Counsel
March 31, 2003	/s/Gerald Paul Gerald Paul, Director, President and Chief Operating Officer
March 31, 2003	/s/Marc Zandman Marc Zandman, Vice-Chairman of the Board, President-Vishay Israel Ltd.
March 31, 2003	/s/Richard N. Grubb Richard N. Grubb, Director, Executive Vice President, Treasurer and Chief Financial Officer (Principal Financial and Accounting Officer)
March 31, 2003	/s/Robert A. Freece Robert A. Freece, Director, Senior Vice President
March 31, 2003	/s/Eli Hurvitz Eli Hurvitz, Director

March 31, 2003	/s/Abraham Ludomirski Abraham Ludomirski, Director
March 31, 2003	/s/Edward B. Shils Edward B. Shils, Director
March 31, 2003	/s/Ziv Shoshani Ziv Shoshani, Director
March 31, 2003	/s/Mark I. Solomon Mark I. Solomon, Director
March 31, 2003	/s/Jean-Claude Tine Jean-Claude Tine, Director
March 31, 2003	/s/Ruta Zandman Ruta Zandman, Director

CERTIFICATIONS

I, Dr. Felix Zandman, certify that:

- 1. I have reviewed this annual report on Form 10-K of Vishay Intertechnology, Inc.;
- 2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
- 4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
 - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
 - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
 - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
- 5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
- 6. The registrant's other certifying officers and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 31, 2003

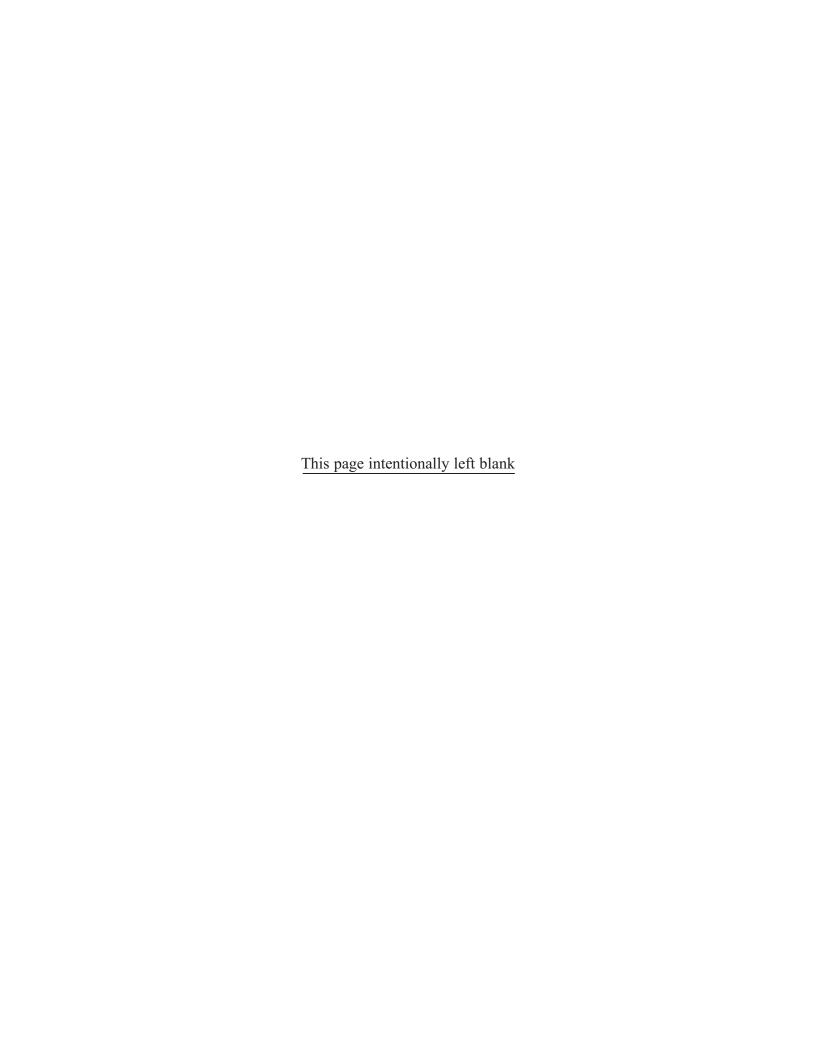
/s/ Dr. Felix Zandman Dr. Felix Zandman Chief Executive Officer

I, Richard N. Grubb, certify that:

- 1. I have reviewed this annual report on Form 10-K of Vishay Intertechnology, Inc.;
- 2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
- 4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
 - a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
 - b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
 - c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
- 5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
- 6. The registrant's other certifying officers and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 31, 2003

/s/ Richard N. Grubb, Richard N. Grubb, Chief Financial Officer



Vishay Intertechnology, Inc.

Consolidated Financial Statements

Years ended December 31, 2002, 2001, and 2000

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Report of Independent Auditors

Board of Directors and Stockholders Vishay Intertechnology, Inc.

We have audited the accompanying consolidated balance sheets of Vishay Intertechnology, Inc. as of December 31, 2002 and 2001, and the related consolidated statements of operations, cash flows, and stockholders' equity for each of the three years in the period ended December 31, 2002. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Vishay Intertechnology, Inc. at December 31, 2002 and 2001, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States.

As discussed in Note 1 to the consolidated financial statements, in 2002 the Company changed its method of accounting for goodwill.

Philadelphia, PA February 6, 2003

/s/ Ernst & Young, LLP

Consolidated Balance Sheets

(In thousands, except per share and share amounts)

		December 31
	2002	2001
Assets		
Current assets:		
Cash and cash equivalents	\$ 339,9	38 \$ 367,115
Accounts receivable, less allowances of \$18,172 and \$17,126 Inventories:	343,5	
Finished goods	219,7	260,161
Work in process	142,8	
Raw materials	191,4	
Deferred income taxes	47,2	97 63,084
Prepaid expenses and other current assets	188,8	81 160,613
Total current assets	1,473,6	93 1,574,627
Property and equipment – at cost:	440.0	
Land	118,0	
Buildings and improvements	339,8	
Machinery and equipment Construction in progress	1,609,9 61,8	
Construction in progress	2,129,6	
Less allowances for depreciation	(854,7	
Less anowances for depreciation	1,274,8	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Goodwill	1,356,2	93 1,077,790
Other intangible assets, net of amortization of \$8,187 and \$1,017	122,4	17 83,337
Other assets	87,9	06 48,236
Total assets	\$ 4,315,1	
	<u> </u>	υ, ψ υ,νυ1,υ2υ

		Decei	nber	31
		2002		2001
Liabilities and stockholders' equity				
Current liabilities:				
Notes payable to banks	\$	18,161	\$	11,241
Trade accounts payable		123,999		89,467
Payroll and related expenses		103,184		71,841
Other accrued expenses		303,609		292,596
Income taxes		8,734		13,081
Current portion of long-term debt		18,550		367
Total current liabilities	-	576,237		478,593
Long-term debt – less current portion		706,316		605,031
Deferred income taxes		52,935		90,340
Deferred income		42,345		57,208
Minority interest		75,985		66,516
Other liabilities		279,462		139,273
Accrued pension costs		223,092		148,017
Stockholders' equity:				
Preferred Stock, par value \$1.00 per share: authorized – 1,000,000 shares; none issued				
Common Stock, par value \$.10 per share:				
authorized – 300,000,000 shares; 144,297,101 and 143,795,355				
shares outstanding after deducting 332,850 shares in treasury		14,429		14,380
Class B convertible Common Stock, par value \$.10 per share:		, -		,
authorized – 40,000,000 shares; 15,383,581 and 15,496,634				
shares outstanding after deducting 279,453 shares in treasury		1,538		1,550
Capital in excess of par value		1,910,994		1,865,979
Retained earnings		523,354		615,968
Unearned compensation		(413)		(921)
Accumulated other comprehensive loss		(91,115)		(130,411)
Total stockholders' equity		2,358,787		2,366,545
Total liabilities and stockholders' equity	\$	4,315,159	\$	3,951,523

See accompanying notes.

Consolidated Statements of Operations

(In thousands, except per share and share amounts)

	Year ended December 31				l	
		2002		2001		2000
Net sales	\$	1,822,813	\$	1,655,346	\$	2,465,066
Costs of products sold		1,454,540		1,273,827		1,459,784
Gross profit		368,273		381,519		1,005,282
Selling, general, and administrative expenses		311,251		278,171		297,315
Amortization of goodwill		_		11,190		11,469
Restructuring expense		30,970		61,908		_
Loss on long-term purchase commitments		106,000		_		_
Purchased research and development		_		16,000		
		(79,948)		14,250		696,498
Other income (expense):						
Interest expense		(28,761)		(16,848)		(25,177)
Other		8,664		12,701		18,904
		(20,097)		(4,147)		(6,273)
(Loss) earnings before income taxes (benefit)		(100.045)		10.102		600 225
and minority interest		(100,045)		10,103		690,225
Income taxes (benefit)		(16,900)		5,695		148,186
Minority interest	Φ.	9,469	Ф	3,895	Ф	24,175
Net (loss) earnings	\$	(92,614)	\$	513	\$	517,864
Basic (loss) earnings per share	\$	(0.58)	\$	0.00	\$	3.83
Diluted (loss) earnings per share	\$	(0.58)	\$	0.00	\$	3.77
Weighted average shares outstanding:						
Basic		159,413,000		141,171,000		135,295,000
Diluted		159,413,000		142,514,000		137,463,000

See accompanying notes.

Consolidated Statements of Cash Flows

(In thousands)

	Yes	ar end	ded Decembe	er 31	
	2002		2001		2000
Operating activities					
Net (loss) earnings	\$ (92,614)	\$	513	\$	517,864
Adjustments to reconcile net (loss) earnings to net	(, ,				,
cash provided by operating activities:					
Depreciation and amortization	180,748		163,387		140,840
Gain on sale of subsidiaries	_		_		(5,851)
Loss (gain) on disposal of property and					
equipment	296		(1,472)		2,320
Minority interest in net earnings of consolidated					
subsidiaries	9,469		3,895		24,175
Equity in earnings of affiliate	_		_		2,577
Purchased research and development	_		16,000		_
Noncash charge for change in fair value of					
interest rate swap	115		3,668		_
Accretion of interest on convertible debentures	9,325		5,313		_
Writedowns of property and equipment included					
in restructuring expense	12,363		20,975		_
Loss on long-term purchase commitments	106,000		_		_
Changes in operating assets and liabilities, net of					
effects of businesses acquired or sold:					
Accounts receivable	102,322		120,095		(148,414)
Inventories	106,818		6,038		(140,084)
Prepaid expenses and other current assets	6,257		(7,321)		(62,687)
Accounts payable	455		(71,761)		28,507
Other current liabilities	(29,766)		(105,685)		106,084
Other	(44,917)		7,773		76,988
Net cash provided by operating activities	366,871		161,418		542,319
Investing activities	(110.07.1)		(1.60.400)		(220 501)
Purchases of property and equipment	(110,074)		(162,493)		(229,781)
Proceeds from sale of property and equipment	20,621		9,911		7,267
Purchases of businesses, net of cash acquired	(278,735)		(172,468)		(42,384)
Net cash proceeds from divestitures	(2(0.100)		(225.050)		33,162
Net cash used in investing activities	(368,188)		(325,050)		(231,736)

(Continues on following page.)

Consolidated Statements of Cash Flows (continued)

(In thousands)

	Year ended December 31				
	2002		2001		2000
Financing activities					
Net payments on revolving credit lines	\$ (14,000)	\$	(100,047)	\$	(506,686)
Proceeds from long-term borrowings	201		415		_
Principal payments on long-term debt	(17,217)		(444)		(385)
Proceeds from convertible subordinated debentures	_		294,096		_
Purchase of treasury stock	_		(850)		(5,765)
Proceeds from sale of common stock	_				395,449
Proceeds from stock options exercised	3,161		854		39,873
Net changes in short-term borrowings	(10,452)		3,274		39
Net cash (used in) provided by financing activities	(38,307)		197,298		(77,475)
Effect of exchange rate changes on cash	12,447		(3,764)		(1,088)
(Decrease) increase in cash and cash equivalents	(27,177)		29,902		232,020
Cash and cash equivalents at beginning of year	367,115		337,213		105,193
Cash and cash equivalents at end of year	\$ 339,938	\$	367,115	\$	337,213

See accompanying notes.

Vishay Intertechnology, Inc.

Consolidated Statements of Stockholders' Equity

(In thousands, except share amounts)

			-				\							
	ئ ت	Common Stock	Class B C Con St	Class B Convertible Common Stock	Capital Pa	Capital in Excess of Par Value	Retained	Retained Earnings	Unearned Compensation	rned sation	Accumu Compi Incon	Accumulated Other Comprehensive Income (Loss)	Total	Total Stockholders' Equity
Balance at January 1, 2000	s	11,147	S	1,556	9	985,393	89	97,591	\$	(1,086)	S	(81,009)	so.	1,013,592
Net earnings		ı		ı		ı		517,864		1		` I		517,864
Foreign currency translation adjustment Pension liability adjustment		1 1		1 1		1 1		1 1		1 1		(32,468)		(32,468)
Comprehensive income														485,302
Stock issued (53,716 shares)		S		I		1,699		ı		(1,704)		I		1
Stock options exercised (2,656,171 shares)		266		I		39,607		I		Ī		I		39,873
Shares)		4		(4)		I		I		I		I		ı
Common stock repurchase (200,000 shares)		(20)) 1		(5,745)		I		I		I		(5,765)
Sale of common stock (8,392,500 shares)		839		I		394,610		I		I		I		395,449
Termination of Lite-On stock appreciation rights		I		I		(108,495)		I		I		I		(108,495)
Tax effects relating to stock plan A mortization of unearned compensation		1 1		1 1		12,357		1 1		1 542		1 1		12,357
Balance at December 31, 2000		12.241		1.552		1.319.426		615.455		(1,248)		(113.571)		1.833.855
Net earnings		i i		1		1		513) !		-		513
Foreign currency translation adjustment		ı		1		ı		I		1		(7,638)		(7,638)
Pension liability adjustment		I		I		I		I		I		(8,557)		(8,557)
Cumulative effect of adoption of SFAS No. 133		I		I		I		I		I		51		51
Loss on derivative financial instruments, net of												,		;
taxes of \$374		I		I		I		I		I		(969)		(969)
Comprehensive loss		ć				4				3				(16,327)
Stock Issued (22,573 shares)		2		I		443		I		(446)		I		(T)
Stock options exercised (85,877 shares)		6		I		845		ĺ		I		I		854
conversions from Class B to common (21,91) shares		C		0		ı		ı		I		I		ı
Common stock repurchase (48.500 shares)		ī (S		<u>i</u>) 1		(846)		ı		ı		ı		(851)
Tax effects relating to stock plan)		I		423		I		I		I		423
Amortization of unearned compensation		I		I		I		I		773		I		773
Stock issued - General Semiconductor acquisition														
(21,305,127 shares)		2,131		I		497,688		I		I		I		499,819
Stock options issued – General Semiconductor						1000								40,000
acquisition Delenge of December 21, 2001		14 200		1 550		1 965 070		- 050 513		- (100)		(130 411)		7 366 545
Net loss		1,000		1,5				(92,614)		(177)		(114,001)		(92.614)
Foreign currency translation adjustment		I		ı		ı		-		ı		64,343		64,343
Pension liability adjustment		I		I		I		I		I		(23,230)		(23,230)
Loss on derivative financial instruments, net of												į		í
Comment of the local		I		I		I		I		I		(1,017)		(1,017)
Comprehensive loss		1				2 134				(135)				2,000
Stock options exercised (260.720 shares)		26		1 1		3.135		l I		(661)		1 1		3,161
Conversions from Class B to common (113,053														
shares)		12		(12)		ı		I		I		I		ı
Warrants issued – BCcomponents acquisition		I		I		39,462		ı		I		I		39,462
Tax effects relating to stock plan		I		I		294		I		1 9		I		294
Amortization of unearned compensation		1 9	4	1 9	,	1 3	4	1	4	643	4	1 1	4	643
Balance at December 31, 2002	so	14,429	\$	1,538	so	1,910,994	S	523,354	s	(413)	\$	(91,115)	\$	2,358,787

See accompanying notes.

Notes to Consolidated Financial Statements

December 31, 2002

Vishay Intertechnology, Inc. is an international manufacturer and supplier of passive and active electronic components, including resistors, capacitors, inductors, strain gages, load cells, force measurement sensors, displacement sensors, photoelastic sensors, power MOSFETS, power conversion and motor control integrated circuits, transistors, diodes and optoelectronic components. Electronic components manufactured by the Company are used in virtually all types of electronic products, including those in the computer, telecommunications, military/aerospace, instrument, automotive, medical, and consumer electronics industries.

1. Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts of Vishay Intertechnology, Inc. and its majority-owned subsidiaries, after elimination of all significant intercompany transactions, accounts, and profits. Investments in 20%- to 50%-owned companies are accounted for on the equity method. Investments in other companies are carried at cost.

Revenue Recognition

The Company recognizes revenue when products are shipped to customers. The Company has agreements with distributors that provide limited rights of return and protection against price reductions initiated by the Company. The effect of these programs is estimated based on historical experience and provisions are recorded at the time of shipment.

Shipping and Handling Costs

Shipping and handling costs are included in costs of products sold.

Use of Estimates

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

Notes to Consolidated Financial Statements (continued)

1. Summary of Significant Accounting Policies (continued)

Inventories

Inventories are stated at the lower of cost, determined by the first-in, first-out method, or market.

Allowance for Doubtful Accounts

The Company maintains an allowance for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. The allowance is determined through an analysis of the aging of accounts receivable and assessments of risk that are based on historical trends and an evaluation of the impact of current and projected economic conditions. The Company evaluates the past-due status of its trade receivables based on contractual terms of sale. If the financial condition of the Company's customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. Bad debt expense was \$6,672,000, \$7,112,000 and \$3,020,000 for the years ended December 31, 2002, 2001, and 2000, respectively.

Depreciation

Depreciation is computed principally by the straight-line method based upon the estimated useful lives of the assets. Machinery and equipment are being depreciated over useful lives of seven to ten years. Buildings and building improvements are being depreciated over useful lives of twenty to forty years. Depreciation of capital lease assets is included in total depreciation expense. Depreciation expense was \$172,174,000, \$149,225,000, and \$126,285,000, for the years ended December 31, 2002, 2001, and 2000, respectively.

Construction in Progress

The estimated cost to complete construction in progress at December 31, 2002 was \$21,838,000.

Goodwill and Other Intangible Assets

The Company adopted Statements of Financial Accounting Standards ("SFAS") No. 141, Business Combinations, and No. 142, Goodwill and Other Intangible Assets, effective January 1, 2002.

Notes to Consolidated Financial Statements (continued)

1. Summary of Significant Accounting Policies (continued)

Goodwill and Other Intangible Assets (continued)

The most significant changes made by SFAS 142 were: (1) goodwill and indefinite lived intangible assets will no longer be amortized, (2) goodwill will be tested for impairment at least annually at the reporting unit level, (3) intangible assets deemed to have an indefinite life will be tested for impairment at least annually, and (4) the amortization period of intangible assets with finite lives will no longer be limited to forty years. SFAS 142 prescribes a two-step method for determining goodwill impairment. In the first step, we determine the fair value of the reporting unit using a comparable companies market multiple approach. If the net book value of the reporting unit exceeds the fair value, we would then perform the second step of the impairment test which requires allocation of the reporting unit's fair value to all of its assets and liabilities in a manner similar to a purchase price allocation, with any residual fair value being allocated to goodwill. The fair value of the goodwill is then compared to its carrying amount to determine impairment. An impairment charge will be recognized only when the implied fair value of a reporting unit's goodwill is less than its carrying amount. SFAS 142 requires the Company to perform transitional impairment tests of its trademarks and goodwill as of January 1, 2002, as well as perform impairment tests on an annual basis and whenever events or circumstances occur indicating that the trademarks or goodwill may be impaired.

The Company has identified the following reporting units and associated goodwill (in thousands):

					Mea	asurements		
	A	Actives	P	assives		Group		Total
								<u>.</u>
Goodwill Balance at December 31, 2002	\$	861,201	\$	462,251	\$	32,841	\$ 1	,356,293

The Company has assigned an indefinite useful life to its trademarks (\$56,000,000) and discontinued the amortization of both its goodwill and trademarks. Completed technology (\$67,000,000) is being amortized over useful lives of seven to ten years. Noncompete agreements (\$7,604,000) are being amortized over a period of one to five years. Amortization expense was \$7,171,000, \$1,017,000, and \$0 for the years ended

Notes to Consolidated Financial Statements (continued)

1. Summary of Significant Accounting Policies (continued)

December 31, 2002, 2001, and 2000, respectively. Estimated annual amortization expense for each of the next five years is as follows: 2003 - \$11,248,000; 2004 - \$8,414,000; 2005 - \$7,993,000; 2006 - \$7,593,000; and 2007 - \$7,593,000.

The Company completed the transitional impairment test of its trademarks as of January 1, 2002. The fair value of the trademarks, as determined by an independent appraiser, was measured as the discounted cash flow savings realized from owning such trademarks and not having to pay a royalty for their use. No impairment of the trademarks was determined to exist at January 1, 2002. An annual impairment test of trademarks was completed as of October 1, 2002, with no impairment recognized.

The Company completed a transitional goodwill impairment test as of January 1, 2002. Fair value of reporting units was determined using comparable company market multiples. The Company determined that there was no goodwill impairment as of January 1, 2002.

The Company performed an additional goodwill impairment test, as required under SFAS 142, with particular attention to the Company's market capitalization as compared with the Company's net asset value at September 30, 2002. The Company determined that there was no goodwill impairment. The Company's required annual impairment test will be performed on October 1st of each subsequent year.

The interim impairment test of goodwill was performed in accordance with the provisions of SFAS 142, which states that, if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount, an impairment test is required. During the nine months ended September 30, 2002, events and circumstances indicated that approximately \$204 million of goodwill of the passives reporting unit might be impaired. However, the Company's estimate of fair value of the passives reporting unit using a comparable companies market multiple approach indicated that the fair value of the reporting unit exceeded its net book value. Nonetheless, it is reasonably possible that the fair value of the passives reporting unit may decrease in the near term resulting in the need to write down that goodwill to fair value.

Notes to Consolidated Financial Statements (continued)

1. Summary of Significant Accounting Policies (continued)

Long-Lived Assets

The Company evaluates impairment of its intangible assets subject to amortization and other long-lived assets, other than goodwill and intangible assets not subject to amortization, in accordance with SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, which has been adopted by the Company as of January 1, 2002. SFAS 144 requires an impairment loss to be recognized only if the carrying amounts of long-lived assets to be held and used are not recoverable from their expected undiscounted cash flows. Adoption of SFAS 144 had no effect on the Company's financial position or its results of operations.

Cash Equivalents

Cash and cash equivalents includes demand deposits and highly liquid investments with maturities of three months or less when purchased.

Research and Development Expenses

The amount charged to expense for research and development (exclusive of purchased in-process research and development) aggregated \$37,095,000, \$30,176,000, and \$37,103,000 for the years ended December 31, 2002, 2001, and 2000, respectively. The Company spends additional amounts for the development of machinery and equipment for new processes and for cost reduction measures.

Grants

Grants received by certain foreign subsidiaries from foreign governments, primarily in Israel, are recognized as income in accordance with the purpose of the specific contract and in the period in which the related expense is incurred. Grants from the Israeli government recognized as a reduction of costs of products sold were \$17,322,000, \$19,064,000, and \$15,721,000 for the years ended December 31, 2002, 2001, and 2000, respectively. Grants receivable of \$16,374,000 and \$14,858,000 are included in other current assets at December 31, 2002 and 2001, respectively. Deferred grant income was \$42,345,000 and \$57,208,000 at December 31, 2002 and 2001, respectively. The grants are subject to certain conditions, including maintaining specified levels of employment for periods up to ten years. Noncompliance with such conditions could result in the repayment of grants. However, management expects that the Company will comply with all terms and conditions of the grants.

Notes to Consolidated Financial Statements (continued)

1. Summary of Significant Accounting Policies (continued)

Minority Interest

Minority interest represents the ownership interests of third parties in the net assets and results of operations of certain consolidated subsidiaries.

Stock-Based Compensation

SFAS No. 123, Accounting for Stock-Based Compensation, encourages entities to record compensation expense for stock-based employee compensation plans at fair value but provides the option of measuring compensation expense using the intrinsic value method prescribed in APB Opinion No. 25, Accounting for Stock Issued to Employees. The Company accounts for stock-based compensation in accordance with APB 25 and related interpretations. The following is provided to comply with the disclosure requirements of SFAS 123 as amended. If compensation cost for the Company's stock option programs had been determined using the fair-value method prescribed by SFAS 123, the Company's results would have been reduced to the pro forma amounts indicated below (in thousands, except per share amounts):

	Yea	ar ende	d December	· 31	
	2002		2001		2000
Net (loss) income, as reported Deduct: Total stock-based employee compensation expense determined under fair value-based method for all awards, net of	\$ (92,614)	\$	513	\$	517,864
related tax effects	(2,430)		(3,742)		(2,568)
Pro forma net (loss) income	\$ (95,044)	\$	(3,229)	\$	515,296
Earnings (loss) per share:					
Basic—as reported	\$ (0.58)	\$	0.00	\$	3.83
Basic—pro forma	\$ (0.60)	\$	(0.02)	\$	3.81
Diluted—as reported	\$ (0.58)	\$	0.00	\$	3.77
Diluted—pro forma	\$ (0.60)	\$	(0.02)	\$	3.75
·					

Notes to Consolidated Financial Statements (continued)

1. Summary of Significant Accounting Policies (continued)

Stock-Based Compensation (continued)

The weighted average fair value of the options granted was estimated using the Black-Scholes option-pricing model, with the assumptions presented below. All options granted in 2002 had a weighted average fair value of \$8.62 and an exercise price equal to the market value. All options granted in 2000 had a weighted average fair value of \$11.64 and a weighted average exercise price of \$25.34.

	2002	2000
	Grants	Grants
Expected dividend yield	_	_
Risk-free interest rate	3.5%	5.8%
Expected volatility	63.2%	58.2%
Expected life (in years)	4.5	4.7

Derivative Financial Instruments

Effective January 1, 2001, the Company adopted SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*. SFAS 133 requires all derivative instruments to be recognized as either assets or liabilities and measured at fair value. The accounting for changes in fair value depends upon the purpose of the derivative instrument and whether it is designated and qualifies for hedge accounting. The Company uses interest rate swap agreements to modify variable rate obligations to fixed rate obligations, thereby reducing exposure to market rate fluctuations. The interest rate swap agreements are designated as hedges. The effective portion of gains or losses is reported in other comprehensive income and the ineffective portion, if any, is reported in net income (loss).

Commitments and Contingencies

Liabilities for loss contingencies, including environmental remediation costs, arising from claims, assessments, litigation, fines, penalties, and other sources are recorded when it is probable that a liability has been incurred and the amount of the assessment and/or remediation can be reasonably estimated. The costs for a specific environmental cleanup site are discounted if the aggregate amount of the

Notes to Consolidated Financial Statements (continued)

1. Summary of Significant Accounting Policies (continued)

Commitments and Contingencies (continued)

obligation and the amount and timing of the cash payments for that site are fixed or reliably determinable generally based upon information derived from the remediation plan for that site. Recoveries from third parties that are probable of realization and can be reasonably estimated are separately recorded, and are not offset against the related environmental liability.

Accounting Pronouncements Pending Adoption

In April 2002, the FASB issued SFAS No. 145, Rescission of FASB Statements No. 4, 44, and 64, Amendment of FASB Statement No. 13, and Technical Corrections. In addition to other technical provisions, this Statement rescinds SFAS No. 4, which required all gains and losses from extinguishment of debt to be aggregated and, if material, classified as an extraordinary item, net of tax. The provisions of SFAS 145 will be adopted by the Company on January 1, 2003.

In July 2002, the FASB issued SFAS No. 146, Accounting for Costs Associated with Exit or Disposal Activities. This Statement nullifies EITF Issue No. 94-3, Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring). SFAS 146 requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred rather than at the date of an entity's commitment to an exit plan. The provisions of SFAS 146 will be adopted by the Company for exit or disposal activities initiated after December 31, 2002.

Reclassifications

Certain prior-year amounts have been reclassified to conform to the current financial statement presentation.

Notes to Consolidated Financial Statements (continued)

2. Acquisitions and Divestitures

Year ended December 31, 2002

In January 2002, the Company acquired the transducer and strain gage businesses of Sensortronics, Inc. Sensortronics is a leading manufacturer of load cells and torque transducers for domestic and international customers in a wide range of industries with manufacturing facilities in Covina, California, Costa Rica, and, under a joint venture arrangement, India. The acquisition included the wholly owned subsidiary of Sensortronics, JP Technologies, a manufacturer of strain gages, located in San Bernardino, California. The purchase price was \$10 million in cash. The purchase price has been allocated, with resulting goodwill of \$3,027,000. The results of operations of Sensortronics are included in the results of the passives segment from January 31, 2002.

In June 2002, the Company acquired Tedea-Huntleigh BV, a subsidiary of Tedea Technological Development and Automation Ltd. Tedea-Huntleigh BV is engaged in the production and sale of load cells used in digital scales by the weighing industry. The purchase price was approximately \$21 million in cash. Additionally, Vishay will pay Tedea a \$1 million consulting fee over a three-year period and repaid a \$9 million loan of Tedea to Tedea-Huntleigh. Tedea-Huntleigh operates two plants in Israel, in Netanya and Carmiel, where it employs approximately 350 people, as well as a number of facilities outside Israel. Tedea-Huntleigh also has load cell operations in the Peoples Republic of China. The purchase price has been allocated, with resulting goodwill of \$13,841,000. Results of operations are included in the passives segment beginning July 1, 2002.

On July 31, 2002, the Company acquired the BLH and Nobel businesses of Thermo Electron Corporation. BLH and Nobel are engaged in the production and sale of load cell-based process weighing systems, weighing and batching instruments, web tension instruments, weighing scales, servo control systems, and components relating to load cells including strain gages, foil gages, and transducers. The purchase price was \$18.5 million in cash. The purchase price has been allocated, with resulting goodwill of \$11,262,000. The results of operations are included in the passives segment beginning August 1, 2002.

In October 2002, the Company acquired Celtron Technologies. Celtron is engaged in the production and sale of load cells used in digital scales for the weighing industry, with manufacturing facilities and offices in Taiwan, the Peoples Republic of China, and California. The purchase price of \$13.5 million in cash has been allocated with resulting goodwill of \$4,711,000.

Notes to Consolidated Financial Statements (continued)

2. Acquisitions and Divestitures (continued)

On December 13, 2002, the Company acquired BCcomponents Holdings B.V., a leading manufacturer of passive components with operations in Europe, India, and the Far East. The product lines of BCcomponents include linear and non-linear resistors; ceramic, film and aluminum electrolytic capacitors; and switches and trimming potentiometers.

Vishay acquired the outstanding shares of BCcomponents in exchange for ten-year warrants to acquire 7,000,000 shares of Vishay common stock at an exercise price of \$20.00 per share and ten-year warrants to acquire 1,823,529 shares of Vishay common stock at an exercise price of \$30.30 per share.

In the transaction, outstanding obligations of BCcomponents, including indebtedness and transaction fees and expenses, in the amount of approximately \$224 million were paid (\$191,000,000) or assumed (\$33,000,000). Also, \$105 million in principal amount of BCcomponents' mezzanine indebtedness and certain other securities of BCcomponents were exchanged for \$105 million principal amount of floating rate unsecured loan notes of Vishay due 2102. The Vishay notes bear interest at LIBOR plus 1.5% through December 31, 2006 and at LIBOR thereafter. The interest note could be further reduced to 50% of LIBOR after December 31, 2010 if the price of Vishay common stock trades above a specified target price, as provided in the notes. The notes are subject to a put and call agreement under which the holders may at any time put the notes to Vishay in exchange for 6,176,471 shares of Vishay common stock in the aggregate, and Vishay may call the notes in exchange for cash or for shares of its common stock after 15 years from the date of issuance. The purchase price was as follows:

Cash consideration	\$ 191,000,000
Warrants issued	39,462,000
Acquisition costs	3,000,000
Total purchase price	\$ 233,462,000

Under purchase accounting, the total purchase price is allocated to assets acquired and liabilities assumed based on their estimated fair values. The allocation of the purchase price is based on a preliminary evaluation of the fair value of BCcomponents' tangible and identifiable intangible assets acquired and liabilities assumed at the date of the merger based upon currently available information. There can be no assurance that the estimated amounts represent the final purchase allocation. The purchase price has been

Notes to Consolidated Financial Statements (continued)

2. Acquisitions and Divestitures (continued)

preliminarily allocated, pending finalization of appraisals for property, plant, and equipment, debt, intangible assets and warrants, to the acquired assets and liabilities based on fair values as follows:

Current assets	\$ 96,071,000
Property, plant, and equipment	127,626,000
Other assets	4,805,000
Trademarks	21,000,000
Completed technology	22,000,000
Current liabilities	(118,238,000)
Long-term debt	(126,328,000)
Other noncurrent liabilities	(29,527,000)
Goodwill	 236,053,000
Total purchase price	\$ 233,462,000

In connection with the BCcomponents acquisition, the Company recorded restructuring liabilities of \$48,000,000 in connection with an exit plan that management began to formulate prior to the acquisition date. Approximately \$46,000,000 of these liabilities relate to employee termination costs covering approximately 780 technical, production, administrative and support employees located in the United States, Europe, and the Pacific Rim. The liability is recorded in other accrued expenses and is expected to be paid out by December 31, 2003. The exit plan is not yet finalized. Future adjustments to increase or decrease the restructuring liabilities would increase or decrease goodwill.

Year ended December 31, 2001

In January 2001, the Company purchased Tansitor, a manufacturer of wet tantalum electrolytic capacitors and miniature conformal coated solid tantalum capacitors, for \$18.3 million in cash. The acquisition was accounted for as a purchase and included in the results of operations of the passives segment from January 1, 2001.

On July 27, 2001, the Company agreed to purchase from Infineon Technologies AG, Munich, the Infineon optoelectronic infrared components business. This business produces optocouplers and optoelectric infrared data components transceivers (IRDC). The total purchase price for this transaction was approximately \$116 million in cash. A partial payment of \$78 million was made on July 27, 2001. A second payment of

Notes to Consolidated Financial Statements (continued)

2. Acquisitions and Divestitures (continued)

\$38 million was made on December 31, 2001 to acquire a manufacturing facility in Malaysia. Under the terms of the agreement, the Company purchased Infineon's U.S. development, marketing, and distribution activities located in the San Jose, California headquarters and a manufacturing facility located in Malaysia. The results of operations of Infineon's U.S. infrared components business are included in the results of the actives segment from July 27, 2001. The results of operations of the Malaysia facility are included from December 31, 2001, its acquisition date. The purchase price was allocated to the acquired assets and liabilities based on fair values as follows:

Current assets	\$ 28,121,000
Property, plant, and equipment	27,575,000
Completed technology	8,000,000
Other assets	226,000
Current liabilities	(14,200,000)
Goodwill	66,351,000
Total purchase price	\$ 116,073,000

On November 2, 2001, the Company acquired General Semiconductor, Inc., a leading manufacturer of rectifiers and power management devices, following approval of the transaction and related matters by stockholders of the two companies, for \$554.8 million, including acquisition expenses of \$7.0 million. Stockholders of General Semiconductor received 0.563 shares of Vishay Common Stock for each General Semiconductor share in a tax-free exchange. The Company used an average closing price of its common stock for the period beginning three trading days immediately prior to the date the acquisition was announced (August 1, 2001) and ending the three trading days immediately thereafter, or an average of \$23.46 per share. The aggregate fair value was determined by multiplying the total number of shares of Vishay Common Stock issued (21,305,127) by \$23.46 per share (determined as described above), or approximately \$499,818,000. The Company assumed General Semiconductor options that became exercisable for 4.3 million shares of Vishay Common Stock, with a fair value of \$48 million. The fair value of the options issued was determined using the Black-Scholes method. The significant assumptions used included an expected dividend yield of 0.0%, a risk-free interest rate of 3%, an expected volatility of 66%, and an expected life of five years. General Semiconductor also had outstanding \$172.5 million principal

Notes to Consolidated Financial Statements (continued)

2. Acquisitions and Divestitures (continued)

amount of 5.75% convertible notes, of which \$1.5 million principal amount was repurchased by the Company in January 2002. As a result of the acquisition, the notes that remain outstanding are convertible into approximately 6.2 million shares of Vishay Common Stock. The results of operations of General Semiconductor are included in the results of the actives segment from November 2, 2001. The final purchase allocation is as follows:

Current assets	\$ 153,115,000
Property, plant, and equipment	184,524,000
Other assets	7,896,000
Noncompete agreements	5,604,000
Trademarks	35,000,000
Completed technology	37,000,000
Purchased in-process technology	16,000,000
Current liabilities	(188,410,000)
Long-term debt	(255,502,000)
Other noncurrent liabilities	(111,290,000)
Goodwill	 670,909,000
Total purchase price	\$ 554,846,000

In connection with the General Semiconductor acquisition, the Company recorded restructuring liabilities of \$94,643,000 in connection with an exit plan that management began to formulate prior to the acquisition date. The exit plan includes downsizing certain European and Taiwan facilities and moving production to low labor cost areas such as Israel, Czech Republic, and China. The exit plan should be completed by the second quarter of 2003. The plan also includes reducing selling, general and administrative expenses through the integration or elimination of redundant sales offices and administrative functions at General Semiconductor. The goal of the Company is achieving significant production cost savings through the transfer and expansion of manufacturing operations to regions such as Israel, the Czech Republic, and the People's Republic of China, where the Company can take advantage of lower labor costs and available tax and other government-sponsored incentives. Approximately \$88,242,000 of these restructuring liabilities related to employee termination costs covering approximately 1,460 technical, production, administrative and support employees located in the United States, Europe, and the Pacific Rim. The remaining \$6,401,000 related to provisions for lease cancellations and other costs. The liability is included in

Notes to Consolidated Financial Statements (continued)

2. Acquisitions and Divestitures (continued)

other accrued expenses on the consolidated balance sheet and the workforce reduction costs are expected to be paid out by the second quarter of 2003. The other costs are expected to be paid out by 2005. Any changes in estimates to the restructuring liability have changed the purchase allocation. A rollforward of the activity in these restructuring liabilities is as follows (in thousands, except number of employees):

			Number of	
	Workforce		Employees	
	Reduction	Other	Terminated	Total
Balance at January 1, 2002	\$ 88,242	\$ 6,401	1,460	\$ 94,643
Cash paid	(52,118)	(1,249)	(426)	(53,367)
Changes in estimate	(7,900)	_	(147)	(7,900)
Balance at December 31, 2002	\$ 28,224	\$ 5,152	887	\$ 33,376

On November 7, 2001, the Company acquired Yosemite Investment, Inc. d/b/a North American Capacitor Company, also known as Mallory, for approximately \$45 million in cash. With manufacturing facilities in Greencastle, Indiana and Glasgow, Kentucky, Mallory is a leading manufacturer of wet tantalum electrolytic capacitors, among other businesses. Subsequently, in February 2002, Vishay sold the audible signal business of Mallory for \$4,925,000, consisting of \$3,925,000 in cash and a \$1,000,000 promissory note and recognized no gain or loss. On April 1, 2002, the Company sold the resale business of Mallory for \$8.8 million, consisting of \$7.6 million in cash and a \$1.2 million subordinated promissory note and recognized no gain or loss. The purchase price was allocated to the acquired assets and liabilities based on fair values as follows:

Current assets Property, plant, and equipment	\$ 11,033,000 6,347,000
Current liabilities	(3,555,000)
Long-term debt	(857,000)
Goodwill	31,684,000
Total purchase price	\$ 44,652,000

Notes to Consolidated Financial Statements (continued)

2. Acquisitions and Divestitures (continued)

The BLH, Tansitor, Celtron, Nobel, Tedea-Huntleigh, Sensortronics, Mallory and Infineon acquisitions were funded with cash on hand and borrowings under Vishay's revolving credit facility.

Had all of the above acquisitions been made at the beginning of the respective periods, the Company's pro forma unaudited results would have been (in thousands, except per share amounts):

	Year ended December 31			
	 2002		2001	
Net sales Net loss	\$ 2,095,657 (132,000)	\$	2,415,651 (86,788)	
Basic and diluted loss per share	(0.83)		(0.55)	

The pro forma information includes adjustments for interest expense that would have been incurred to finance the acquisitions, adjustments to depreciation based on the fair value of property, plant, and equipment acquired, write-off of purchased in-process research and development, amortization of intangible assets and related tax effects. Pro forma net loss for the year ended December 31,2001 includes pre-tax restructuring charges of \$88,846,000 recorded by General Semiconductor and BC components prior to acquisition. Goodwill related to the acquisitions is not tax-deductible.

The unaudited pro forma results are not necessarily indicative of the results that would have been attained had the acquisitions occurred at the beginning of the periods presented.

Year ended December 31, 2000

During 2000, the Company acquired certain assets and assumed certain liabilities of Spectrol Electronics Corporation and Spectrol Electronics Limited and acquired 100% of the common stock of Cera-Mite Corporation and of Electro-Films, Inc. The combined cash purchase price was \$42,384,000. The results of operations of Electro-Films, Cera-Mite, and Spectrol have been included in the Company's results from June 1, 2000, August 1, 2000, and September 1, 2000, respectively. The pro forma effect of these acquisitions was not material for 2000.

Notes to Consolidated Financial Statements (continued)

2. Acquisitions and Divestitures (continued)

On May 31, 2000, the Company entered into a definitive agreement for the sale of its 65% interest in Lite-On Power Semiconductor Corporation (LPSC) to the Lite-On Group for \$40,736,000 in cash and the transfer to the Company of the rights under the SARs (see Note 7) issued in July 1997. The fair value of the SARs was \$108,495,000 as of May 31, 2000. A pretax gain of \$8,401,000 is included in other income in 2000 in connection with the sale of the Company's 65% interest in LPSC.

On November 30, 2000, the Company sold V-Tech Latino Americana LTDA, its Brazilian distribution subsidiary. In connection with the sale, the Company received cash proceeds of approximately \$400,000 and recorded a noncash pretax loss of \$2,550,000, which is included in other income (expense).

3. Goodwill

As discussed in Note 1, the Company adopted SFAS 142 on January 1, 2002. The Company's net income and earnings per share adjusted to exclude goodwill amortization were as follows:

	Year ended December 31					l	
		2002		2001		2000	
			(In t	thousands)		
Reported net (loss) income	\$	(92,614)	\$	513	\$	517,864	
Add back: Goodwill amortization, net of tax				10,414		10,692	
Adjusted net (loss) income		(92,614)		10,927		528,556	
Basic earnings per share:							
Reported net (loss) income	\$	(0.58)	\$	0.00	\$	3.83	
Goodwill amortization, net of tax		_		0.08		0.08	
Adjusted net (loss) income		(0.58)		0.08		3.91	
Diluted earnings per share:							
Reported net (loss) income	\$	(0.58)	\$	0.00	\$	3.77	
Goodwill amortization, net of tax				0.08		0.08	
Adjusted net (loss) income		(0.58)		0.08		3.85	

Notes to Consolidated Financial Statements (continued)

3. Goodwill (continued)

The changes in the carrying amounts of goodwill by segment for the year ended December 31, 2002 were as follows:

	 Actives		Passives	Total
Balance at January 1, 2002	\$ 864,375	\$	213,415	\$ 1,077,790
Goodwill acquired during the year Purchase price adjustments Currency translation adjustments	- (8,332) 5,158		276,606 830 4,241	276,606 (7,502) 9,399
Balance at December 31, 2002	\$ 861,201	\$	495,092	\$ 1,356,293

4. Restructuring Expense

Restructuring expense reflects the cost reduction programs currently being implemented by the Company. These include the closing of facilities and the termination of employees. Restructuring costs are expensed during the period in which we determine that we will incur those costs and all of the requirements of accrual are met. Because these costs are recorded based upon estimates, our actual expenditures for the restructuring activities may differ from the initially recorded costs. We could be required either to record additional expenses in future periods, if the initial estimates were too low, or to reverse part of the charges that we recorded initially.

Notes to Consolidated Financial Statements (continued)

4. Restructuring Expense (continued)

Year ended December 31, 2002

Restructuring expense was \$30,970,000 for the year ended December 31, 2002. Restructuring of European and Israeli operations included \$10,698,000 of employee termination costs covering approximately 778 technical, production, administrative and support employees located in Czech Republic, France, Hungary, Israel, Portugal, and Austria. In the United States, \$7,909,000 of restructuring expense related to termination costs for approximately 660 technical, production, administrative and support employees. The remaining \$12,363,000 of restructuring expense relates to the noncash writedown of building and equipment that are no longer in use. The restructuring expense was incurred as part of the cost reduction programs currently being implemented by the Company. The restructuring activities related to existing business were designed to reduce both fixed and variable costs, particularly in response to the reduced demand for our products occasioned by the electronics industry downturn which began in 2001. Activity related to these costs is as follows (in thousands, except number of employees):

	orkforce eduction	In	Asset	Number of Employees Terminated	Total
Restructuring expense Utilized	\$ 18,607 (6,420)	\$	12,363 (12,363)	1,438 (783)	\$ 30,970 (18,783)
Balance at December 31, 2002	\$ 12,187	\$	_	655	\$ 12,187

The remaining \$12,187,000 of severance costs, currently shown in other accrued expenses, should be paid by December 31, 2003.

Year ended December 31, 2001

Restructuring expense was \$61,908,000 for the year ended December 31, 2001. Restructuring of European, Asia Pacific, and Israeli operations included \$27,064,000 of employee termination costs covering approximately 3,778 technical, production, administrative and support employees located in France, Hungary, Portugal, Austria, the Philippines, Germany, and Israel. The European operations also recorded \$2,191,000 of noncash costs associated with the writedown of buildings and equipment that are no longer in use. In the United States, \$13,870,000 of restructuring expense relates to termination costs for

Notes to Consolidated Financial Statements (continued)

4. Restructuring Expense (continued)

approximately 1,885 technical, production, administrative and support employees. The remaining \$18,783,000 of restructuring expense relates to the noncash writedown of buildings and equipment that are no longer in use.

Activity related to these costs is as follows (in thousands, except number of employees):

	orkforce eduction	In	Asset ipairment	Number of Employees Terminated	Total
Restructuring expense Utilized	\$ 40,934 (18,114)	\$	20,974 (20,974)	5,663 (4,913)	\$ 61,908 (39,088)
Balance at December 31, 2001	 22,820		_	750	22,820
Cash paid	(19,865)		_	(612)	(19,865)
Changes in estimate	(1,391)		_	` <u>-</u>	(1,391)
Balance at December 31, 2002	\$ 1,564	\$	_	138	\$ 1,564

The remaining \$1,564,000 of severance costs, currently shown in other accrued expenses, is expected to be paid by December 31, 2003.

5. Income Taxes

Earnings before income taxes and minority interest consists of the following components:

		Year ended December 31						
	20	002	2001		2000			
		(In thousands)						
tic	\$ (5	9,882) \$	(55,598)	\$	177,852			
	(4	0,163)	65,701		512,373			
	\$ (10	0,045) \$	10,103	\$	690,225			

Notes to Consolidated Financial Statements (continued)

5. Income Taxes (continued)

Significant components of income taxes are as follows:

	Year ended December 31						
	2002 2001					2000	
			(In	thousands)			
Current:							
U.S.	\$	(41,991)	\$	6,194	\$	51,965	
Foreign		6,111		9,197		11,936	
State		776		641		4,744	
		(35,104)		16,032		68,645	
Deferred:							
U.S.		30,590		(12,392)		62,156	
Foreign		(16,152)		4,031		17,540	
State		3,766		(1,976)		(155)	
		18,204		(10,337)		79,541	
	\$	(16,900)	\$	5,695	\$	148,186	

Notes to Consolidated Financial Statements (continued)

5. Income Taxes (continued)

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

	December 31				
	2002	2001			
	(In tho	usands)			
Deferred tax assets:					
Pension and other retiree obligations	\$ 47,710	\$ 41,500			
Net operating loss carryforwards	112,770	38,869			
Tax credit carryforwards	11,766	13,080			
Restructuring reserves	13,093	23,678			
Other accruals and reserves	55,699	51,348			
Total deferred tax assets	241,038	168,475			
Less valuation allowance	(63,192)	(10,256)			
	177,846	158,219			
Deferred tax liabilities:					
Tax over book depreciation	87,483	88,377			
Non-amortizable intangible assets	24,454	26,412			
Other – net	30,359	16,284			
Total deferred tax liabilities	142,296	131,073			
Net deferred tax assets	\$ 35,550	\$ 27,146			

Notes to Consolidated Financial Statements (continued)

5. Income Taxes (continued)

A reconciliation of income tax expense at the U.S. federal statutory income tax rate to actual income tax expense (benefit) is as follows:

	Year ended December 31					
		2002		2001		2000
			(In	thousands)		
Tax at statutory rate State income taxes, net of U.S. federal tax	\$	(35,016)	\$	3,536	\$	241,579
benefit		2,540		(382)		3,064
Effect of foreign operations		11,090		(4,894)		(99,520)
Purchased research and development		_		5,600		
Other		4,486		1,835		3,063
	\$	(16,900)	\$	5,695	\$	148,186

At December 31, 2002, the Company had the following significant net operating loss carryforwards for tax purposes (in thousands):

		Expires	
Czech Republic	\$ 608	2005 - 2007	
France	8,720	2005 - 2007	
Germany	50,560	No expiration	
Israel	153,442	No expiration	
Portugal	3,550	2005 - 2007	
United States	58,236	2021	

Approximately \$25,280,000 of the carryforward in Germany resulted from the Company's acquisition of Roederstein, GmbH in 1993. Valuation allowances of \$6,208,000 and \$7,324,000 have been recorded at December 31, 2002 and 2001, respectively, for deferred tax assets related to foreign net operating loss carryforwards. In 2002 and 2001, respectively, tax benefits recognized through reductions of the valuation allowance had the effect of reducing goodwill of acquired companies by \$491,000 and \$4,901,000. If additional tax benefits are recognized in the future through further reduction of the valuation allowance, \$2,523,000 of such benefits will reduce goodwill.

Notes to Consolidated Financial Statements (continued)

5. Income Taxes (continued)

In addition, as part of the BCcomponents acquisition, the Company has the following estimated preacquisition NOL carryforwards for tax purposes (in thousands):

		Expires
Austria	\$ 4,329	No expiration
Belgium	60,504	No expiration
Netherlands	74,688	No expiration

The Company has recorded valuation allowances against the deferred tax assets arising from these net operating loss carryforwards. If the Company recognizes future tax benefits through the use of these preacquisition losses, the benefit of such utilization will be recorded as a reduction to goodwill.

Notes to Consolidated Financial Statements (continued)

5. Income Taxes (continued)

At December 31, 2002, the Company had the following tax credit carryforwards available (in thousands):

		Expires	
Federal Alternative Minimum Tax	\$ 5,802	No expiration	
California Investment Credit	5,644	2003 - 2009	
California Research Credit	3,402	No expiration	

At December 31, 2002, no provision had been made for U.S. federal and state income taxes on approximately \$897,550,000 of foreign earnings, which are expected to be reinvested indefinitely. Upon distribution of those earnings in the form of dividends or otherwise, the Company would be subject to U.S. income taxes (subject to an adjustment for foreign tax credits), state income taxes, and withholding taxes payable to the various foreign countries. Determination of the amount of unrecognized deferred U.S. income tax liability is not practicable because of the complexities associated with its hypothetical calculation.

Income taxes paid were \$2,910,000, \$72,953,000, and \$45,703,000 for the years ended December 31, 2002, 2001, and 2000, respectively.

6. Long-Term Debt

Long-term debt consists of the following:

	December 31			
		2002		2001
	(In thousands)			ds)
Multicurrency revolving credit loans	\$	111,000	\$	125,000
Convertible subordinated notes, LYONs, due 2021		317,830		308,506
Other debt and capital lease obligations		21,689		1,390
Convertible unsecured notes, BCcomponents, due 2102		105,000		_
Convertible subordinated notes, GSI, due 2006		169,347		170,502
		724,866		605,398
Less current portion		18,550		367
	\$	706,316	\$	605,031

Notes to Consolidated Financial Statements (continued)

6. Long-Term Debt (continued)

On December 13, 2002, the Company entered into an amendment to its long-term revolving credit and swing line facility. The aggregate commitment under this facility was reduced from \$660,000,000 to \$500,000,000, subject to increase under certain circumstances, and certain changes were made to other terms of the facility. This facility, which matures on June 1, 2005, is subject to the Company's right to request year-to-year renewals. Interest on the long-term facility is payable at prime or other variable interest rate options. The Company is required to pay facility fees on the long-term facility. As of December 31, 2002, the Company had \$111,000,000 outstanding under the long-term revolving credit facility (interest rate of 3.03%; 5.77% after giving effect to interest rate swaps). Letters of credit totaling \$30,633,000 were issued under the revolving credit facility at December 31, 2002. \$358,367,000 was available under the credit and swing line facility at December 31, 2002.

Borrowings under the credit facility are secured by pledges of stock in certain significant subsidiaries and certain guarantees by significant subsidiaries. The credit facility restricts the Company from paying cash dividends and requires the Company to comply with other covenants, including the maintenance of specific financial ratios.

On December 13, 2002, the Company completed the acquisition of BCcomponents Holdings B.V. In connection with this acquisition, \$105,000,000 in principal amount of BCcomponents' mezzanine indebtedness and certain other securities of BCcomponents were exchanged for \$105,000,000 principal amount of floating rate unsecured loan notes of the Company, due 2102. The notes bear interest at LIBOR plus 1.5% through December 31, 2006 and at LIBOR thereafter. The interest rate could be further reduced to 50% of LIBOR after December 31, 2010 if the price of the Company's common stock trades above a specified target price, as provided in the notes. The notes are subject to a put and call agreement under which the holders may at any time put the notes to the Company in exchange for 6,176,471 shares of the Company's common stock in the aggregate, and the Company may call the notes in exchange for cash or for shares of its common stock after 15 years from the date of issuance.

On June 4, 2001, the Company completed a private placement of \$550,000,000 face amount Liquid Yield Option Notes (LYONs) due 2021. In connection with the sale of the LYONs, the Company received net proceeds of \$294,096,000 and used the proceeds to pay down existing bank debt. Each LYON has a \$1,000 face amount and was offered at a price of \$551.26 (55.126% of the principal amount at maturity). The Company will not pay interest on the LYONs prior to maturity unless contingent interest becomes payable.

Notes to Consolidated Financial Statements (continued)

6. Long-Term Debt (continued)

The issue price of each LYON represents a yield to maturity of 3.00%, excluding any contingent interest. The LYONs are subordinated in right of payment to all of the Company's existing and future senior indebtedness.

At any time on or before the maturity date, the LYONs are convertible into Vishay Common Stock at a rate of 17.6686 shares of Common Stock per \$1,000 principal amount at maturity. The conversion rate may be adjusted under certain circumstances, but it will not be adjusted for accrued original issue discount.

The Company is required to pay contingent interest to the holders of the LYONs during the six-month period commencing June 4, 2006 and during any six-month period thereafter if the average market price of a LYON for a certain measurement period immediately preceding the applicable six-month period equals 120% or more of the sum of the issue price and accrued original issue discount for such LYON. The amount of contingent interest payable during any six-month period will be the sum of any contingent interest payable in the first and second three-month periods during such six-month period. During any three-month period in which contingent interest becomes payable, the contingent interest payable per LYON for such period will be equal to the greater of (1) 0.0625% of the average market price of a LYON for the measurement period referred to above or (2) the sum of all regular cash dividends paid by the Company per share on its common stock during such three-month period multiplied by the number of shares of common stock issuable upon conversion of a LYON at the then-applicable conversion rate.

The holders of the LYONs may require the Company to repurchase all or a portion of their LYONs on June 4, 2004, 2006, 2011, and 2016 at various prices set forth in the notes. The Company may choose to pay the purchase price in cash, Common Stock, or a combination of both. The Company may redeem for cash all or a portion of the LYONs at any time on or after June 4, 2006 at the prices set forth in the notes.

General Semiconductor, which was acquired by the Company on November 2, 2001, had outstanding \$172.5 million principal amount of 5.75% convertible subordinated notes due December 15, 2006. The notes were recorded at their fair value of \$170.5 million as of the November 2, 2001 acquisition date. Interest on the convertible notes is payable semiannually on June 15 and December 15 of each year. As a consequence of the Company's acquisition of General Semiconductor, the convertible notes became convertible into approximately 6.2 million shares of the Company's Common Stock. The convertible notes

Notes to Consolidated Financial Statements (continued)

6. Long-Term Debt (continued)

are redeemable at the Company's option, in whole or in part, at any time on or after December 15, 2002 at a premium of 103.286% of par value declining annually to 100.821% at December 15, 2005 and thereafter.

Aggregate annual maturities of long-term debt, assuming that the Company is required to repurchase the LYONs in 2004, are as follows: 2003 – \$18,550,000; 2004 – \$318,869,000; 2005 – \$111,533,000; 2006 – \$169,373,000; 2007 – \$11,000; and thereafter – \$106,530,000.

At December 31, 2002, the Company had committed and uncommitted short-term credit lines with various U.S. and foreign banks aggregating \$77,803,000, of which \$59,642,000 was unused. The weighted average interest rate on short-term borrowings outstanding as of December 31, 2002 and 2001 was 2.80% and 2.53%, respectively.

Interest paid was \$17,977,000, \$15,685,000, and \$29,930,000, for the years ended December 31, 2002, 2001, and 2000, respectively.

7. Stockholders' Equity

The Company's Class B Common Stock carries ten votes per share while the Common Stock carries one vote per share. Class B shares are transferable only to certain permitted transferees while the Common Stock is freely transferable. Class B shares are convertible on a one-for-one basis at any time into shares of Common Stock.

The Company completed a public offering of its Common Stock on May 15, 2000, selling 8,392,500 shares at a price of \$49.00 (adjusted for the June 9, 2000 three-for-two stock split). The total net proceeds to the Company from the offering, after deducting the underwriting discount and estimated expenses, were approximately \$395,449,000. These proceeds were used to repay a portion of the debt outstanding under its long-term revolving credit facility.

In connection with the Company's acquisition of 65% of LPSC in July 1997, the Company issued stock appreciation rights (SARs) to the Lite-On Group (former owners of LPSC). The SARs represented the right to receive, in stock, the increase in value on the equivalent of 3,200,000 shares of the Company's Common Stock, above \$11.68 per share. On January 24, 2000, the Company exercised its right to call the SARs. Based on the call price of \$26.43 per share and the average closing price of Vishay shares for the thirty

Notes to Consolidated Financial Statements (continued)

7. Stockholders' Equity (continued)

days prior to January 24, 2000, the Company would have had to issue 2,294,000 shares of Common Stock to settle the SARs. In connection with the sale of its 65% interest in LPSC to the Lite-On Group (see Note 2), the Lite-On Group transferred its rights under the SARs to Vishay.

On November 2, 2001, the stockholders approved an increase in the authorized capital stock of the Company. The total authorized Common Stock was increased from 150,000,000 to 300,000,000 shares and the Class B Common Stock was increased from 20,000,000 to 40,000,000 shares.

On August 10, 2000, the Board of Directors of the Company authorized the repurchase of up to 5,000,000 shares of its Common Stock from time to time in the open market. As of December 31, 2002, the Company had repurchased 248,500 shares for a total of \$6,616,000.

Unearned compensation relating to Common Stock issued under employee stock plans is being amortized over periods ranging from three to five years. At December 31, 2002, 305,126 shares were available for issuance under stock plans.

At December 31, 2002, the Company has reserved shares of Common Stock for future issuance as follows:

Employee stock plan	305,126
Common stock options outstanding	9,231,000
Common stock options available to grant	1,036,000
Common stock warrants	8,823,529
Convertible unsecured notes, BCcomponents	6,176,471
Convertible subordinated notes, LYONs	9,717,730
Class B common stock	15,383,581
Convertible subordinated notes, General Semiconductor	6,191,166
	56,864,603

Notes to Consolidated Financial Statements (continued)

8. Other Income (Expense)

Other income (expense) consists of the following:

	Year ended December 31					
	2002 2001		2000			
			(In th	housands)		
Foreign exchange (losses) gains	\$	(777)	\$	611	\$	(7,305)
Loss on ineffective interest rate swap		(115)		(3,668)		_
Interest income		7,952		15,092		9,652
Dividend income		100		_		_
Equity in net income of affiliates		_		_		2,577
Gain on termination of interest rate swap						
agreements		_		_		8,919
Gains on sale of subsidiaries		_		_		5,851
(Losses) gains on disposal of property and						
equipment		(296)		1,472		(2,320)
Other		1,800		(806)		1,530
	\$	8,664	\$	12,701	\$	18,904

In connection with repayments of debt in 2000, the Company terminated \$200,000,000 notional amount of interest rate swap agreements (see Note 14) and recognized pretax gains of \$8,919,000.

During the year ended December 31, 2000, the Company sold its 65% interest in LPSC and all of the assets of V-Tech Latino American LTDA. The sale of LPSC resulted in a pretax gain of \$8,401,000 and the sale of V-Tech resulted in a pretax loss of \$2,550,000 (see Note 2).

Notes to Consolidated Financial Statements (continued)

9. Other Accrued Expenses

Other accrued expenses consists of the following (in thousands):

	2002	2001
Restructuring Returns and allowances	\$ 95,127 39,803	\$ 143,033 32,140
Loss on tantalum purchase commitment – current portion Other	25,334 143,345	117,423
	\$ 303,609	\$ 292,596

10. Other Comprehensive Income (Loss)

The cumulative balance of each component of other comprehensive income (loss) and the income tax effects allocated to each component are as follows:

			Tax		
	Beginning	Before-Tax	Benefit	Net-of-Tax	Ending
	Balance	Amount	(Expense)	Amount	Balance
			(In thousands,)	
December 31, 2002					
Pension liability adjustment	\$ (13,694)	\$ (35,562)	\$ 12,332	\$ (23,230)	\$ (36,924)
Currency translation adjustment	(116,072)	64,343	_	64,343	(51,729)
Loss on derivative financial					
instruments	(645)	(2,291)	474	(1,817)	(2,462)
	\$(130,411)	\$ 26,490	\$ 12,806	\$ 39,296	\$ (91,115)
December 31, 2001					
Pension liability adjustment	\$ (5,137)	\$ (13,281)	\$ 4,724	\$ (8,557)	\$ (13,694)
Currency translation adjustment	(108,434)	(7,638)	_	(7,638)	(116,072)
Loss on derivative financial					
instruments		(1,019)	374	(645)	(645)
	\$(113,571)	\$ (21,938)	\$ 5,098	\$ (16,840)	\$(130,411)
December 31, 2000					
Pension liability adjustment	\$ (5,043)	\$ 1,258	\$ (1,352)	\$ (94)	\$ (5,137)
Currency translation adjustment	(75,966)	(32,468)		(32,468)	(108,434)
	\$ (81,009)	\$ (31,210)	\$ (1,352)	\$ (32,562)	\$(113,571)

Notes to Consolidated Financial Statements (continued)

11. Pensions and Other Postretirement Benefits

The Company maintains several defined benefit pension and nonpension postretirement plans which cover substantially all full-time U.S. employees. The U.S. pension plans of General Semiconductor are included beginning on November 2, 2001. The following table sets forth a reconciliation of the benefit obligation, plan assets, and accrued benefit cost related to these plans:

	Pension	Benefits	Other 1	Benefits
	2002	2001	2002	2001
		(In tho	usands)	
Change in benefit obligation:				
Benefit obligation at beginning of year	\$ 193,273	\$ 116,008	\$ 20,286	\$ 7,964
Service cost	3,433	3,092	279	240
Interest cost	13,598	9,023	1,465	678
Employee contributions	1,680	2,019	_	_
Actuarial losses (gains)	(1,158)	(169)	1,400	325
Plan amendments	_	_	(410)	_
Benefits paid	(16,090)	(7,565)	(1,530)	(523)
Assumption change	12,299	_	509	_
Acquisition of General Semiconductor		70,865	_	11,602
Benefit obligation at end of year	\$ 207,035	\$ 193,273	\$ 21,999	\$ 20,286
Change in plan assets: Fair value of plan assets at beginning of year Actual return on plan assets Company contributions Plan participants' contributions Benefits paid Acquisition of General Semiconductor Fair value of plan assets at end of year	\$ 165,186 (11,224) 4,226 1,680 (16,090) - \$ 143,778	\$ 102,918 (1,078) 5,113 2,019 (7,565) 63,779 \$ 165,186		
Funded status Unrecognized net actuarial loss (gain) Unrecognized transition obligation (asset) Unamortized prior service cost Additional minimum liability Net amount recognized	\$ (63,257) 60,957 (101) - (48,682) \$ (51,083)	\$ (28,087) 26,812 (302) - (13,638) \$ (15,215)	\$ (21,999) 1,237 1,934 182 - \$ (18,646)	\$ (20,286) (671) 2,128 639 - \$ (18,190)

Notes to Consolidated Financial Statements (continued)

11. Pensions and Other Postretirement Benefits (continued)

	Pension 1	Benefits	Other 1	Benefits
	2002	2001	2002	2001
		(In thous	ands)	
Amounts recognized in the consolidated balance sheets consist of: Accrued benefit liability Accumulated other comprehensive loss	\$ (82,726) 31,643	\$ (24,079) 8,864	\$ (18,646) _	\$ (18,190) -
Net amount recognized	\$ (51,083)	\$ (15,215)	\$ (18,646)	\$ (18,190)
Weighted-average assumptions as of December 31: Discount rate Expected return on plan assets Rate of compensation increase	6.75% 8.50%-8.75% 4.50%-6.50%		6.75%	7.25%

	Pe	nsion Benef	its	Other Benefits					
	2002	2001	2000	2002	2001	2000			
			(In tho	usands)					
Components of net periodic benefit cost:									
Annual service cost	\$ 5,424	\$ 5,388	\$ 4,595	\$ 279	\$ 240	\$ 225			
Less expected employee									
contributions	1,991	2,296	2,067	_	_	_			
Net service cost	3,433	3,092	2,528	279	240	225			
Interest cost	13,598	9,023	7,858	1,466	678	545			
Expected return on plan assets	(14,227)	(10,048)	(8,703)	_	_	_			
Amortization of prior service cost	_	6	67	47	93	93			
Amortization of transition obligation	(201)	311	110	194	194	194			
Amortization of (gains) losses	1,474	514	556	_	_	(17)			
Net periodic benefit cost	\$ 4,077	\$ 2,898	\$ 2,416	\$ 1,986	\$ 1,205	\$ 1,040			

Notes to Consolidated Financial Statements (continued)

11. Pensions and Other Postretirement Benefits (continued)

The projected benefit obligation, accumulated benefit obligation, and fair value of plan assets for the pension plans with accumulated and projected benefit obligations in excess of plan assets were \$207,035,000, \$194,760,000, and \$143,778,000, respectively, as of December 31, 2002 and \$121,472,000, \$107,553,000, and \$99,210,000, respectively, as of December 31, 2001.

The Company maintains two unfunded nonpension postretirement plans funded as costs are incurred. One plan is contributory, with employee contributions adjusted for general inflation or inflation in costs under the plan. The plan was amended in 1993 to cap employer contributions at 1993 levels. The second plan covers all full-time U.S. General Semiconductor employees not covered by a collective bargaining agreement who meet defined age and service requirements. This plan is the primary provider of benefits for retirees up to age 65, after which Medicare becomes the primary provider. The impact of a one-percentage-point change in assumed health care cost trend rates on the net periodic benefit cost and postretirement benefit obligation is immaterial.

Many of the Company's U.S. employees are eligible to participate in 401(k) savings plans, some of which provide for Company matching under various formulas. The Company's matching expense for the plans was \$2,990,000, \$3,182,000, and \$3,161,000 for the years ended December 31, 2002, 2001, and 2000, respectively.

The Company provides pension and similar benefits to employees of certain foreign subsidiaries consistent with local practices. Certain foreign subsidiaries of the Company have defined benefit pension plans. The foreign pension plans of General Semiconductor are included as of November 2, 2001. The foreign pension plans of BCcomponents are included as of December 13, 2002. The following table sets forth a reconciliation of the benefit obligation, plan assets, and accrued benefit cost related to the foreign defined benefit plans:

Notes to Consolidated Financial Statements (continued)

11. Pensions and Other Postretirement Benefits (continued)

	2002			2001	
	(In thousand			ls)	
Change in benefit obligation:					
Benefit obligation at beginning of year	\$	93,397	\$	90,548	
Service cost		525		391	
Interest cost		5,630		5,301	
Actuarial gains		(1,572)		(26)	
Benefits paid		(4,869)		(4,845)	
Foreign currency translation		13,055		(3,845)	
Curtailment gains		(1,336)		_	
Acquisitions		14,343		5,873	
Benefit obligation at end of year	\$	119,173	\$	93,397	
Change in plan assets: Fair value of plan assets at beginning of year Actual return on plan assets Company contributions Benefits paid Foreign currency translation Fair value of plan assets at end of year	\$ 	13,137 (894) 2,449 (2,454) 2,407 14,645	\$	13,417 1,019 1,947 (2,440) (806) 13,137	
Funded status Unrecognized net actuarial (gains) losses Unrecognized transition asset Unamortized prior service cost	\$	(104,528) (636) 21 (3)	\$	(80,260) 1,560 18 (6)	
Net amount recognized	\$	(105,146)	\$	(78,688)	

Notes to Consolidated Financial Statements (continued)

11. Pensions and Other Postretirement Benefits (continued)

					2002		2001
					(In thous	sand	<u>s)</u>
Amounts recognized in the consolidated balance sheets consist of: Accrued benefit liability Accumulated other comprehensive loss Net amount recognized			\$ 	`	0,427) 5,281 5,146)	\$ \$	(83,518) 4,830 (78,688)
Weighted-average assumptions as of December 31: Discount rate Rate of compensation increase			6.00% - 6.25% 2.60% - 3.00%			6.50% 3.00%	
	2002			2001			2000
_			(In thousands)				
Components of net periodic benefit cost:			,		,		
Service cost Interest cost Expected return on plan assets Amortization of prior service cost Amortization of transition asset Curtailment gains Amortization of (gains) losses	\$	525 5,630 (489) - (3) (1,336) (94)		\$	391 5,301 (444) 36 (3) - 97	\$	440 5,755 (440) 45 (4) - 151
Net periodic benefit cost	\$	4,233		\$	5,378	\$	5,947

The projected benefit obligation, accumulated benefit obligation, and fair value of plan assets for the foreign pension plans with accumulated benefit obligations and projected benefit obligations in excess of plan assets were \$119,173,000, \$118,646,000, and \$14,645,000, respectively, as of December 31, 2002 and \$81,463,000, \$81,646,000, and \$13,137,000, respectively, as of December 31, 2001.

Notes to Consolidated Financial Statements (continued)

12. Stock Options

The Company has three stock option programs. Under the 1995 Stock Option Program, certain key executives of the Company were granted options on March 19, 1995, to purchase 2,283,000 shares of the Company's Common Stock. The options were fully vested on the date of grant and expired March 1, 2000, with one-third exercisable at \$12.21, one-third exercisable at \$15.36, and one-third exercisable at \$21.94. As of December 31, 2000, options to purchase 2,010,000 shares had been exercised under this plan and the remaining options had been canceled.

Under the 1997 Stock Option Program, certain executive officers, key employees, and consultants of the Company were granted options on May 21, 1998, to purchase 2,687,000 shares of the Company's Common Stock. The options were fully vested on the date of grant and expire June 1, 2008, with one-third exercisable at \$10.89, one-third exercisable at \$12.53, and one-third exercisable at \$13.61. As of December 31, 2002, options to purchase 528,000 shares have been exercised under this plan.

Under the 1998 Stock Option Program, certain executive officers and key employees were granted options, as summarized in the following table:

# of Exercise Date of Grant Options Price		Vesting	Expiration	
October 6, 1998	1,598,000	\$ 5.60	Evenly over 6 years	March 16, 2008
October 8, 1999	1,334,000	15.33	Evenly over 6 years	October 8, 2009
August 4, 2000	50,000	30.00	Evenly over 5 years, beginning August 4, 2003	August 4, 2010
October 12, 2000	1,114,000	25.13	Evenly over 6 years	October 12, 2010
October 1, 2001 through August 5, 2002	15,000	\$14.40 – \$25.07	Evenly over 6 years	October 1, 2011 through August 5, 2012

On May 18, 2000, the stockholders of the Company approved an increase in the number of shares available for grant under Vishay's 1998 Stock Option Program. As a result, the number of shares available for grant under this program increased from 2,953,500 to 4,453,500. As of December 31, 2002, options to purchase 362,000 shares have been exercised under this plan.

Notes to Consolidated Financial Statements (continued)

12. Stock Options (continued)

On November 2, 2001, Vishay acquired General Semiconductor and General Semiconductor became a wholly owned subsidiary of the Company. As a result of the acquisition, each outstanding option to acquire General Semiconductor common stock became exercisable for shares of Vishay Common Stock. Based on the conversion ratio in the acquisition of 0.563 of a Vishay share for each General Semiconductor share, the former General Semiconductor options become exercisable in the aggregate for 4,282,000 shares of Vishay Common Stock. All such options were immediately vested and exercisable as a result of the merger but the terms of the options otherwise remained unchanged. As of December 31, 2002, options to purchase 190,000 shares have been exercised under this plan.

The following table summarizes the Company's stock option activity (options in thousands):

	20	02	20	01	2000		
	Weighted Number Average Nun of Exercise o		Number of Options	Weighted Average Exercise Price	Number of Options	Weighted Average Exercise Price	
Outstanding at beginning							
of year	9,569	\$ 15.97	5,646	\$ 14.29	7,493	\$ 12.67	
Granted	15	17.75	· –	_	1,164	25.34	
Exercised	(261)	12.12	(86)	9.99	(2,656)	15.08	
Canceled	(92)	17.14	(273)	17.82	(355)	10.41	
Acquisition of General							
Semiconductor		_	4,282	18.10		_	
Outstanding at end of year	9,231	16.07	9,569	15.97	5,646	14.29	
Exercisable at end of year	7,626	15.79	7,358	15.74	2,651	11.96	
Available for future grants	1,036		958		760	_	

Notes to Consolidated Financial Statements (continued)

12. Stock Options (continued)

The following table summarizes information concerning stock options outstanding and exercisable at December 31, 2002 (options in thousands):

Options Outstanding					
		Weighted Average		Options	Exercisable
Range of Exercise Prices	Number of Options	Remaining Contractual Life	Weighted Average Exercise Price	Number of Options	Weighted Average Exercise Price
\$2.64	3	1.57	\$ 2.64	3	\$ 2.64
\$5.60	962	5.74	5.60	584	5.60
10.89 - 12.53	1,289	5.39	11.76	1,289	11.76
\$12.54 - \$13.61	1,283	5.35	13.28	1,283	13.28
\$14.32 - \$14.99	62	2.48	14.46	55	14.46
\$15.33	1,033	6.74	15.33	510	15.33
\$15.43 - \$16.41	1,369	7.59	15.97	1,369	15.97
\$16.52 - \$20.86	1,366	5.88	18.95	1,361	18.95
\$21.43 - \$25.07	595	3.23	22.44	592	22.42
\$25.13 - \$34.52	1,269	7.48	25.93	580	26.47
Total	9,231		\$ 16.07	7,626	\$ 15.79

13. Commitments and Contingencies

Total rental expense under operating leases was \$27,652,000, \$22,994,000, and \$21,431,000 for the years ended December 31, 2002, 2001, and 2000, respectively.

Future minimum lease payments for operating leases with initial or remaining noncancelable lease terms in excess of one year are as follows: 2003 - \$21,978,000; 2004 - \$15,419,000; 2005 - \$12,675,000; 2006 - \$11,390,000; 2007 - \$10,773,000 and thereafter - \$4,739,000.

Environmental Matters

The Company is subject to various federal, state, local and foreign laws and regulations governing environmental matters, including the use, discharge and disposal of hazardous materials. The Company's manufacturing facilities are believed to be in substantial compliance with current laws and regulations. Complying with current laws and regulations has not had a material adverse effect on the Company's financial condition.

Notes to Consolidated Financial Statements (continued)

13. Commitments and Contingencies (continued)

Environmental Matters (continued)

As part of the acquisition of General Semiconductor by Vishay on November 2, 2001, the Company assumed ongoing environmental matters. As part of the acquisition of BCcomponents on December 13, 2002, the Company has recorded environmental liabilities of \$7,600,000.

The Company has engaged independent consultants to assist management in evaluating potential liabilities related to environmental matters. Management assesses the input from these independent consultants along with other information known to the Company in its effort to continually monitor these potential liabilities. Management assesses its environmental exposure on a site-by-site basis, including those sites where the Company has been named as a "potentially responsible party." Such assessments include the Company's share of remediation costs, information known to the Company concerning the size of the hazardous waste sites, their years of operation and the number of past users and their financial viability. The Company has a reserve of \$22,405,000 recorded at December 31, 2002 for environmental matters relating to General Semiconductor. While the ultimate outcome of these matters cannot be determined, management does not believe that the final disposition of these matters will have a material adverse effect on the Company's financial position, results of operations, or cash flows beyond the amounts previously provided for in the financial statements.

The Company's present and past facilities have been in operation for many years, and over that time in the course of those operations, such facilities have used substances which are or might be considered hazardous, and the Company has generated and disposed of wastes which are or might be considered hazardous. Therefore, it is possible that additional environmental issues may arise in the future, which the Company cannot now predict.

Litigation

In February and March 2001, several purported class-action complaints were filed in the Delaware Court of Chancery and the California Superior Court against the Company, Siliconix, and the directors of Siliconix in connection with a proposal by the Company in February 2001 to purchase all issued and outstanding shares of Siliconix that the Company did not already own. The class actions alleged that the Company's proposed offer was unfair and a breach of fiduciary duty. One of the Delaware class actions also

Notes to Consolidated Financial Statements (continued)

13. Commitments and Contingencies (continued)

Litigation (continued)

alleged that the Company had usurped Siliconix inventory and patents, appropriated Siliconix's separate corporate identity, and obtained a below-market loan from Siliconix. The actions sought injunctive relief, damages and other relief. In June 2001, the Delaware Chancery Court denied a preliminary injunction motion seeking to enjoin the Company's tender offer, which was commenced in May 2001 but not successfully completed. Subsequently, the Company and Siliconix filed motions to dismiss the actions in Delaware and for summary judgment. The actions in California were stayed. In the fourth quarter of 2002, based largely on the June 2001 Delaware Court of Chancery ruling, the parties agreed to dismiss the case without prejudice.

The Company is a party to various claims and lawsuits arising in the normal course of business. The Company is of the opinion that these litigations or claims will not have a material negative effect on its consolidated financial position, results of operations, or cash flows.

14. Financial Instruments

The Company uses financial instruments in the normal course of its business, including derivative financial instruments, for purposes other than trading. These financial instruments include debt and interest rate swap agreements. The notional or contractual amounts of these commitments and other financial instruments are discussed below.

Concentration of Credit Risk

Financial instruments with potential credit risk consist principally of cash and cash equivalents and accounts receivable. The Company maintains cash and cash equivalents with various major financial institutions. Concentrations of credit risk with respect to receivables are generally limited due to the Company's large number of customers and their dispersion across many countries and industries. At December 31, 2002 and 2001, the Company had no significant concentrations of credit risk.

Notes to Consolidated Financial Statements (continued)

14. Financial Instruments (continued)

Interest Rate Swap Agreements

In August 1998, the Company entered into six interest rate swap agreements, maturing in 2003, with a total notional amount of \$300,000,000 to manage interest rate risk related to its multicurrency revolving line of credit. These interest rate swap agreements required the Company to make payments to the counterparties at the fixed rate stated in the agreements, and in return to receive payments from the counterparties at variable rates. During fiscal year 2000, the Company terminated \$200,000,000 notional amount of interest rate swap agreements and recognized a pretax gain of \$8,919,000. At December 31, 2002, the Company had outstanding one interest rate swap agreement with a notional amount of \$100,000,000. At December 31, 2002, 2001, and 2000, the Company paid a weighted average fixed rate of 5.77%, respectively, and received a weighted average variable rate of 1.40%, 1.93%, and 6.66%, respectively. The fair value of the interest rate swap agreements, based on current market rates, approximated a net payable of \$3,309,000 and \$4,686,000 at December 31, 2002 and 2001, respectively. For the years ended December 31, 2002 and 2001, the Company recorded a pretax loss of \$115,000 and \$3,668,000, respectively, relating to an ineffective hedge for a portion of time relating to an interest rate swap agreement (see Note 8).

Cash and Cash Equivalents, Notes Payable, and Long-Term Debt

The carrying amounts of cash and cash equivalents reported in the consolidated balance sheets approximate their fair values. The fair value of the long-term debt is \$723,429,000 as compared to its carrying value of \$724,866,000. The fair value of long-term debt was estimated based on trading prices and market prices of debt with similar terms and features.

15. Current Vulnerability Due to Certain Concentrations

Customer Concentrations

A material portion of the Company's revenues are derived from the worldwide communications and computer markets. These markets have historically experienced wide variations in demand for end products. If demand for these end products should continue to decrease, the producers thereof could reduce their purchases of the Company's products, which could have a material adverse effect on the Company's results of operations and financial position.

Notes to Consolidated Financial Statements (continued)

15. Current Vulnerability Due to Certain Concentrations (continued)

Sources of Supply

Although most materials incorporated in the Company's products are available from a number of sources, certain materials (particularly tantalum and palladium) are available only from a relatively limited number of suppliers.

Many of Vishay's products require the use of raw materials that are produced in only a limited number of regions around the world or are available from only a limited number of suppliers. Vishay's results of operations may be materially and adversely affected if Vishay has difficulty obtaining these raw materials, the quality of available raw materials deteriorates or there are significant price increases for these raw materials. For example, the prices for tantalum and palladium, two raw materials that Vishay uses in its capacitors, are subject to fluctuation. For periods in which the prices of these raw materials are rising, Vishay may be unable to pass on the increased cost to Vishay's customers, which would result in decreased margins for the products in which they are used. For periods in which the prices are declining, Vishay may be required to write down its inventory carrying cost of these raw materials which, depending on the extent of the difference between market price and its carrying cost, could have a material adverse effect on Vishay's net earnings.

Vishay is a major consumer of the world's annual production of tantalum. Tantalum, a metal purchased in powder or wire form, is the principal material used in the manufacture of tantalum capacitors. There are currently three major suppliers that process tantalum ore into capacitor grade tantalum powder. Due to the strong demand for its tantalum capacitors and difficulty in obtaining sufficient quantities of tantalum powder from its suppliers, Vishay stockpiled tantalum ore in 2000 and early 2001. During 2001, Vishay and its competitors experienced a significant decline in the tantalum capacitor business. Vishay's usage of tantalum declined from 602,585 pounds in 2000 to 248,640 pounds in 2001 and 119,900 pounds in 2002. The market prices for tantalum also decreased significantly during 2002. As a result, Vishay recorded, in costs of products sold, writedowns of \$25,700,000 and \$52,000,000, respectively, on tantalum inventories during the years ended December 31, 2002 and 2001, respectively. The net book value of tantalum inventories is \$49,609,000 and \$49,337,000 at December 31, 2002 and 2001, respectively. The Company also recorded a loss on future purchase commitments of \$106,000,000 for the year ended December 31, 2002. Vishay's purchase commitments were entered into at a time when market demand for tantalum capacitors was high and tantalum powder was in short supply. If the downward pricing trend were to

Notes to Consolidated Financial Statements (continued)

15. Current Vulnerability Due to Certain Concentrations (continued)

Sources of Supply (continued)

continue, the Company could again be required to write down the carrying value of its tantalum inventory and record additional losses on its long-term purchase commitments.

Under the terms of these future purchase commitments, the Company's purchase commitments are approximately \$100,300,000 for 2003, \$103,800,000 for 2004, \$116,600,000 for 2005, and \$60,100,000 for 2006. If certain conditions of the contract are not met, the commitment could increase to \$145,900,000 for 2003, \$147,600,000 for 2004, \$149,300,000 for 2005, and \$81,300,000 for 2006. The Company purchased \$53,280,000, \$23,395,000, and \$15,495,000 under these contracts for the years ended December 31, 2002, 2001, and 2000, respectively.

Palladium, a metal used to produce multi-layer ceramic capacitors, is currently found primarily in South Africa and Russia. Palladium is a commodity product that is subject to price volatility. The price of palladium fluctuated in the range of approximately \$222 to \$1,090 per troy ounce during the three years ended December 31, 2002, and as of December 31, 2002, the price of palladium was \$236 per troy ounce. During the years ended December 31, 2002 and 2001, respectively, the Company recorded in costs of products sold writedowns of \$1,700,000 and \$18,000,000, respectively, on palladium inventories. The net book value of palladium inventories is \$5,644,000 and \$12,260,000 at December 31, 2002 and 2001, respectively.

From time to time there have been short-term market shortages of raw material utilized by Vishay. While these shortages have not historically adversely affected Vishay's ability to increase production of products containing tantalum and palladium, they have historically resulted in higher raw material cost for Vishay. Vishay cannot assure that any of these market shortages in the future would not adversely affect Vishay's ability to increase production, particularly during periods of growing demand for Vishay's products.

Geographic Concentration

To address the increasing demand for its products and to lower its costs, the Company has expanded, and plans to continue to expand, its manufacturing operations in Israel in order to take advantage of that country's lower wage rates, highly skilled labor force, government-sponsored grants, and various tax

Notes to Consolidated Financial Statements (continued)

15. Current Vulnerability Due to Certain Concentrations (continued)

Geographic Concentration (continued)

abatement programs. Israeli incentive programs have contributed substantially to the growth and profitability of the Company. The Company might be materially and adversely affected if these incentive programs were no longer available to the Company or if events were to occur in the Middle East that materially interfered with the Company's operations in Israel.

16. Business Segment and Geographic Area Data

Vishay designs, manufactures, and markets electronic components that cover a wide range of products and technologies. The Company has two reportable segments: Passive Electronic Components (Passives) consisting principally of fixed resistors, solid tantalum surface mount chip capacitors, solid tantalum leaded capacitors, wet/foil tantalum capacitors, multi-layer ceramic chip capacitors, film capacitors and inductors, and Active Electronic Components (Actives) consisting principally of diodes, transistors, power MOSFETS, power conversion, motor control integrated circuits, optoelectronic components and IRDCs. The Company evaluates business segment performance on operating income, exclusive of restructuring charges, amortization of goodwill and unusual and non-recurring items.

The Company evaluates performance and allocates resources based on several factors, of which the primary financial measure is business segment operating income excluding amortization of intangibles and special charges. The accounting policies of the business segments are the same as those described in the summary of significant accounting policies (see Note 1). The operating results of Passives reflect the acquisitions of Celtron as of October 1, 2002, BLH/Nobel as of August 1, 2002, Tedea-Huntleigh BV as of June 1, 2002, and Sensortronics as of January 31, 2002. The operating results of Actives reflect the acquisitions of Infineon Malaysia as of December 31, 2001, General Semiconductor as of November 2, 2001, and Infineon U.S. as of July 27, 2001, and include LPSC from July 1, 1997 through its divestiture in 2000. Business segment assets are the owned or allocated assets used by each business.

The corporate component of operating income represents corporate selling, general, and administrative expenses. Corporate assets include corporate cash, property, plant, and equipment, and certain other assets.

During the year 2000, one North American distributor accounted for 14% of total net sales. During the years 2002 and 2001, no individual customer accounted for more than 10% of net sales.

Notes to Consolidated Financial Statements (continued)

16. Business Segment and Geographic Area Data (continued)

2002 2001		2000		
(In thousands)	In thousands)			
Business segment information				
Net sales:				
Passives \$ 767,246 \$ 1,010,634	\$	1,627,860		
Actives 1,055,567 644,712		837,206		
\$ 1,822,813 \$ 1,655,346	\$	2,465,066		
Operating income (loss):				
Passives \$ (61,317) \$ 60,137	\$	547,156		
Actives 139,140 65,181		204,640		
Corporate (20,801) (21,970)		(43,829)		
Restructuring expense (30,970) (61,908)		_		
Purchased research and development – (16,000)		_		
Loss on long-term purchase commitments (106,000)		_		
Amortization of goodwill – (11,190)		(11,469)		
\$ (79,948) \$ 14,250	\$	696,498		
Restructuring expense:				
Passives \$ 30,049 \$ 57,498	\$	_		
Actives 921 4,410		_		
\$ 30,970 \$ 61,908	\$	_		
Depreciation expense:				
Passives \$ 80.084 \$ 83,735	\$	73,803		
Actives 87,609 61,238	*	52,250		
Corporate 4,481 4,252		232		
\$ 172,174 \$ 149,225	\$	126,285		

Notes to Consolidated Financial Statements (continued)

16. Business Segment and Geographic Area Data (continued)

		2002		2001		2000	
			(In	thousands)	_		
Interest expense:			`	,			
Passives	\$	963	\$	680	\$	60	
Actives		10,545		1,988		1,389	
Corporate		17,253		14,180		23,728	
	\$	28,761	\$	16,848	\$	25,177	
Income tax expense (benefit):							
Passives	\$	(33,674)	\$	(2,912)	\$	106,353	
Actives	Ψ	21,286	4	11,862	Ψ	51,469	
Corporate		(4,512)		(3,255)		(9,636)	
•	\$	(16,900)	\$	5,695	\$	148,186	
Total assets:							
Passives	\$	2,125,443	\$	1,876,282	\$	1,931,610	
Actives		2,046,944		1,980,841		809,360	
Corporate		142,772		94,400		42,688	
•	\$	4,315,159	\$	3,951,523	\$	2,783,658	
Capital expenditures:							
Passives	\$	45,105	\$	91,028	\$	131,318	
Actives	•	62,933	-	68,463	*	95,343	
Corporate		2,036		3,002		3,120	
1		110,074	\$	162,493	\$	229,781	
		· · · · · · · · · · · · · · · · · · ·					

Notes to Consolidated Financial Statements (continued)

16. Business Segment and Geographic Area Data (continued)

The following geographic area data include net sales based on revenues generated by subsidiaries located within that geographic area and property, plant, and equipment based on physical location:

	2002			2001		2000	
	(In thousands)						
Geographic area information							
Net sales:							
United States	\$	482,154	\$	638,326	\$	1,034,985	
Germany		382,932		452,839		678,398	
Asia Pacific		542,859		315,550		279,645	
France		69,635		85,046		85,686	
Israel		75,238		32,646		296,704	
Other		269,995		130,939		89,648	
	\$	1,822,813	\$	1,655,346	\$	2,465,066	
Property, plant, and equipment – net:							
United States	\$	207 792	\$	345,602	\$	255 201	
	ð	307,783	Ф	,	Ф	355,291	
Germany		154,288		116,435		116,910	
Israel		328,315		351,375		317,840	
Asia Pacific		253,937		221,819		77,337	
France		37,687		33,745		24,272	
Other		192,840		98,557		81,904	
	\$	1,274,850	\$	1,167,533	\$	973,554	

17. Earnings (Loss) per Share

Basic (loss) earnings per share is computed using the weighted average number of common shares outstanding during the periods presented. Diluted (loss) earnings per share is computed using the weighted average number of common shares outstanding adjusted to include the potentially dilutive effect of stock options granted under the Company's 1995, 1997, and 1998 stock option plans (see Note 12), stock appreciation rights issued in connection with the LPSC acquisition (see Note 2), and other potentially dilutive securities.

Notes to Consolidated Financial Statements (continued)

17. Earnings (Loss) per Share (continued)

The following table sets forth the computation of basic and diluted earnings (loss) per share (in thousands, except per share amounts):

	Year ended December 31					
		2002		2001		2000
Numerator						
Numerator for basic (loss) earnings per share –						
net (loss) income	\$	(92,614)	\$	513	\$	517,864
Denominator						
Denominator for basic (loss) earnings per						
share – weighted average shares		159,413		141,171		135,295
Effect of dilutive securities:						
Employee stock options		_		1,201		1,831
Stock appreciation rights		_		_		144
Other		_		142		193
Dilutive potential common shares		_		1,343		2,168
Denominator for diluted earnings per share – adjusted weighted average shares		159,413		142,514		137,463
adjusted weighted average shares		10,110		112,011		137,103
Basic (loss) earnings per share	\$	(0.58)	\$	0.00	\$	3.83
Diluted (loss) cornings per share	•	(0.59)	¢	0.00	¢	2 77
Diluted (loss) earnings per share	\$	(0.58)	\$	0.00	3	3.77

Notes to Consolidated Financial Statements (continued)

17. Earnings (Loss) per Share (continued)

For the year ended December 31, 2002, options to purchase 9,231,000 shares of common stock at prices ranging from \$2.64 to \$34.52, for the year ended December 31, 2001, options to purchase 1,164,000 shares of common stock at prices ranging from \$25.13 to \$30.00 per share, and for the year ended December 31, 2000, options to purchase 1,114,000 shares of common stock at \$25.13 per share were not included in the computation of diluted earnings per share because their inclusion would have been anti-dilutive. For the year ended December 31, 2002, warrants to purchase 8,823,529 shares were not included in the computation of diluted earnings per share because the warrants' strike prices were greater than the average market price on the common shares. Additionally, for the years ended December 31, 2002 and 2001, convertible notes, convertible into approximately 22,085,000 and 15,908,896 shares, respectively, have not been included in the calculation of diluted earnings per share because their effect would be antidilutive.

18. Related Party Transactions

On December 12, 2002, the Company's Board of Directors passed resolutions to terminate the stock purchase programs for corporate officers and key employees (together the "Plan") and to offer to all Plan participants the opportunity to surrender to the Company the shares of Vishay common stock purchased with their Plan loans in satisfaction of such loans and all accrued interest thereon. Under the resolutions, the Company agreed that it would compensate the Plan participants for any income tax that the participants are required to recognize as a result of the surrender. Two directors of the Company are among the participants in the Plan. For all Plan participants, the current market value of the Vishay common stock purchased with Plan loans is significantly below the outstanding balances of the loans. The Company recorded a writedown for the loans and accrued interest, and an accrual for compensation expense attributable to taxes owing by Plan participants on surrender, totaling \$2,591,000 as of December 31, 2002. This amount is recorded in selling, general, and administrative expense.

Vishay Intertechnology, Inc.

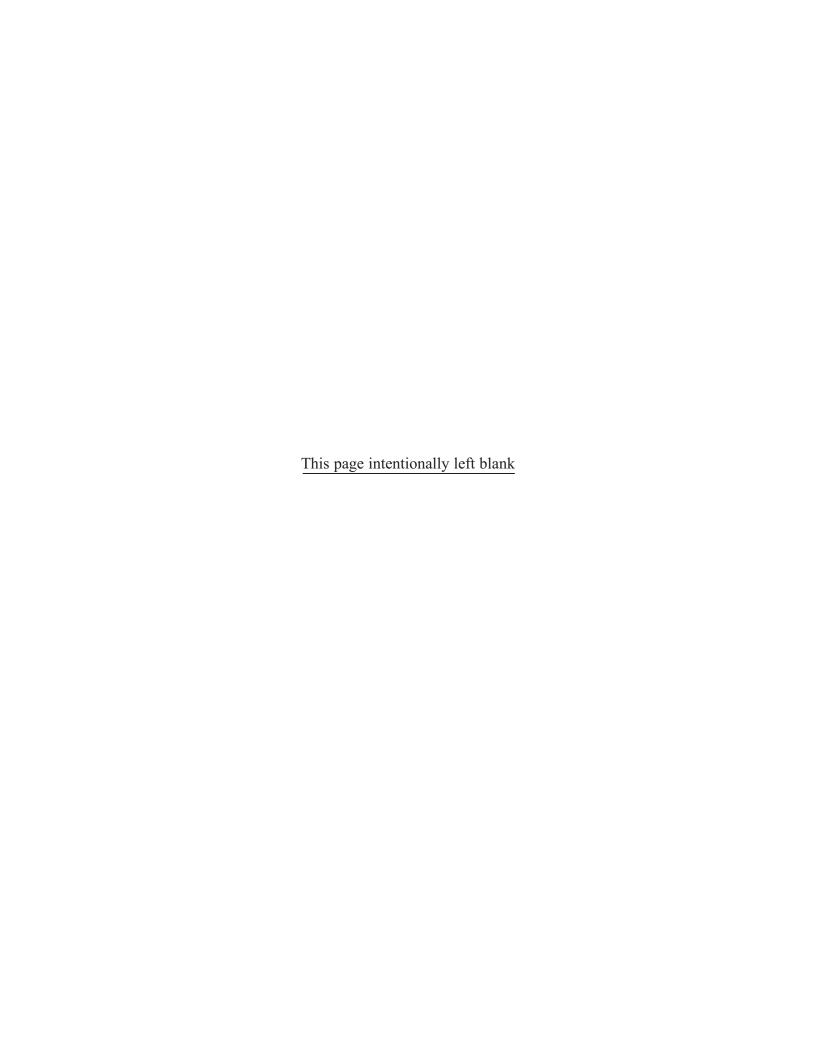
Notes to Consolidated Financial Statements (continued)

19. Summary of Quarterly Financial Information (Unaudited)

Quarterly financial information for the years ended December 31, 2002 and 2001 is as follows (in thousands, except per share amounts):

		First C)uart	er		Second (Juart			Third C	uarte		Four	th Qua	rter	_	otal Y	ear	
	200	2(3)(11)	20	2002 ⁽³⁾ (11) 2001 ⁽⁶⁾	2($002^{(3)(12)}$ $2001^{(7)}$	200		$2002^{(3)}$	$2002^{(3)(4)(13)}\tilde{}2001^{(1)(8)}$	2001		$2002^{(3)(4)(5)(14)} \bar{2001}^{(1)(2)(9)}$	5) (14) 20	01(1)(2)(9)	$2002^{(3)(4)(5)(15)} 2001^{(1)(2)(10)}$	5) (15)	2001(1)(2)(10)
Net sales	\$ 43	\$ 434,140 \$ 558,465	\$ 5;	58,465	↔	457,877	\$ 38.	3,437	\$ 471,419	1,419	\$ 332,293	.,293	\$ 459,37		381,151	\$ 1,822,813	13	\$ 1,655,346	16
Gross profit	œ	36,937		198,854	Ξ	107,565	10	101,051	10,	107,227	25	388,	66,544		52,226		73	381,519	19
Net earnings (loss)		2,420	-1	90,126	,1	15,617	·	3,126	1	13,114	(35	(39,152)	(123,765)	_	(53,587)	(92,614)	14)	51	13
Basic earnings (loss) per share	€	0.05		\$ 0.65	↔	0.10	S	0.02	∽	0.08	∽	0.28)	8 (0.78	<i>€</i>	(0.35)	∽	28)	8	00
Diluted earnings (loss) per share	❤	0.02		0.65	≶	0.10	S	0.02	∽	80.0	<u> </u>	(0.28)	\$ (0.78)	\$	(0.35)	%	(0.58)	\$ 0.0	0.00

- ncludes the results of Infineon U.S. from July 27, 2001.
- Includes the results of General Semiconductor from November 2, 2001 and Mallory from November 7, 2001
- includes the results of Sensortronics from January 31, 2002.
- Includes the results of Tedea-Huntleigh from July 1, 2002 and BLH and Nobel from August 1, 2002 -3004
 - includes the results of Celtron from October 1, 2002.
 - includes restructuring charges of \$5,971,000 and writedown of tantalum inventory of \$10,000,000. ©©E®6
- Includes restructuring charges of \$29,305,000 and writedown of tantalum inventory of \$10,000,000.
- Includes restructuring charges of \$11,802,000, and writedowns of tantalum and palladium inventories of \$17,000,000 and \$18,000,000, respectively.
- Includes restructuring charges of \$14,830,000, writedown of tantalum inventory of \$15,000,000, and purchased research and development costs of \$16,000,000
- Includes restructuring charges of \$61,908,000, writedowns of tantalum and palladium inventories of \$52,000,000 and \$18,000,000, respectively, and purchased research and development costs of \$16,000,000.
- Includes restructuring charges of \$3,024,000.
- Includes restructuring charges of \$1,907,000.
- Includes restructuring charges of \$2,567,000 and write-down of palladium inventory of \$600,000 (13)
- of \$106,000,000 and write-downs of \$23,472,000, losses of future purchase commitments of \$106,000,000 and write-downs of tantalum and palladium inventories of \$25,700,000 and \$1,100,000, respectively. (14)
 - Includes restructuring charges of \$30,970,000, losses of future purchase commitments of \$106,000,000 and write-downs of tantalum and palladium inventories of \$25,700,000 and \$1,700,000, respectively (15)





CORPORATE INFORMATION

VISHAY INTERTECHNOLOGY, INC.

Corporate Headquarters

Vishay Intertechnology, Inc. 63 Lincoln Highway Malvern, PA 19355-2143 USA Phone 610-644-1300 Fax 610-296-0657 www.vishay.com

CORPORATE OFFICERS

Dr. Felix Zandman

Chairman of the Board Chief Executive Officer

Avi D. Eden

Vice Chairman of the Board Executive Vice President

Dr. Gerald Paul

President Chief Operating Officer

Marc Zandman

Vice Chairman of the Board Group Vice President, Measurements Group President, Vishay Israel Ltd.

Richard N. Grubb

Executive Vice President, Treasurer, Chief Financial Officer

Robert A. Freece

Senior Vice President

William J. Spires

Vice President, Secretary

William M. Clancy

Assistant Secretary

Steven Klausner

Assistant Treasurer

ANNUAL MEETING

May 22, 2003 at 10:30 a.m. Four Seasons Hotel South Ballroom Lobby Level One Logan Square Philadelphia, PA 19103

HONORARY CHAIRMAN OF THE BOARD

Alfred P. Slaner

(Deceased March 14, 1996)

BOARD OF DIRECTORS

Dr. Felix Zandman

Chairman of the Board Chief Executive Officer Vishay Intertechnology, Inc.

Avi D. Eden

Vice Chairman of the Board Executive Vice President Vishay Intertechnology, Inc.

Marc Zandman

Vice Chairman of the Board Group Vice President, Measurements Group President, Vishay Israel Ltd. Vishay Intertechnology, Inc.

Robert A. Freece

Senior Vice President Vishay Intertechnology, Inc.

Richard N. Grubb

Executive Vice President, Treasurer, Chief Financial Officer Vishay Intertechnology, Inc.

Eliyahu Hurvitz

Chairman of the Board Teva Pharmaceutical Industries, Ltd.

Dr. Abraham Ludomirski

Founder and Managing Director of Vitalife Fund

Dr. Gerald Paul

President Chief Operating Officer Vishay Intertechnology, Inc.

Dr. Edward B. Shils

George W. Taylor Professor Emeritus of Entrepreneurial Studies The Wharton School University of Pennsylvania

Ziv Shoshani

Executive Vice President, Resistor Group Vishay Intertechnology, Inc.

Mark I. Solomon

Founder and Chairman CMS Companies

Jean-Claude Tiné

Investor

Ruta Zandman

Public Relations Associate Vishay Intertechnology, Inc.

SHAREHOLDERS' INFORMATION

Independent Auditors

Ernst & Young LLP Philadelphia, PA

Transfer Agent and Registrar

American Stock Transfer & Trust Company 40 Wall St., 46th Floor New York, NY 10055 Phone: 800-937-5449

Stock Exchange Listings

New York Stock Exchange Symbol: VSH Midwest Stock Exchange Chicago Board of Options Exchange

Investor Relations Contact

Robert A. Freece Senior Vice President Vishay Intertechnology, Inc. Phone: 610-644-1300

QUARTERLY REPORT MAILINGS

Shareholders owning Vishay stock indirectly (through a bank, broker, or nominee who is a registered holder) can receive our reports directly and promptly from the Company at the same time we mail to shareholders of record. To be placed on Vishay's mailing list, call 610-644-1300, extension 7483. Shareholders with access to the Internet can find quarterly reports, press releases, SEC fillings, and all other financial documents at www.vishay.com.

SEC FORM 10-K

A copy of the Company's Form 10-K Annual Report for the year ended December 31, 2002, filed with the Securities and Exchange Commission, may be obtained by shareholders without charge by writing to the Investor Relations Department, Vishay Intertechnology, Inc., 63 Lincoln Highway, Malvern, PA 19355-2143 or through Vishay's website at www.vishay.com.





VISHAY INTERTECHNOLOGY, INC.

CORPORATE HEADQUARTERS

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www.vishay.com

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