



A N N U A L R E P O R T 2 0 0 3



ANNUAL REPORT

INFICON is a leading developer, manufacturer and supplier of innovative vacuum instrumentation, critical sensor technologies, and process control software for the semiconductor and related industries. These analysis, measurement and control products are vital to original equipment manufacturers (OEMs) and end-users in the complex manufacturing of semiconductors, flat panel displays, magnetic and optical storage media and precision optics. INFICON also provides essential instrumentation for gas leak detection and toxic chemical analysis to the air conditioning/refrigeration, emergency response, military and security markets.

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STOCK LISTINGS

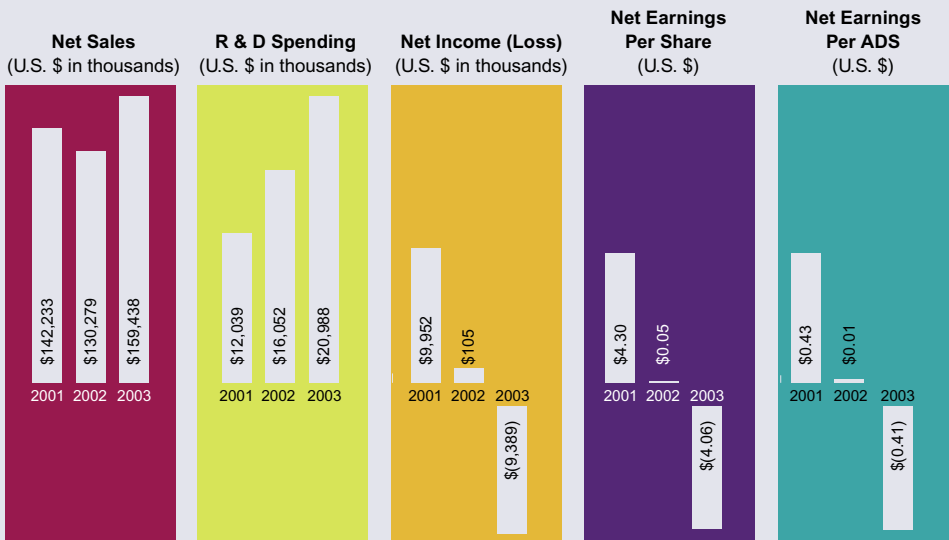
The Company's common stock is traded on the SWX Swiss Stock Exchange and the NASDAQ National Market under the symbol IFCN.

FINANCIAL HIGHLIGHTS

(U.S. \$ in thousands, except per share data)

	2001	2002	2003
Net Sales*	\$142,233	\$130,279	\$159,438
Research & Development*	\$12,039	\$16,052	\$20,988
Net Income (Loss)	\$9,952	\$105	\$(9,389)
Net Earnings (Loss) Per Share	4.30	0.05	\$(4.06)
Net Earnings (Loss) Per ADS	0.43	0.01	\$(0.41)
Cash Flow from Operations	\$24,752	\$10,236	\$890
Stockholders' Equity	\$119,524	\$127,410	\$125,759
Total Assets	\$138,194	\$147,928	\$150,674

* excluding discontinued operations (Ultra Clean Processing)



This Annual Report is also available in the investor relations section of our website, www.inficon.com, or by writing or calling Investor Relations. We welcome your comments and inquiries.



Lukas Winkler, President and Chief Executive Officer / John Grad, Chairman of the Board

Dear Shareholders,

INFICON ended 2003 on a very strong note with growth in all geographic regions and almost all product lines. For the year, revenues rose to \$159.4 million from \$130.3 million in 2002, an increase of more than 22%, or almost 14% on a constant dollar basis.

However, INFICON faced several challenges during 2003 marked by difficult decisions to divest the Ultra Clean Processing Business Unit and to write-down the value of our patterning solutions product line. These decisions were made against a backdrop of continued global economic weakness and sluggish semiconductor capital spending that persisted for most of the year.

As a result, INFICON reported a net loss of \$9.4 million (\$4.06 per diluted share - \$0.41 per ADS) compared to net income of \$0.1 million (\$0.05 per diluted share – \$0.01 per ADS) in 2002. On a continuing operations basis, the company reported a net loss of \$5.9 million, which included a \$7.4 million impairment charge related to the write-down of patterning solutions assets.

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Samsung Electronics places orders valued at \$2.6 million for FabGuard® to be used for *in situ* process monitoring in a 300mm fab.

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New Cygnus™ Thin Film Deposition Controller introduced for optimizing production of next generation flat panel displays.

POSITIVE REPOSITIONING IN A CHALLENGING YEAR

We decided to divest our Ultra Clean Processing Business Unit in order to sharpen our focus on the front-end of the semiconductor manufacturing process. Having suffered from a prolonged industry decline, the unit lost \$3.4 million in 2003, which was reported as a discontinued operation. By divesting the unit, we have also eliminated the costs associated with this business going into 2004.



FabGuard process diagnostic software for advanced process control.

Our patterning solutions product line also necessitated a repositioning. With the acquisition of New Vision Systems in January 2003, we entered the patterning processes market with a plan to target the very largest multi-fab chipmakers. While we never lost an order to a third party competitor, it became clear that internal software development teams represented the real—and most difficult—competition. We therefore shifted our sales efforts to medium-sized chipmakers that have a clear need for our lithography-focused products but lack the

internal resources to develop in-house solutions. Given the prolonged lock-up of capital for new projects, we expect that this approach will take some time to show results.

SALES GROWTH CONFIRMS LONG-TERM STRATEGY

As the year came to an end, we saw renewed order momentum in the semiconductor market. In fact, in the fourth quarter, INFICON generated twice as much revenue from the semiconductor industry as in the third quarter of 2003, increasing revenue from this segment to \$7.8 million. Accordingly, the percentage of INFICON sales that the semiconductor industry represents jumped to 17% in the fourth quarter of 2003 from 10% in the

third quarter. For the full year 2003, semiconductor manufacturing sales rose 43% to \$22.3 million from \$15.6 million in 2002.

We are especially pleased to report that this trend continued into the first quarter of 2004. It affirms the INFICON strategy of laying a solid foundation for market share gains in a semiconductor market recovery. We have accomplished this by successfully leveraging our

gas sensing and process control expertise and continuing to emphasize

We made considerable progress in our targeted segments of components and subsystems for OEMs and advanced process control solutions for chip manufacturers.

research and development for innovative products addressing customer-critical business issues. At the same time, we have been careful to maintain our dominant position in established industrial markets and extend our reach into expanding security and emergency response markets. In 2003, this strategy began to pay off in a number of ways.

GAINING STRENGTH IN SEMICONDUCTOR MARKETS

In our semiconductor manufacturing business, we made considerable progress in our targeted segments of components and subsystems for original equipment manufacturers (OEMs) and advanced process control solutions for chip manufacturers.

We experienced a surge in sales of INFICON Ceramic Capacitance Diaphragm Gauges (CDGs) and Combination Vacuum Gauges to major OEMs. We have worked hard to cultivate these relationships, and with the transition to 300-millimeter manufacturing tools finally underway, our design wins are converting into accelerated sales growth for these products.

INFICON *in situ* metrology products for maximizing our customers' equipment utilization in chip manufacturing generated incremental sales, especially in the U.S. and Asia.

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Combination Vacuum Gauge line is expanded with announcement of new TripleGauge™ Bayard-Alpert Capacitance Diaphragm Gauge.

5 | 2 0 | 2 0 0 3

New UL5000 Helium Leak Detector introduced providing fast and accurate leak-checking of semiconductor and flat panel display manufacturing.

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U.S. Department of Defense places \$9.3 million order for HAPSITE® Chemical Identification System.

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INFICON acquires Sentex Systems - extends leadership position in critical, on-site monitoring and identification of toxic chemicals and materials.

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U.S. Department of Defense places additional \$4.3 million order for HAPSITE Chemical Identification System.

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U.S. Department of Defense places \$2.6 million follow on order for HAPSITE Chemical Identification System.

In these regions, we gained share with INFICON Integrated Process Monitors (IPMs) and FabGuard® process diagnostic software, complete systems that give us a competitive advantage in advanced process control projects in 300-millimeter fabs. We were especially pleased that Samsung Electronics selected our *in situ* metrology software and sensors for

We now have a portfolio of products aimed at chemical security for urban air space monitoring, infrastructure protection, and early detection of chemical contamination in water source and distribution systems.

fully automated, real-time fault detection and analysis in their new manufacturing facilities.

We also saw increased demand from fabs in Singapore and Taiwan for evaluations and installations of Stiletto™, our *in situ* scanning-laser particle detector for monitoring sub-micron contaminants in semiconductor process equipment.

Our market-leading thin film products also performed well, reflecting rising demand from flat panel display and optical storage equipment OEM customers. We continued to benefit from the emerging market for Organic Light Emitting Displays (OLED), as end-user demand grew for next-generation displays on mobile phones and Personal Digital Assistants. In 2003, OLED-related sales already approached 20 percent of all our sales to the thin film markets.

COMMITTED TO TECHNOLOGY LEADERSHIP

During 2003, we continued to develop technologically superior products and product enhancements to help semiconductor engineers analyze, control and improve manufacturing processes. We unveiled the new INFICON TripleGauge™—the next phase in our technology-proven Combination Vacuum Gauge line.

We also introduced the UL5000 Helium Leak Detector, our newest in an extensive line of market leading leak detectors. The UL5000 is designed for high efficiency and speed in

OEM and fab environments for testing components, subassemblies and large chambers of semiconductor tools.

ENVIRONMENTAL HEALTH AND SAFETY FOR CHEMICAL SECURITY

In our Environmental Health and Safety business, an 84% increase in sales was a major highlight of the year. The growth of this business represents successful execution of our strategy of broadening our product offerings in this area. We now have a portfolio of products aimed at chemical security for urban air space monitoring, infrastructure protection, and early detection of chemical contamination in water source and distribution systems. For the full year, emergency response and security sales rose to \$22.4 million from \$12.2 million in 2002.

Chief among our products is the HAPSITE® Chemical Identification System for immediate on-scene detection of chemical agents and toxic materials. The technology for HAPSITE draws heavily on the same gas sensor expertise that made INFICON the market leader in semiconductor gas analysis. Demand for the system continued strong in the United States, and we experienced increased call for the product internationally, receiving orders from a wide array of customers in many countries including a first order from China.

During the year, we had great success in combining HAPSITE analytical technology with the expertise in water monitoring we obtained from the July acquisition of Sentex



HAPSITE for chemical security in Afghanistan.

Systems, Inc. a privately-held, New Jersey-based company. Sentex supplies continuous, on-line water monitors for applications such as factory discharge water or water security, air monitors for spot analysis or continuous on-site monitoring. Through the addition of these products and technical expertise to INFICON's portfolio, we help our customers make crucial decisions affecting life, health and safety.

INITIATIVES FOR PROFITABLE GROWTH

Our intention is to extend our leadership position to achieve strong, profitable growth. We believe we can attain this goal through an unwavering focus on innovation backed by con-

tinued investment in research and development, bringing new products to market in 2004 and beyond.

To that end, we are pursuing four key growth initiatives.

First, we will continue to address high growth segments of the semiconductor and related markets with an expanding portfolio of *in situ* sensors for improved fault diagnostics and process control at the manufacturing tool level. This will enlarge our opportunities in both the OEM and end user markets. Secondly, to further address the semiconductor OEM market, we will continue to develop innovative combinations of intelligent gauges and valves for integrated vacuum control. Thirdly, in our Environmental Health and Safety business, we will focus on produc-

ing HAPSITE
accessories
and additional
sensing devices
that achieve
even higher



Research and development in new technologies for market-leading leak detectors.

Our intention is to extend our leadership position through an unwavering focus on innovation backed by continued investment in research and development.

capability and portability. And fourth, in our leak detection business, we expect to bring low cost technology to market over the next two years, which will give INFICON significant price advantages, particularly important in the highly competitive U.S. and Asian markets.

Concurrent with these product-related growth initiatives, we will continue to exercise stringent controls over our operating expenses to ensure that our spending is properly paced with revenue growth.

A GREAT COLLABORATION

In closing, we want to acknowledge the many important contributions that Jim Brissenden, who retired as president and chief executive officer in December 2003, made during his 20 years with INFICON. Jim guided INFICON in its evolution from a division of a worldwide manufacturing company to a successful, publicly-traded global enterprise. On behalf of the board of directors, we thank Jim for his dedication, insight, and outstanding contributions to INFICON. We also thank our customers, our shareholders and most of all, our employees—who supported the growth of our business in 2003. We are confident that INFICON with its strong customer relationships, market agility, strong brand, and talented people, will seize the opportunities ahead to build long-term shareholder value.

Sincerely,



Lukas Winkler
President and Chief Executive Officer



John Grad
Chairman of the Board

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New Scintograph Chemical Monitoring Systems provide water security monitoring for toxic industrial chemicals and chemical warfare agents.

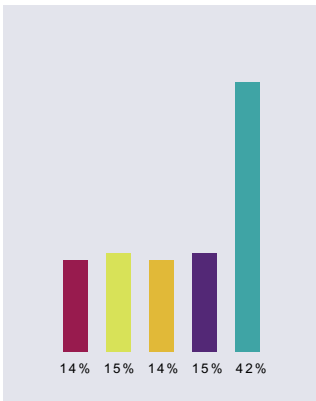
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Samsung Electronics places orders valued at \$1.1 million for INFICON Integrated Process Monitors and FabGuard process diagnostic software.

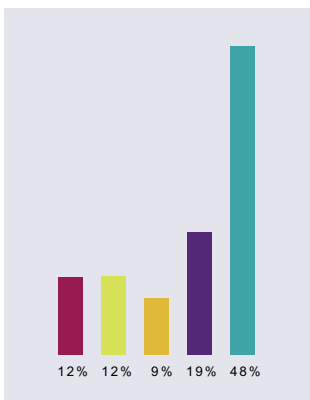
REVENUE BY END MARKET

- SEMICONDUCTOR MANUFACTURING
- THIN FILM MANUFACTURING
- ENVIRONMENTAL HEALTH AND SAFETY
- REFRIGERATION / AIR CONDITIONING
- INDUSTRIAL MARKETS

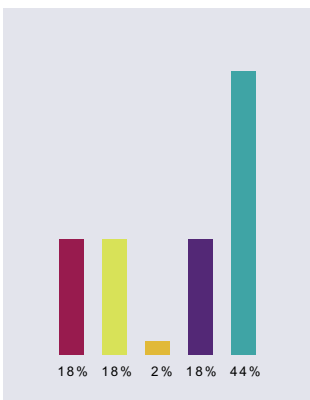
FY 2003



FY 2002



FY 2001



excluding discontinued operations
(Ultra Clean Processing)



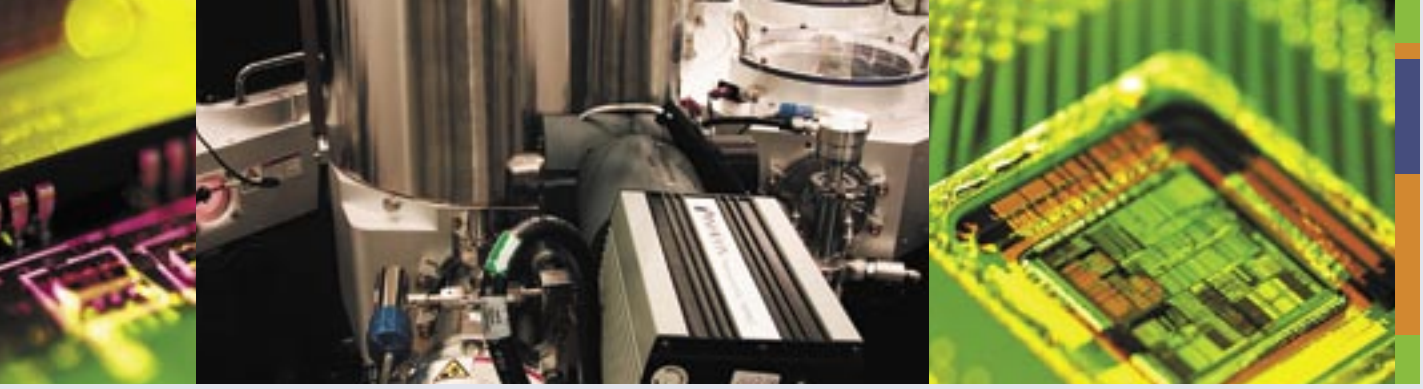
Preclean particle monitoring with Stiletto Scanning-Laser Particle Detector.

SEMICONDUCTOR MANUFACTURING

MAXIMIZING OUR CUSTOMERS' EQUIPMENT UTILIZATION AND PRODUCTIVITY

What does it take to succeed in the hyperdynamic semiconductor industry, where chip manufacturers must continually boost quality and yield by making their processes ever more precise, productive and reliable? INFICON technology solutions and process expertise directly address the most pressing cost and productivity improvements demanded by semiconductor manufacturers as they move from 200mm (8 inch) wafers to 300mm (12 inch) wafers. We intersect the industry's need to analyze, control and improve manufacturing with market-leading *in situ* metrology and process control hardware and software, high-performance leak detectors, and vacuum measurement products.

INFICON Integrated Process Metrology and Control Systems include advanced spectroscopic sensors, such as residual gas analyzers, particle detectors, photoresist detectors, and RF probes. Our Integrated Process Metrology and Control Systems manage simultaneously all levels of *in situ* sensors, from simple pressure gauges to complex mass spectrometers, as needed to understand integrated circuit manufacturing processes. INFICON is successful in delivering these products to the semiconductor fab, targeting those "bottleneck" processes where increased control can create large and rapid paybacks. In fact, FabGuard® process diagnostic software was named this year's Grand Winner by Semiconductor International Magazine as the most outstanding product used in semiconductor manufacturing.



INFICON Integrated Process Monitors on a semiconductor manufacturing tool.

Responding to the industry's need for greater contamination control, we introduced the Stiletto Particle Detector, also a winner of Semiconductor International Magazine's top 20 outstanding products used in semiconductor manufacturing and its related industries. Providing unprecedented protection against defect-induced yield loss, this scanning-laser *in situ* sensor monitors sub-micron contaminants in semiconductor process equipment and has the unique ability to detect particles during every wafer processed.

The various process steps in semiconductor manufacturing have different working pressures and temperatures, from ultra high vacuum up to atmosphere. INFICON Ceramic Capacitance Diaphragm Gauges deliver higher accuracy, stability, and longer life than conventional metal technology, especially in extremely corrosive processes. These attributes give us a clear competitive advantage with manufacturers of CVD and etch semiconductor equipment. In addition, INFICON Combination Vacuum Gauges offer superior accuracy and reliability in compact designs, combining multiple technologies in a single controller for reduced complexity and cost.

Sensitive, versatile, and reliable, INFICON leak detectors are preferred by integrated circuit manufacturers and original equipment manufacturers for quality control. The INFICON UL5000 and UL1000 Fab Leak Detectors are designed to meet the most critical and demanding leak detection applications. They pinpoint locations where gaseous impurities could enter the multiple chambers of a chip-manufacturing tool or where environmentally damaging, hazardous or expensive gases might escape from a sealed, pressurized system.

Our customers in the semiconductor industry include the major chip manufacturers and original equipment manufacturers including IBM, Motorola, Intel, Samsung, LSI Logic, Applied Materials, Tokyo Electron and Novellus.



Cygnus Thin Film Deposition Controller for OLED processes.

THIN FILM MANUFACTURING

FINE TUNING FOR PROCESS CONTROL AND HIGHER YIELDS

The long-standing expertise of INFICON in the manufacture of devices requiring the very thin layering of multiple materials is employed in many vacuum-coating applications, in addition to semiconductor manufacturing. INFICON advanced instrumentation is acknowledged in the market-dominant position of our thin film deposition monitors and controllers that optimize the production of a wide array of products such as flat panel displays, fiber optics, data storage media, and surgical lighting.

Among the newest is Cygnus™ Thin Film Deposition Controller, the next generation of INFICON precision thin film instruments. It has unique capabilities, which are critical in new Organic Light-Emitting Diode (OLED) processes used in the production of the latest flat panel displays. OLED technology is quickly emerging as the display technology for next-generation consumer electronics, like mobile phones and PDAs.

INFICON vacuum control products target thin film coating applications with innovative vacuum gauges that are particularly well suited for incorporation in original equipment manufacturers' vacuum systems. Our unique Combination Vacuum Gauges enable these customers to replace two conventional gauges with one to measure a wide range of pressures very cost-effectively.

INFICON customers include an impressive list of the major scientific and consumer optics and flat panel display manufacturers and original equipment manufacturers such as Unaxis, Leybold Optics, Applied Films, Zeiss, Anelva, Samsung, Sunic Systems, and Ness Display.





HAPSITE in military use.



Scentograph Chemical Monitoring System for water security.

ENVIRONMENTAL HEALTH AND SAFETY

LEVERAGING CORE TECHNOLOGIES IN GROWTH MARKETS

INFICON has a portfolio of products aimed at chemical security for urban air space monitoring, infrastructure protection, and early detection of chemical contamination in water source and distribution systems. The technology for these products draws heavily on the same vacuum sensor expertise that has made INFICON the market leader in semiconductor gas analysis, thus successfully leveraging our knowledge of vacuum technology in growth markets.

INFICON offers both gas chromatograph/mass spectrometers, the benchmark for positive identification of organic chemicals with the highest degree of accuracy of any analytical technique, and stand-alone, portable gas chromatograph technology, ideal for monitoring in most industrial and environmental applications. Our flagship products, HAPSITE® Chemical Identification Systems, the only man-portable, gas chromatograph/mass spectrometers, can identify trace levels of chemical warfare agents, toxic industrial chemicals, and non-toxic chemicals in air, water and soil. They are in active service with United States and numerous other armed forces worldwide and with emergency response teams in 30 of the largest U.S. cities, various government agencies in 13 countries, and other organizations including the U.S. Environmental Protection Agency and the United Nations.

INFICON Chemical Monitoring Systems are designed for spot analysis or continuous monitoring of organic chemical compounds in air, soil or water in the field. We have effectively combined HAPSITE analytical technology with acquired expertise in water monitoring to provide highly accurate, on-scene analysis in support of critical decision-making affecting life, health and safety.





Ecotec II Leak Detector for quality control.

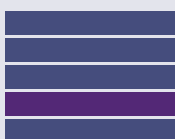
REFRIGERATION / AIR CONDITIONING

KEEPING PROFITS FROM LEAKING AWAY

INFICON refrigerant and helium leak detectors are the recognized market leaders with over 40% share in the refrigeration and air conditioning markets. They are widely used for quality control at air conditioner, appliance and automotive manufacturing facilities, while our hand-held testers and associated equipment are used for after-market maintenance in the field by refrigeration/air conditioning, heating and automotive service professionals. Some of our key customers include Carrier, Whirlpool, York International, Samsung, DaimlerChrysler, General Motors, Volkswagen and Audi.

More specifically, INFICON leak detectors are used primarily to confirm the integrity of a container, whether it is a vacuum chamber or a pressurized container, or in the maintenance of gas lines which must be airtight. Extremely sensitive and reliable, our various models of high-performance leak detectors are used on assembly lines for subassembly and mid-production quality testing, as well as for final test. For example, manufacturers of refrigeration systems will initially leak-test a refrigeration coil with a helium leak detector to ensure that the chamber is leak-free. Later in the manufacturing process, the coil is filled with refrigerant, resealed and then tested with a refrigerant leak detector to assure integrity of the final seal. These quality control measures help manufacturers ensure that resources are not wasted by charging faulty systems with refrigerant.

INFICON is ideally positioned to exploit the growing trend toward more stringent leak requirements for product quality and safety in a large and growing number of systems and products. This emphasis on higher standards is driving the market toward high-tech leak testing methods, creating opportunities for us to expand our customer base. In addition, increased environmental awareness and growing demand from emerging markets like China add to our addressable market.





INFICON Combination Vacuum Gauges for pressure measurement and control in manufacturing processes.

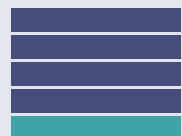
INDUSTRIAL MARKETS

INNOVATIVE PRODUCTS ENHANCING PRODUCTIVITY

As a global leader in vacuum instrumentation, INFICON addresses a wide variety of markets such as automotive, aerospace, heat-treating, analytical instrumentation, food packaging, and universities and institutes for research and development. Our strong semiconductor market focus actually translates directly into a competitive advantage in these applications due to the stringent high product performance, low cost, and superior logistical support required in that high-tech industry.

We have two product lines that serve customers who employ vacuum technology for manufacturing, research, or vacuum processes of any kind. Our leak detectors test the integrity of a container, whether a vacuum chamber or pressurized system; our vacuum control products enable our customers to monitor gas pressures during various stages of a manufacturing process and connect components to a vacuum chamber.

Because of the broad array of industrial applications, we target the large manufacturers of vacuum pumps who buy our products and resell them to an extensive range of end-users with their own name on them. This highly efficient private label sales channel allows us to cost effectively access the large number of medium to small vacuum users that cannot be economically served by our direct sales and service force. We have several, large private label partners - among them Pfeiffer Vacuum and Leybold Vacuum - both global vacuum technology companies.



Certain statements contained in this Letter to Shareholders and Annual Report are forward-looking statements that do not relate solely to historical or current facts. Forward looking statements can be identified by the use of words such as "may," "believe," "will," "expect," "project," "assume," "estimate," "anticipate," "plan" or "continue." These forward-looking statements address, among other things, our strategic objectives, trends in vacuum technology and in the industries that employ vacuum instrumentation, such as the semiconductor and related industries and the anticipated effects of these trends on our business. These forward-looking statements are based on the current plans and expectations of our management and are subject to a number of uncertainties and risks that could significantly affect our current plans and expectations, as well as future results of operations and financial condition. Some of these risks and uncertainties are discussed in the Company's Annual Report on Form 20-F for fiscal 2003 and the Company's reports on Form 6-K filed with the Securities and Exchange Commission during 2003.

As a consequence, our current and anticipated plans and our future prospects, results of operations and financial condition may differ from those expressed in any forward-looking statements made by or on behalf of our company. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.



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