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

Form 10-K
For Annual and Transition Reports Pursuant to Sections 13 or #15D of the Securities and Exchange Act of 1934

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

For the fiscal year ended March 31, 2004

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

Commission file number: 0-26824

Tegal Corporation
(Exact name of registrant as specified in its charter)

Delaware	**68-0370244**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
2201 South McDowell Boulevard **Petaluma, California**	**94954**
(Address of principal executive offices)	*(Zip Code)*

Registrant's Telephone Number, Including Area Code: (707) 763-5600

Securities Registered Pursuant to Section 12(b) of the Act: None

Securities Registered Pursuant to Section 12(g) of the Act:
Common Stock, $0.01 Par Value

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 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 if the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2) Yes [ ] No [X]

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant, based on the closing sale price of the common stock on September 30, 2003 as reported on the Nasdaq National Market, was $19,203,360. As of June 24, 2004, 44,261,309 shares of the registrant's common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for registrant's 2004 Annual Meeting of Stockholders to be held September 21, 2004 will be filed with the Commission within 120 days after the close of the registrant's fiscal year and are incorporated by reference in Part III.

TABLE OF CONTENTS

		Page
	PART I	
Item 1.	Business	3
Item 2.	Properties	19
Item 3.	Legal Proceedings	19
Item 4.	Submission of Matters to a Vote of Security Holders	19
	PART II	
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issue Purchases of Equity Securities	19
Item 6.	Selected Financial Data	21
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	22
Item 7A.	Quantitative and Qualitative Disclosure about Market Risks	28
Item 8.	Financial Statements and Supplementary Data	29
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	52
Item 9A.	Controls and Procedures	52
	PART III	
Item 10.	Directors and Executive Officers of the Registrant	52
Item 11.	Executive Compensation	53
Item 12.	Security Ownership of Certain Beneficial Owners and Management	53
Item 13.	Certain Relationships and Related Transactions	53
Item 14.	Principal Accountant Fees and Services	53
	PART IV	
Item 15.	Exhibits, Financial Statement Schedules and Reports on Form 8-K	54
	Signatures	57

PART I

Item 1. *Business*

Information contained or incorporated by reference herein contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, which can be identified by the use of forward-looking terminology such as "may," "will," "expect," "anticipate," "estimate" or "continue" or the negative thereof or other variations thereon or comparable terminology or which constitute projected financial information. The following contains cautionary statements identifying important factors with respect to such forward-looking statements, including certain risks and uncertainties, that could cause actual results to differ materially from those in such forward-looking statements. See "Risk Factors." All dollar amounts are in thousands unless specified otherwise.

The Company

Tegal Corporation, a Delaware corporation ("Tegal" or the "Company"), designs, manufactures, markets and services plasma etch and deposition systems that enable the production of integrated circuits ("ICs"), memory and related microelectronics devices used in personal computers, wireless voice and data telecommunications, contact-less transaction devices, radio frequency identification devices ("RFID's"), smart cards, data storage and micro-level actuators. Etching and deposition constitute two of the principal IC and related device production process steps and each must be performed numerous times in the production of such devices.

We were formed in December 1989 to acquire the operations of the former Tegal Corporation, a division of Motorola, Inc. ("Motorola"). Our predecessor company was founded in 1972 and acquired by Motorola in 1978. We completed our initial public offering in October 1995.

On August 30, 2002, we acquired all of the outstanding common stock of Sputtered Films, Incorporated ("SFI"), a privately held California corporation pursuant to an Agreement and Plan of Merger dated August 13, 2002. Sputtered Films is a leader in the design, manufacture and service of high performance physical vapor deposition sputtering systems for the semiconductor and semiconductor packaging industry. SFI was founded in 1967 with the development of the S-Gun, core technology of the acquired company.

On November 11, 2003, we acquired substantially all of the assets and certain liabilities of Simplus Systems Corporation, ("Simplus"), a development stage company, pursuant to an asset purchase agreement. Simplus had developed a deposition cluster tool and certain patented processes for barrier, copper seed and high-K dielectric applications. Simplus had coined the term "nano-layer deposition" or "NLD" to describe its unique approach to chemical vapor deposition ("CVD"). The Company is continuing to develop these NLD processes and related tools, and is in the process of marketing them to a limited number of key customers and joint development partners.

Semiconductor Industry Background

Growth of Semiconductor and Semiconductor Equipment Industries

The semiconductor industry has experienced significant growth over the last 20 years. This growth has resulted from the increasing demand for ICs from traditional IC markets, such as personal computers, telecommunications, consumer electronics, automotive electronics and office equipment, as well as developing markets, such as wireless communications, multimedia and portable and network computing. As a result of this increased demand, semiconductor device manufacturers have periodically expended significant amounts of capital to build new semiconductor fabrication facilities ("fabs") and to expand existing fabs. In spite of the continuing growth in demand for semiconductors, the industry periodically experiences cycles of excess supply and excess capacity as additions to capacity are brought online in large increments which exceed the short-term growth in demand for ICs. The industry periodically experiences such fluctuations, and is currently experiencing a significant slowdown in the purchase of equipment for the manufacture of ICs.

Growth in the semiconductor industry has been driven, in large part, by advances in semiconductor performance at a decreasing cost per function. Advanced semiconductor processing technologies increasingly allow semiconductor manufacturers to produce ICs with smaller features, thereby increasing processing speed and expanding device functionality and memory capacity. As ICs have become more complex, however, both the number and price of state of the art process tools required to manufacture ICs have increased significantly. As a result, the cost of semiconductor manufacturing equipment has become an increasingly large part of the total cost of producing advanced ICs. Today, a typical 300 millimeter wafer fab may cost as much as $2.0 to $3.0 billion, with semiconductor manufacturing equipment costs representing the majority of total fab costs.

Semiconductor Production Processes

To create an IC, semiconductor wafers are subjected to a large number of complex process steps. The three primary steps in manufacturing ICs are (1) deposition, in which a layer of insulating or conducting material is deposited on the wafer surface, (2) photolithography, in which the circuit pattern is projected onto a light sensitive material (the photoresist), and (3) etch, in which the unmasked parts of the deposited material on the wafer are selectively removed to form the IC circuit pattern.

Each step of the manufacturing process for ICs requires specialized manufacturing equipment. Today, plasma-based systems are used for the great majority of both deposition and etching processes. During physical vapor deposition (also known as "PVD"), the semiconductor wafer is exposed to a plasma environment that forms continuous thin films of electrically insulating or electrically conductive layers on the semiconductor wafer. During a plasma etch process (also known as "dry etch"), a semiconductor wafer is exposed to a plasma composed of a reactive gas, such as chlorine, which etches away selected portions of the layer underlying the patterned photoresist layer.

Segmentation of the Deposition and Etch Markets

The deposition market is generally divided into the following market segments, defined according to the underlying technology used to create the deposited thin film: electrochemical deposition (also known as "electroplating"), chemical vapor deposition (also known as "CVD", of which plasma-enhanced chemical vapor deposition "PECVD" is a major sub-segment), atomic layer deposition (also known as "ALD"), and physical vapor deposition (also known as "PVD").

Certain deposition technologies or processes are better suited than others for depositing different types of materials (films). In silicon-based microelectronic fabrication, electrochemical deposition of copper is the essential basis for creating the multi-level metal electrical interconnects found in advanced logic and memory ICs. CVD and PECVD deposition of dielectric materials like silicon dioxide and silicon nitride is used to create layers of electrical insulation between active circuit elements in the integrated circuit. CVD and PECVD are also used for polysilicon and silicide deposition, to create the electrically conductive thin films used in the active circuit elements. ALD is a technique whereby, in a process repeated many times, a monolayer of chemical reactant adsorbed on the IC wafer surface forms a single atomic layer of a dielectric or a metallic film. Physical vapor deposition is used for both metallic thin film deposition and, in reactive PVD processes, for dielectric thin film deposition.

Further segmentation occurs within the PVD market according to specific applications. One important application for PVD is the deposition of thin films where residual film stress must be closely controlled in order to create specific desired electrical results, as in precision thin film resistor fabrication, or to avoid physically deforming the substrate, as in the fabrication of power MOS devices on ultra-thin silicon wafers. The ability to control film stress is also critical for the deposition of multi-layer thin film stacks on photomasks used in advanced microelectronic photolithography applications such as extreme ultraviolet lithography (also known as "EUVL") for development of 45 nm and 32 nm fabrication processes. If stress is not low and controlled in this step, the masks can become distorted.

We believe that enabling tight control of stress and other process parameters, along with minimizing overall contamination levels during PVD thin film deposition processes, will be increasingly recognized by IC makers as key features that differentiate PVD tool products and PVD tool makers. We also believe these capabilities will be important to device makers in the related industries of compound semiconductor device fabrication, LED fabrication, optical communication device manufacturing, in micro electromechanical systems (also known as "MEMS") fabrication, and in the field of advanced packaging processes for microelectronic devices.

ALD is used for the creation of various seed and barrier layers in capacitor device structures, where the integrity and conformality of the deposited film is essential to the proper functioning of the device. However, since ALD absorption occurs at less than one monolayer with each cycle, layers with film thicknesses of >100 Angstroms require repeated cycles and with potentially long processing times. NLD has the benefit of being able to deposit films more rapidly with equivalent or better integrity and conformality. In addition, NLD uses standard chemical precursors which are well-known to semiconductor device manufacturers and has the ability to deposit compound films, of which most high-K dielectric materials are made. We believe that these are compelling advantages for the deposition of certain films in the device structures in both memory and logic application, both now and in the foreseeable future.

The dry etch market is generally segmented into the following market segments, defined according to the class of film being etched: polysilicon, oxide (dielectric) and metal. New films are continually being developed in each of these three market segments.

Certain dry etch technologies or processes are better suited for etching different types of materials (films) and, as a result, the dry etch market may be segmented according to the type of film being etched. In addition, as ICs become increasingly complex, certain etch steps required to manufacture a state of the art IC demand leading edge (or "critical") etch performance. For example, to produce a 64-megabit DRAM device, semiconductor manufacturers are required to etch certain device features at dimensions as small as 0.13 micron. Nonetheless, even in the most advanced ICs, production steps can be performed with less demanding (or "non-critical") etch performance. As a result, we believe the etch market has also begun to segment according to the required level of etch performance — critical or non-critical.

Today, the semiconductor industry is faced with the need to develop and adopt an unprecedented number of new materials as conventional films are running out of the physical properties needed to support continuing shrinks in die size and to provide improved performance. Certain of these new materials present unique etch production problems. For example, the use of certain films, such as platinum, iridium and Lead Zirconium Titanate ("PZT"), currently being used in the development of non-volatile, ferroelectric random access memory ("FRAM") devices, is presenting new challenges to semiconductor manufacturers. Magnetic random access memory ("MRAM") devices incorporate unique magnetic materials in the device structures, as do certain proposed "RRAM" devices. While these new films contribute to improved device performance and reduced die size, their unique properties make them particularly difficult to etch and, therefore, require more advanced etch process technologies.

Business Strategy

We have a large installed base of etch and deposition equipment exceeding 1,700 systems and we believe that over the years we have earned a reputation as a supplier of reliable, value-oriented systems along with systems incorporating unique, advanced process technologies. Our systems are sold throughout the world to both domestic and international customers. In our fiscal year ended March 31, 2004, approximately 67% of our revenues resulted from international sales. To support our systems sales, we maintain local service and support in every major geographic market in which we have an installed base, backed up by a spares logistics system designed to provide delivery within 24 hours anywhere in the world.

Tegal's strategy is to become the leading provider of integrated etch and deposition process solutions for a defined set of new and emerging materials central to the production of a broad array of advanced semiconductor devices. Incorporation of these new, exotic materials is essential to achieving the higher device densities, lower power consumption and novel functions exhibited by the newest generation of cell phones, computer memories, fiber optic switches and remote sensors. Currently, Tegal is the leading supplier of etch solutions to makers of advanced "non-volatile" ferro-electric ("FeRAM") and magnetic ("MRAM") devices. FeRAM is just now entering commercial production with chips for the newest generation of cell phones, PDA's, smart cards and radio-frequency identification devices ("RFID's"), used for applications such as inventory tracking and cashier-less transaction processing. Rounding out Tegal's portfolio of new materials expertise are so-called "compound-semi" materials, such as GaAs, GaN and InP, widely used in telecom device production.

Our long-term growth strategy is to build on our technical knowledge, experience and reputation in semiconductor capital equipment, both through organic growth in the markets in which it specializes and through selective acquisitions of complementary technologies. Through its acquisitions of Sputtered Films, Inc. and, more recently, Simplus Systems Corp., Tegal secured new sources for complementary deposition technologies for its new materials strategy.

Products

6500 Series "Critical Etch" Products

We offer several models of our 6500 series critical etch products configured to address film types and applications desired by our customers. We introduced the 6500 series tool in 1994 and since that time have expanded the product line to address new applications including:

- new high K dielectrics and associated materials used in capacitors at sub-0.5 micron for FRAMs, high-density DRAM and magnetic memory (MRAM) devices;
- shallow trench isolation used to isolate transistors driven by increased packing densities used in memory devices employing design rules at or below 0.25 micron;
- sub-0.5 micron multi-layer metal films composed of aluminum/copper/silicon/titanium alloys;
- sub-0.5 micron polysilicon;
- compound semiconductor III-V materials; and

- leading edge thin film head materials.

All 6500 series models offer one and two-chamber configurations and a rinse/strip option. Prices for 6500 series systems typically range between $1.8 million and $3.0 million.

Our 6500 series systems have been engineered to provide process flexibility and competitive throughput for wafers and substrates up to eight inches in diameter, while minimizing cost and space requirements. The 6550 Spectra chamber is 300 mm capable and is currently being used on the 200 mm 6500 platform. Customer demand for new materials is at the 200 mm node. However, having 300 mm capability is important for future customer needs. A dual chamber platform design allows for either parallel or integrated etch processes. We seek to maximize the 6500 series systems' average throughput by incorporating a process chamber technology and system architecture designed to minimize processing down-time required for cleaning and maintenance. Each 6500 series system has a central wafer handling system with full cassette vacuum loadlocks, non-contact optical wafer alignment and a vacuum transport system. Individual process module servicing is possible without shutting down the system or other chambers. Contamination control features in the 6500 series systems include pick and place wafer handling with no moving parts above the wafer, four-level vacuum isolation from the atmosphere to the etch chamber, and individual high-throughput, turbo-pumped vacuum systems for the cassettes, wafer handling platform and each process module. These and other features of the 6500 series are designed to enable a semiconductor manufacturer to reduce wafer particle contamination to a level that we believe exceeds industry standards and to improve etch results and process flexibility.

In addition, our 6500 series systems incorporate a software system that has been designed and tested to minimize the risk of the system operator "crashing" the system or interrupting wafer fabrication, while being easy to use. This software system incorporates a software architecture designed to operate in multiple interface modes, including operator, maintenance engineer, process engineer and diagnostic modes. Features include icon-based touch screen menus for ease of use. In addition, the software provides a quick-response interface which allows the semiconductor manufacturer access to all necessary system information for factory automation. The system includes data in-situ process manufacturing archiving and remote, real time diagnostics.

900 Series "Non-Critical Etch" Products

We introduced our 900 series family of etch systems in 1984 as a critical etch tool of that era. Over the years, we have enhanced the 900 series family as non-critical etch systems capable of performing the etch steps required in the production of silicon-based IC devices and, more recently, as critical etch tools for new specialty devices such as gallium arsenide for high-speed telecommunications devices. In 1994, we introduced an eight-inch wafer capable 900 series system (capable of etching five inch to eight-inch wafers). The 900 series non-critical etch systems are aimed at pad, zero layer, non-selective nitride, backside, planarization and small flat panel display applications, thin film etch applications used in the manufacture of read-write heads for the disk drive industry and gallium arsenide and other III-V materials used in high-speed digital wireless telecommunications applications. Our 900 series systems typically sell for a price from $250,000 to $600,000.

The 900 series systems incorporate a single process chamber on a non-loadlocked modular platform for reliability and ease of maintenance, which we believe results in higher average throughput and lower operating costs. Continued improvements in both reliability and performance have enabled us to offer the 900 series systems as a solution for a broad range of applications involving line widths down to 0.8 microns.

The *i*900 was introduced in July 2000. This system has enhanced the functionality of the 900 series with added features such as user-friendly GUI (graphical user interface) touch screens, better process control and an improved transport system that will increase efficiency, while preserving the durability for which the tool is known.

Endeavor Series Critical Deposition Products

We offer several models of our Endeavor series critical deposition products configured to address film types and applications desired by the customer. We introduced the Endeavor series tool in 1992 and since that time have expanded the product line to address new applications. Deposition applications addressed by the Endeavor series system include:

- chip packaging technologies requiring stress control in multi-layer under bump metallization (UBM), including deposition onto polyimide;
- IC front side interconnect metallization;
- Ohmic contact formation and metallization of thinned wafers for high power transistors;
- deposition of thin film resistors with fine tuning of thermal capacitance of resistance (TCR);

- barrier and seed layer deposition in deep vias;
- encapsulating films for light emitting diodes (LED);
- dielectric layers for sound acoustic wave (SAW) and integrated gate bipolar transistors (IGBT);
- automobile electronics requiring high adhesion properties of the backside metal film stacks; and
- high precision, ultra clean deposition of films used in photolithography and extreme ultraviolet (EUV) masks.

All Endeavor series models offer one to five process modules, and can be configured as single or dual cassette module systems. The system is fully field upgradeable. Prices for Endeavor series systems typically range between $1.8 million and $3.0 million.

Our Endeavor series systems have been engineered to provide process flexibility and competitive throughput for wafers and substrates up to eight inches in diameter, or six inches square while minimizing cost and space requirements. The Endeavor cassette module is SMIF compatible. Fast and efficient, the system's capability is enhanced by parallel processing and scheduled downtime is minimized by its modularity. Each Endeavor series system has a central wafer handling system with full vacuum loadlocks, non-contact optical wafer alignment and a vacuum transport system. Individual process module servicing is possible without shutting down the system or other chambers. Contamination control features in the Endeavor series systems include sputter-up processing, and a gentle and reliable handling system that allows the transport and process of wafers without clamping or mechanical pressure, and no backside contact of the wafer or substrate at any time. All processing is done under high vacuum, using individual high-throughput, turbo-pumped vacuum systems for the cassette module and transfer module and each process module. These and other features of the Endeavor series are designed to enable a semiconductor manufacturer to reduce wafer particle contamination to a level that we believe exceeds industry standards and to improve deposition results and process flexibility.

In addition, our Endeavor series systems employs a user-friendly software system that is equipped with full safety interlocks and is four-level password protected. This software system incorporates a graphical user interface with software architecture designed to operate in multiple interface modes, including operator, maintenance engineer, process engineer and diagnostic modes. The software provides a quick-response interface which allows the semiconductor manufacturer access to all necessary system information for factory automation. The software and automation are completely functional from remote locations via ISDN line. This remote access can be used to download software upgrades, or as a powerful diagnostic tool, providing our customers with immediate factory support.

Customers

We sell our systems to semiconductor and related electronic device component manufacturers throughout the world. Major customers over the last three fiscal years have included the following:

AMI	Matsushita	Sumitomo
AMS	Motorola	ST Microelectronics
Analog Devises	NEC	Tesla Sezam,S.A.
Denso/Ryosan	Nortel Technology	Toshiba
Fuji Microdevice	OKI	United Microelectronics
Hewlett Packard	RF Microdevices	University Francois Rabelais
Intel	Sony	Winbond Electronics Corp.
International Rectifier	Setech	Walsin Lihwa Corp.

Of these 24 customers, seven ordered one or more systems in fiscal 2004. The composition of our top five customers has changed from year to year, but net system sales to our top five customers in each of fiscal 2004, 2003, and 2002 accounted for 84.8%, 88.2%, and 54.4%, respectively, of our total net system sales. Intel, Fuji, and Matsushita accounted for 31.4%, 22.9% and 12.6% respectively, of our net system sales in 2004. International Rectifier, University Francois, ST Microelectronics and OKI represented 32.2%, 22.7%, 12.5% and 12.0%, respectively, of our net system sales in 2003. ST Microelectronics, Nortel, Analog and NEC represented 24.2%, 17.1%, 10.1% and 13.1%, respectively, of our net system sales in 2002. Other than the above customers, no single customer represented more than 10% of our net system sales in fiscal 2004, 2003 or 2002. Although the composition of the group comprising our largest customers may vary from year to year, the loss of a significant customer or any reduction in orders by any significant customer, including reductions due to market, economic or competitive conditions in the semiconductor and related device manufacturing industry, may have a material adverse effect on us.

Backlog

We schedule production of our systems based upon order backlog and customer commitments. We include in our backlog only orders for which written purchase orders have been accepted and shipment dates within the next 12 months have been assigned. As of

May 31, 2004 and 2003, our order backlog was approximately $3,275 and $6,000, respectively. Booked system orders are subject to cancellation by the customer, but with substantial penalties except in the case of orders for evaluation systems or for systems that have not yet incurred production costs. Orders may be subject to rescheduling with limited or no penalty. Some orders are received for systems to be shipped in the same quarter as the order is received. As a result, our backlog at any particular date is not necessarily indicative of actual sales for any succeeding period.

Marketing, Sales and Service

We sell our systems worldwide through a network of six direct sales personnel and seven independent sales representatives in sales offices located throughout the world. In the United States of America, we market our systems through direct sales personnel located in two regional sales offices and at our Petaluma, California headquarters. In addition, we provide field service and applications engineers out of our regional locations and our Petaluma headquarters in order to ensure dedicated technical and field process support throughout the United States of America on short notice.

We maintain sales, service and process support capabilities in Japan, Taiwan, Germany, and Italy and service/support operations in Austria and China. In addition to our international direct sales and support organizations, we also market our systems through independent sales representatives in Israel, India, Turkey, China, South Korea and Singapore and selected markets in Japan.

International sales, which consist of export sales from the United States of America either directly to the end user or to one of our foreign subsidiaries, accounted for approximately 67%, 66% and 67% of total revenue for fiscal 2004, 2003 and 2002, respectively. Revenues by region for each of the last three fiscal years were as follows:

	Years Ended March 31,		
	2004	2003	2002
United States	$ 5,538	$ 4,864	$ 7,168
Asia, excluding Japan	1,241	1,537	3,903
Japan	6,485	2,934	4,094
Germany	170	353	731
Italy	1,480	1,851	2,617
Europe, excluding Germany and Italy	1,614	2,561	3,093
Total sales	$ 16,528	$ 14,100	$ 21,606

We generally sell our systems on 30-to-60 day credit terms to our domestic and European customers. Customers in the Pacific Rim countries, other than Japan, are generally required to deliver a letter of credit payable in U.S. dollars upon system shipment. Sales to other international customers, including Japan, are billed either in local currency or U.S. dollars. We anticipate that international sales will continue to account for a significant portion of revenue in the foreseeable future.

We generally warrant our new systems for 12 months and our refurbished systems for six months from shipment. Our field engineers provide customers with call-out repair and maintenance services for a fee. Customers may also enter into repair and maintenance service contracts covering our systems. We train customer service engineers to perform routine service for a fee and provide telephone consultation services generally free of charge.

The sales cycles for our systems vary depending upon whether the system is an initial design-in, reorder or used equipment. Initial design-in sales cycles are typically 12 to 18 months, particularly for 6500 and Endeavor series systems. In contrast, reorder sales cycles are typically four to six months, and used system sales cycles are generally one to three months. The initial design-in sales cycle begins with the generation of a sales lead, which is followed by qualification of the lead, an analysis of the customer's particular applications needs and problems, one or more presentations to the customer (frequently including extensive participation by our senior management), two to three wafer sample demonstrations, followed by customer testing of the results and extensive negotiations regarding the equipment's process and reliability specifications. Initial design-in sales cycles are monitored by senior management for correct strategic approach and resource prioritization. We may, in some rare instances, need to provide the customer with an evaluation system for three to six months prior to the receipt of a firm purchase order.

Research and Development

The market for semiconductor capital equipment is characterized by rapid technological change. We believe that continued and timely development of new systems and enhancements to existing systems is necessary for us to maintain our competitive position. Accordingly, we devote a significant portion of our personnel and financial resources to research and development programs and seek to maintain close relationships with our customers in order to be responsive to their system needs.

Our research and development encompasses the following areas: plasma etch, physical vapor deposition and chemical vapor deposition technologies, process characterization and development, material sciences applicable to etch and deposition environments, systems design and architecture, electro-mechanical design and software engineering. Management emphasizes advanced plasma and reactor chamber modeling capabilities in order to accelerate bringing advanced chamber designs to market. We employ multi-discipline teams to facilitate short engineering cycle times and rapid product development.

As of March 31, 2004, we had 21 full-time employees dedicated to equipment design engineering, process support and research and development. Research and development expenses for fiscal 2004, 2003 and 2002 were $3,305, $4,815, and $5,928, respectively, and represented 20.0%, 34.2%, and 27.4% of total revenue, respectively. Such expenditures were primarily used for the development of new processes, continued enhancement and customization of existing systems, processing customer samples in our demonstration labs and providing process engineering support at customer sites. Additionally we had in-process research and development expense of $2,202 which represented 13.3% of revenue for fiscal 2004 that was related to the acquisition of Simplus Systems.

Manufacturing

Our etch systems are produced at our headquarters in Petaluma, California. Deposition systems are currently produced at our facility in Santa Barbara, California. Our manufacturing activities consist of assembling and testing components and sub-assemblies, which are then integrated into finished systems. We have structured our production facilities to be driven either by orders or by forecasts and have adopted a modular system architecture to increase assembly efficiency and design flexibility. We have also implemented “just-in-time” manufacturing techniques in our assembly processes. Through the use of such techniques, 900 series system manufacturing cycle times take approximately 14 days and cycle times for our Endeavor systems and our 6500 series products take two to three months.

Competition

The semiconductor capital equipment industry is highly competitive. We believe that the principal competitive factor in the critical segments of the etch industry is technical performance of the system, followed closely by the existence of customer relationships, the system price, the ability to provide service and technical support on a global basis and other related cost factors. We believe that the principal competitive factor in the non-critical segments of the etch industry is system price, followed closely by the technical performance of the system, the existence of established customer relationships, the ability to provide service and technical support on a global basis and other related cost factors.

Intellectual Property

We hold an exclusive license or ownership of 73 United States of America patents, including both deposition and etch products, and 36 corresponding foreign patents covering various aspects of our systems. We have also applied for 32 additional United States of America patents and 66 additional foreign patents. Of these patents, a few expire as early as 2004, others expire as late as 2022 with the average expiration occurring in approximately 2015. We believe that the duration of such patents generally exceeds the life cycles of the technologies disclosed and claimed therein. We believe that although the patents we have exclusively licensed or hold directly will be of value, they will not determine our success, which depends principally upon our engineering, marketing, service and manufacturing skills. However, in the absence of patent protection, we may be vulnerable to competitors who attempt to imitate our systems, processes and manufacturing techniques. We have signed a non-exclusive field of use license to two of our patents, relating to our strategic application sets. In addition, other companies and inventors may receive patents that contain claims applicable to our systems and processes. The sale of our systems covered by such patents could require licenses that may not be available on acceptable terms, if at all. We also rely on trade secrets and other proprietary technology that we seek to protect, in part, through confidentiality agreements with employees, vendors, consultants and other parties. There can be no assurance that these agreements will not be breached, that we will have adequate remedies for any breach or that our trade secrets will not otherwise become known to or independently developed by others.

The original version of the system software for our 6500 series systems was jointly developed by us and Realtime Performance, Inc., a third-party software vendor. We hold a perpetual, non-exclusive, non-royalty bearing license to use and enhance this software. The enhanced version of the software currently used on our 6500 series systems has undergone multiple releases of the original software, and such enhancements were developed exclusively by us. Neither the software vendor nor any other party has any right to use our current release of the system software. However we cannot make any assurances that this software will not be illegally copied or reversed-engineered by either customers or third-parties.

Employees

As of March 31, 2004, we had a total of 89 regular employees, two part-time contract personnel and two full-time contract personnel. Of our regular employees, eight are in engineering, 13 are in research and development, 21 are in manufacturing and operations, 28 are in marketing, sales and customer service and support and 15 are in executive and administrative positions. Many of our employees are highly skilled, and our success will depend in part upon our ability to attract, retain and develop such employees. Skilled employees, especially employees with extensive technological backgrounds, remain in demand. There can be no assurance we will be able to attract or retain the skilled employees that may be necessary to continue our research and development, manufacturing or marketing programs. The loss of any such persons, as well as the failure to recruit additional key personnel in a timely manner, could have a material adverse effect on us.

None of our employees is represented by a labor union or covered by a collective bargaining agreement. We consider our employee relations to be good.

Risk Factors

We have incurred operating losses and may not be profitable in the future; Our plans to maintain and increase liquidity may not be successful; The report of the independent registered public accounting firm includes a going concern uncertainty explanatory paragraph; The accounting for the 2% convertible debentures resulted in significant expense amounts.

We incurred net losses of $12,602, $12,625 and $8,730 for the years ended March 31, 2004, 2003 and 2002, respectively, and generated negative cash flows from operations of $3,179, $5,984 and $3,603 in these respective years. These factors raise substantial doubt as to our ability to continue as a going concern, and our independent registered public accounting firm has included a going concern uncertainty explanatory paragraph in their report dated June 25, 2004 which is included elsewhere in this Form 10-K. Our plans to maintain and increase liquidity include the restructuring executed during fiscal 2002 and 2003, which reduced headcount from 155 employees to 89 employees and has reduced our cost structure entering fiscal 2005. We believe the cost reduction and a projected increase in sales during fiscal 2005 will generate sufficient cash flows to fund our operations through the end of fiscal 2005. However, these projected sales are to a limited number of new and existing customers and are based, for the most part, on internal and customer provided estimates of future demand, not firm customer orders. If the projected sales do not materialize, we will need to reduce expenses further and raise additional capital through the issuance of debt or equity securities. If additional funds are raised through the issuance of preferred stock or debt, these securities could have rights, privileges or preferences senior to those of our common stock, and debt covenants could impose restrictions on our operations. The sale of equity or debt could result in additional dilution to current stockholders, and such financing may not be available to us on acceptable terms, if at all. Failure to raise additional funds may adversely affect the Company’s ability to achieve its intended business objectives. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded assets or the amount or classification of liabilities or any other adjustments that might be necessary should we be unable to continue as a going concern.

Our 2% convertible debentures due 2011 are convertible at a conversion rate of $0.35 per share, which was lower than the common stock's prices at June 30, 2003, the commitment date for the first tranche and September 8, 2003, the stockholder approval date for the second tranche. Additionally, we granted a 20% warrant coverage to our debenture holders. The value of both the beneficial conversion feature and warrants resulted in a significant debt discount which will be accreted as interest expense over the eight-year life of the debentures. This has resulted in substantial interest expense during fiscal 2004 of $5,251 and will continue to result in substantial interest expense through fiscal 2011 or until the debentures are converted. Approximately 22% of the debentures were not yet converted into shares of our common stock as of March 31, 2004; however as of June 15, 2004 all of these outstanding debentures had been converted into shares of our common stock.

The exercise of outstanding warrants, options and other rights to obtain additional shares will dilute the value of the shares.

As of March 31, 2004, there were warrants exercisable for approximately 3,199,942 shares of our common stock, advisor warrants convertible into 196,129 shares, 23,900 shares issuable as interest payment on previously issued debentures in lieu of cash and options exercisable for approximately 7,390,328 shares of our common stock. In addition, we have warrants outstanding from previous offerings for approximately 1,610,480 shares of our common stock.

The exercise of these warrants and the issuance of the common stock will result in dilution in the value of the shares of our outstanding common stock and the voting power represented thereby. In addition, the exercise price of the warrants may be lowered under the price adjustment provisions in the event of a “dilutive issuance,” that is, if we issue common stock at any time prior to their

maturity at a per share price below such conversion or exercise price, either directly or in connection with the issuance of securities that are convertible into, or exercisable for, shares of our common stock. A reduction in the exercise price may result in the issuance of a significant number of additional shares upon the exercise of the warrants.

The warrants do not establish a "floor" that would limit reductions in such conversion price or exercise price. The downward adjustment of the exercise price of these warrants could result in further dilution in the value of the shares of our outstanding common stock and the voting power represented thereby.

On October 14, 2003, we registered 3,542,436 shares which can be issued as interest payments to the debenture holders in lieu of cash. The number of shares issuable as interest payments is calculated by dividing total interest due over the life of the debentures at 2% per annum by a price per share of $0.35. If we elect to use such shares to pay interest, such issuance will result in dilution to our stockholders.

Sales of substantial amounts of our shares of common stock could cause the price of our common stock to go down.

To the extent the holders of our convertible securities and warrants convert or exercise such securities and then sell the shares of our common stock they receive upon conversion or exercise, our stock price may decrease due to the additional amount of shares available in the market. The subsequent sales of these shares could encourage short sales by our stockholders and others which could place further downward pressure on our stock price. Moreover, holders of these convertible securities and warrants may hedge their positions in our common stock by shorting our common stock, which could further adversely affect our stock price. The effect of these activities on our stock price could increase the number of shares issuable upon future conversions of our convertible securities or exercises of our warrants.

We received stockholder approval to increase the number of authorized shares of common stock to 100,000,000 shares. We may issue additional capital stock, convertible securities and/or warrants to raise capital in the future. In addition, we may elect to pay any accrued interest on the outstanding $1,673 principal amount of debentures as of March 31, 2004 with shares of our common stock. Interest on the debentures is compounded quarter-annually, based on 2% per annum on the principal amount outstanding. In addition, to attract and retain key personnel, we may issue additional securities, including stock options. All of the above could result in additional dilution of the value of our common stock and the voting power represented thereby. No prediction can be made as to the effect, if any, that future sales of shares of our common stock, or the availability of shares for future sale, will have on the market price of our common stock prevailing from time to time. Sales of substantial amounts of shares of our common stock in the public market, or the perception that such sales could occur, may adversely affect the market price of our common stock and may make it more difficult for us to sell our equity securities in the future at a time and price which we deem appropriate. Public or private sales of substantial amounts of shares of our common stock by persons or entities that have exercised options and/or warrants could adversely affect the prevailing market price of the shares of our common stock.

The semiconductor industry is cyclical and may experience periodic downturns that may negatively affect customer demand for our products and result in losses such as those experienced in the past.

Our business depends upon the capital expenditures of semiconductor manufacturers, which in turn depend on the current and anticipated market demand for integrated circuits. The semiconductor industry is highly cyclical and historically has experienced periodic downturns, which often have had a detrimental effect on the semiconductor industry's demand for semiconductor capital equipment, including etch and deposition systems manufactured by us. In response to the current prolonged industry slow-down, we have initiated a substantial cost containment program and completed a corporate-wide restructuring to preserve our cash. However, the need for continued investment in research and development, possible capital equipment requirements and extensive ongoing customer service and support requirements worldwide will continue to limit our ability to reduce expenses in response to the current downturn.

Our competitors have greater financial resources and greater name recognition than we do and therefore may compete more successfully in the semiconductor capital equipment industry than we can.

We believe that to be competitive, we will require significant financial resources in order to offer a broad range of systems, to maintain customer service and support centers worldwide and to invest in research and development. Many of our existing and potential competitors, including, among others, Applied Materials, Inc., Lam Research Corporation, Novellus and Tokyo Electron Limited, have substantially greater financial resources, more extensive engineering, manufacturing, marketing and customer service and support capabilities, larger installed bases of current generation etch, deposition and other production equipment and broader process equipment offerings, as well as greater name recognition than we do. We cannot assure you that we will be able to compete successfully against these companies in the United States or worldwide.

If we fail to meet the continued listing requirements of the Nasdaq Stock Market, our stock could be delisted.

Our stock is currently listed on The Nasdaq SmallCap Market. The Nasdaq Stock Market's Marketplace Rules impose certain minimum financial requirements on us for the continued listing of our stock. One such requirement is the minimum bid price on our stock of $1.00 per share. Beginning in 2002, there have been periods of time during which we have been out of compliance with the $1.00 minimum bid requirements of The Nasdaq SmallCap Market.

On September 6, 2002, we received notification from Nasdaq that for the 30 days prior to the notice, the price of our common stock had closed below the minimum $1.00 per share bid price requirement for continued inclusion under Marketplace Rule 4450(a)(5) (the "Rule"), and were provided 90 calendar days, or until December 5, 2002, to regain compliance. Our bid price did not close above the minimum during that period. On December 6, 2002, we received notification from Nasdaq that our securities would be delisted from The Nasdaq National Market, the exchange on which our stock was listed prior to May 6, 2003, on December 16, 2002 unless we either (i) applied to transfer our securities to The Nasdaq SmallCap Market, in which case we would be afforded additional time to come into compliance with the minimum $1.00 bid price requirement; or (ii) appealed the Nasdaq staff's determination to the Nasdaq's Listing Qualifications Panel (the "Panel"). On December 12, 2002 we requested an oral hearing before the Panel and such hearing took place on January 16, 2003 in Washington, D.C. Our appeal was based, among other things, on our intention to seek stockholder approval for a reverse split of our outstanding common stock. On April 28, 2003 at a special meeting of our stockholders, our board of directors was granted the authority to effect a reverse split of our common stock within a range of two-for-one to fifteen-for-one. This authority was reaffirmed by our stockholders at the Annual Meeting on September 8, 2003. The timing and ratio of a reverse split, if any, is at the sole discretion of our board of directors, but it must be completed on or before December 2, 2003. On May 6, 2003, we transferred the listing of our common stock to The Nasdaq SmallCap Market. In connection with this transfer, and by additional notice, Nasdaq granted us an extension until December 31, 2003, to regain compliance with the Rule's minimum $1.00 per share bid price requirement for continued inclusion on The Nasdaq SmallCap Market. On September 16, 2003, the bid price for our stock had closed at $1.00 or above for ten consecutive days. On September 17, 2003, we received a letter from Nasdaq confirming that Tegal had regained compliance with the minimum bid price requirement and that the question of its continued listing on The SmallCap Market was now closed.

If we are out of compliance in the future with Nasdaq listing requirements, we may take actions in order to achieve compliance, which actions may include a reverse split of our common stock. If an initial delisting decision is made by the Nasdaq's staff, we may appeal the decision as permitted by Nasdaq rules. If we are delisted and cannot obtain listing on another major market or exchange, our stock's liquidity would suffer, and we would likely experience reduced investor interest. Such factors may result in a decrease in our stock's trading price. Delisting also may restrict us from issuing additional securities or securing additional financing.

We depend on sales of our advanced products to customers that may not fully adopt our product for production use.

We have designed our advanced etch and deposition products for customer applications in emerging new films, polysilicon and metal which we believe to be the leading edge of critical applications for the production of advanced semiconductor and other microelectronic devices. Revenues from the sale of our advanced etch and deposition systems accounted for 40%, 25% and 36% of total revenues in fiscal 2004, 2003 and 2002, respectively. Our advanced systems are currently being used primarily for research and development activities or low volume production. For our advanced systems to achieve full market adoption, our customers must utilize these systems for volume production. There can be no assurance that the market for devices incorporating emerging films, polysilicon or metal will develop as quickly or to the degree we expect.

If our advanced systems do not achieve significant sales or volume production due to a lack of full customer adoption, our business, financial condition, results of operations and cash flows will be materially adversely affected.

Our potential customers may not adopt our products because of their significant cost or because our potential customers are already using a competitor's tool.

A substantial investment is required to install and integrate capital equipment into a semiconductor production line. Additionally, we believe that once a device manufacturer has selected a particular vendor's capital equipment, that manufacturer generally relies upon that vendor's equipment for that specific production line application and, to the extent possible, subsequent generations of that vendor's systems. Accordingly, it may be extremely difficult to achieve significant sales to a particular customer once that customer has selected another vendor's capital equipment unless there are compelling reasons to do so, such as significant performance or cost advantages. Any failure to gain access and achieve sales to new customers will adversely affect the successful commercial adoption of our products and could have a detrimental effect on us.

Our quarterly operating results may continue to fluctuate.

Our revenue and operating results have fluctuated and are likely to continue to fluctuate significantly from quarter to quarter, and there can be no assurance as to future profitability.

Our 900 series etch systems typically sell for prices ranging between $250,000 and $600,000, while prices of our 6500 series critical etch systems and our Endeavor deposition system typically range between $1.8 million and $3.0 million. To the extent we are successful in selling our 6500 and Endeavor series systems, the sale of a small number of these systems will probably account for a substantial portion of revenue in future quarters, and a transaction for a single system could have a substantial impact on revenue and gross margin for a given quarter.

Other factors that could affect our quarterly operating results include:

- our timing of new systems and technology announcements and releases and ability to transition between product versions;
- seasonal fluctuations in sales;
- changes in the mix of our revenues represented by our various products and customers;
- adverse changes in the level of economic activity in the United States or other major economies in which we do business;
- foreign currency exchange rate fluctuations;
- expenses related to, and the financial impact of, possible acquisitions of other businesses; and
- changes in the timing of product orders due to unexpected delays in the introduction of our customers' products, due to lifecycles of our customers' products ending earlier than expected or due to market acceptance of our customers' products.

Because technology changes rapidly, we may not be able to introduce our products in a timely enough fashion.

The semiconductor manufacturing industry is subject to rapid technological change and new system introductions and enhancements. We believe that our future success depends on our ability to continue to enhance our existing systems and their process capabilities, and to develop and manufacture in a timely manner new systems with improved process capabilities. We may incur substantial unanticipated costs to ensure product functionality and reliability early in our products' life cycles. There can be no assurance that we will be successful in the introduction and volume manufacture of new systems or that we will be able to develop and introduce, in a timely manner, new systems or enhancements to our existing systems and processes which satisfy customer needs or achieve market adoption.

Some of our sales cycles are lengthy, exposing us to the risks of inventory obsolescence and fluctuations in operating results.

Sales of our systems depend, in significant part, upon the decision of a prospective customer to add new manufacturing capacity or to expand existing manufacturing capacity, both of which typically involve a significant capital commitment. We often experience delays in finalizing system sales following initial system qualification while the customer evaluates and receives approvals for the purchase of our systems and completes a new or expanded facility. Due to these and other factors, our systems typically have a lengthy sales cycle (often 12 to 18 months in the case of critical etch and deposition systems) during which we may expend substantial funds and management effort. Lengthy sales cycles subject us to a number of significant risks, including inventory obsolescence and fluctuations in operating results over which we have little or no control.

We may not be able to protect our intellectual property or obtain licenses for third parties' intellectual property and therefore we may be exposed to liability for infringement or the risk that our operations may be adversely affected.

Although we attempt to protect our intellectual property rights through patents, copyrights, trade secrets and other measures, we may not be able to protect our technology adequately and competitors may be able to develop similar technology independently. Additionally, patent applications that we may file may not be issued and foreign intellectual property laws may not protect our intellectual property rights. There is also a risk that patents licensed by or issued to us will be challenged, invalidated or circumvented and that the rights granted thereunder will not provide competitive advantages to us. Furthermore, others may independently develop similar systems, duplicate our systems or design around the patents licensed by or issued to us.

Litigation could result in substantial cost and diversion of effort by us, which by itself could have a detrimental effect on our financial condition, operating results and cash flows. Further, adverse determinations in such litigation could result in our loss of proprietary rights, subject us to significant liabilities to third parties, require us to seek licenses from third parties or prevent us from manufacturing or selling our systems. In addition, licenses under third parties' intellectual property rights may not be available on reasonable terms, if at all.

Our customers are concentrated and therefore the loss of a significant customer may harm our business.

Our top five customers accounted for 84.8%, 88.2% and 54.4% of our systems revenues in fiscal 2004, 2003 and 2002, respectively. Three customers each accounted for more than 10% of net systems sales in fiscal 2004. Although the composition of the group comprising our largest customers may vary from year to year, the loss of a significant customer or any reduction in orders by any significant customer, including reductions due to market, economic or competitive conditions in the semiconductor manufacturing industry, may have a detrimental effect on our business, financial condition, results of operations and cash flows. Our ability to increase our sales in the future will depend, in part, upon our ability to obtain orders from new customers, as well as the financial condition and success of our existing customers and the general economy, which is largely beyond our ability to control.

We are exposed to additional risks associated with international sales and operations.

International sales accounted for 67%, 66% and 67% of total revenue for fiscal 2004, 2003 and 2002, respectively. International sales are subject to certain risks, including the imposition of government controls, fluctuations in the U.S. dollar (which could increase the sales price in local currencies of our systems in foreign markets), changes in export license and other regulatory requirements, tariffs and other market barriers, political and economic instability, potential hostilities, restrictions on the export or import of technology, difficulties in accounts receivable collection, difficulties in managing representatives, difficulties in staffing and managing international operations and potentially adverse tax consequences. There can be no assurance that any of these factors will not have a detrimental effect on our operations, financial results and cash flows.

We generally attempt to offset a portion of our U.S. dollar denominated balance sheet exposures subject to foreign exchange rate remeasurement by purchasing forward currency contracts for future delivery. There can be no assurance that our future results of operations and cash flows will not be adversely affected by foreign currency fluctuations. In addition, the laws of certain countries in which our products are sold may not provide our products and intellectual property rights with the same degree of protection as the laws of the United States.

Evolving regulation of corporate governance and public disclosure may result in additional expenses and continuing uncertainty.

Changing laws, regulations and standard relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, new SEC regulations and Nasdaq National Market rules are creating uncertainty for public companies. We continually evaluate and monitor developments with respect to new and proposed rules and cannot predict or estimate the amount of the additional costs we may incur or the timing of such costs. These new or changed laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We are committed to maintaining high standards of corporate governance and public disclosure. As a result, we have invested resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities. If our efforts comply with new or changed laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us and we may be harmed.

We must integrate our acquisition of Simplus Systems Corporation and we may need to make additional future acquisitions to remain competitive. The process of identifying, acquiring and integrating future acquisitions may constrain valuable management resources, and our failure to effectively integrate future acquisitions may result in the loss of key employees and the dilution of stockholder value and have an adverse effect on our operating results.

On November 11, 2003, we acquired substantially all of the assets of Simplus Systems Corporation. We may in the future seek to acquire or invest in additional businesses, products or technologies that we believe could complement or expand our business, augment our market coverage, enhance our technical capabilities or that may otherwise offer growth opportunities. We may encounter problems with the assimilation of Simplus or businesses, products or technologies acquired in the future including:

- difficulties in assimilation of acquired personnel, operations, technologies or products;
- unanticipated costs associated with acquisitions;
- diversion of management's attention from other business concerns and potential disruption of our ongoing business;
- adverse effects on our existing business relationships with our customers;
- potential patent or trademark infringement from acquired technologies;
- adverse effects on our current employees and the inability to retain employees of acquired companies;
- use of substantial portions of our available cash as all or a portion of the purchase price;
- dilution of our current stockholders due to the issuance of additional securities as consideration for acquisitions; and
- inability to complete acquired research and development projects.

If we are unable to successfully integrate our acquired companies or to create new or enhanced products and services, we may not achieve the anticipated benefits from our acquisitions. If we fail to achieve the anticipated benefits from the acquisitions, we may incur increased expenses and experience a shortfall in our anticipated revenues and we may not obtain a satisfactory return on our investment. In addition, if a significant number of employees of acquired companies fail to remain employed with us, we may experience difficulties in achieving the expected benefits of the acquisitions.

Completing any potential future acquisitions could cause significant diversions of management time and resources. Financing for future acquisitions may not be available on favorable terms, or at all. If we identify an appropriate acquisition candidate for any of our businesses, we may not be able to negotiate the terms of the acquisition successfully, finance the acquisition or integrate the acquired business, products, technologies or employees into our existing business and operations. Future acquisitions may not be well-received by the investment community, which may cause our stock price to fall. We have not entered into any agreements or understanding regarding any future acquisitions and cannot ensure that we will be able to identify or complete any acquisition in the future.

If we acquire businesses, new products or technologies in the future, we may be required to amortize significant amounts of identifiable intangible assets and we may record significant amounts of goodwill that will be subject to annual testing for impairment. If we consummate one or more significant future acquisitions in which the consideration consists of stock or other securities, our existing stockholders' ownership could be significantly diluted. If we were to proceed with one or more significant future acquisitions in which the consideration included cash, we could be required to use a substantial portion of our available cash.

Our financial performance may adversely affect the morale and performance of our personnel and our ability to hire new personnel.

Our common stock has declined in value below the exercise price of many options granted to employees pursuant to our stock option plans. Thus, the intended benefits of the stock options granted to our employees, the creation of performance and retention incentives, may not be realized. As a result, we may lose employees whom we would prefer to retain. As a result of these factors, our remaining personnel may seek employment with larger, more established companies or companies perceived as having less volatile stock prices.

Provisions in our agreements, charter documents, stockholder rights plan and Delaware law may deter takeover attempts, which could decrease the value of your shares.

Our certificate of incorporation and bylaws and Delaware law contain provisions that could make it more difficult for a third party to acquire us without the consent of our board of directors. Our board of directors has the right to issue preferred stock without stockholder approval, which could be used to dilute the stock ownership of a potential hostile acquirer. Delaware law imposes some restrictions on mergers and other business combinations between us and any holder of 15% or more of our outstanding common stock.

In addition, we have adopted a stockholder rights plan that makes it more difficult for a third party to acquire us without the approval of our board of directors. These provisions apply even if the offer may be considered beneficial by some stockholders.

Our stock price is volatile and could result in a material decline in the value of your investment in Tegal.

We believe that factors such as announcements of developments related to our business, fluctuations in our operating results, sales of our common stock into the marketplace, failure to meet or changes in analysts' expectations, general conditions in the semiconductor industry or the worldwide economy, announcements of technological innovations or new products or enhancements by us or our competitors, developments in patents or other intellectual property rights, developments in our relationships with our customers and suppliers, natural disasters and outbreaks of hostilities could cause the price of our common stock to fluctuate substantially. In addition, in recent years the stock market in general, and the market for shares of small capitalization stocks in particular, have experienced extreme price fluctuations, which have often been unrelated to the operating performance of affected companies. There can be no assurance that the market price of our common stock will not experience significant fluctuations in the future, including fluctuations that are unrelated to our performance.

Potential disruption of our supply of materials required to build our systems could have a negative effect on our operations and damage our customer relationships.

Materials delays have not been significant in recent years. Nevertheless, we procure certain components and sub-assemblies included in our systems from a limited group of suppliers, and occasionally from a single source supplier. For example, we depend on MECS Corporation, a robotic equipment supplier, as the sole source for the robotic arm used in all of our 6500 series systems. We currently have no existing supply contract with MECS Corporation, and we currently purchase all robotic assemblies from MECS Corporation on a purchase order basis. Disruption or termination of certain of these sources, including our robotic sub-assembly source, could have an adverse effect on our operations and damage our relationship with our customers.

Any failure by us to comply with environmental regulations imposed on us could subject us to future liabilities.

We are subject to a variety of governmental regulations related to the use, storage, handling, discharge or disposal of toxic, volatile or otherwise hazardous chemicals used in our manufacturing process. We believe that we are currently in compliance in all material respects with these regulations and that we have obtained all necessary environmental permits generally relating to the discharge of hazardous wastes to conduct our business. Nevertheless, our failure to comply with present or future regulations could result in additional or corrective operating costs, suspension of production, alteration of our manufacturing processes or cessation of our operations.

The structured secondary offering facility we entered into in February 2004 and amended in May 2004 may have a dilutive impact on our stockholders, and the potential unavailability of this facility would negatively impact our financing activities.

On February 11, 2004, we entered into a structured secondary offering facility (the "Structured Secondary") with Kingsbridge Capital Limited ("Kingsbridge"), which was amended on May 19, 2004. Under the terms of an Amended and Restated Common Stock Purchase Agreement (the "Purchase Agreement") entered into by the Company and Kingsbridge on May 19, 2004 with respect to the Structured Secondary, we may, at our sole discretion, sell to Kingsbridge, and Kingsbridge would be obligated to purchase, up to $25 million of shares of our common stock, par value $0.01 per share. The price at which we may sell shares of common stock under the Purchase Agreement is based on a discount to the volume weighted average market price of the common stock for a specified number of trading days following each of our respective elections to sell shares thereunder. The lowest threshold price at which our stock may be sold is at the sole discretion of the Company, but in no case may be lower than $1.00 per share, and in the event the price of our common stock falls below this $1.00 threshold, the Structured Secondary will not be an available source of financing. We may utilize the Structured Secondary through February 11, 2004 from time to time in our sole discretion, subject to various conditions and terms contained in the Purchase Agreement. Among the terms of the Purchase Agreement is a "Material Adverse Effect" clause which permits Kingsbridge to terminate the Structured Secondary if Kingsbridge determines that an event has occurred that results in any effect on the business, operations, properties or financial condition of the Company and its subsidiaries that is material and adverse to the Company and such subsidiaries, taken as a whole, and/or any condition, circumstance, or situation that would prohibit or otherwise interfere with our ability to perform any of our obligations under the Purchase Agreement.

In connection with our entering into the Structured Secondary, we issued to Kingsbridge a warrant (the "Warrant") to purchase 300,000 shares of common stock at an exercise price of $4.11 per share. The Warrant will not be exercisable until August 11, 2004, and will expire on August 11, 2009.

There are 9,151,661 shares of our common stock that are reserved for issuance under the Structured Secondary with Kingsbridge, 300,000 of which are issuable under the Warrant we granted to Kingsbridge. The issuance of shares under the Structured Secondary and upon exercise of the Warrant will have a dilutive impact on other stockholders and the issuance or even potential issuance of such shares could have a negative effect on the market price of our common stock. In addition, if we draw down the Structured Secondary, we will issue shares to Kingsbridge at a discount of 10% of the daily volume weighted average prices of our common stock during a specified period of trading days after initiation of each respective draw down. Issuing shares at such a discount will further dilute the interests of other stockholders.

To the extent that Kingsbridge sells shares of our common stock issued under the Structured Secondary to third parties, our stock price may decrease due to the additional selling pressure in the market. The perceived risk of dilution from sales of stock to or by Kingsbridge may cause holders of our common stock to sell their shares, or it may encourage short sales. This could contribute to a decline in our stock price.

The Structured Secondary imposes certain limitations on our ability to issue equity or equity-linked securities.

During the two-year term of the Structured Secondary, we may not engage in certain equity or equity-linked financings without the prior written consent of Kingsbridge, which consent will not be unreasonably withheld, conditioned or delayed. However, we may engage in the following capital raising transactions without Kingsbridge's consent: (1) establish stock option or award plans or agreements (for directors, employees, consultants and/or advisors) and amend such plans or agreements, including increasing the number of shares available thereunder, (2) use equity securities to finance the acquisition of other companies, equipment, technologies or lines of business, (3) issue shares of common stock and/or preferred stock in connection with our option or award plans, stock purchase plans, rights plans, warrants or options, (4) issue shares of common stock and/or preferred stock in connection with the acquisition of products, licenses, equipment or other assets and strategic partnerships or joint ventures (the primary purpose of which is not to raise equity capital); (5) issue shares of common and/or preferred stock to consultants and/or advisors as consideration for services rendered, (6) issue and sell shares in an underwritten public offering of common stock, and (7) issue shares of common stock to Kingsbridge under any other agreement entered into between our company and Kingsbridge.

In addition, we may not issue securities that are, or may become, convertible or exchangeable into shares of common stock where the purchase, conversion or exchange price for such common stock is determined using a floating or otherwise adjustable discount to the market price of the common stock (including pursuant to an equity line or other financing that is substantially similar to an equity line with an investor other than Kingsbridge) during the two-year term of our agreement with Kingsbridge.

We may issue additional shares and dilute your ownership percentage.

Certain events over which you have no control could result in the issuance of additional shares of our common stock, which would dilute your ownership percentage in our company. As of March 31, 2004, there were 36,583,850 shares of our common stock issued and outstanding and there were 533,521 shares of common stock reserved for issuance under our equity incentive and stock purchase plans. In addition, as of March 31, 2004, there were outstanding options, warrants and other rights to acquire up to approximately 7,390,000 shares of common stock. We may also issue additional shares of common stock or preferred stock:

- to raise additional funds for working capital, commercialization, production and marketing activities;
- upon the exercise or conversion of additional outstanding options and warrants; and
- in lieu of cash payment of dividends.

Moreover, although the issuance of our common stock under the Structured Secondary will have no effect on the rights or privileges of existing holders of common stock, the economic and voting interests of each stockholder will be diluted as a result of such issuance. Although the number of shares of common stock that stockholders presently own will not decrease, such shares will represent a smaller percentage of our total shares that will be outstanding after such events. If we satisfy the conditions that allow us to draw down the entire $25 million available under the Structured Secondary, and we choose to do so, then generally, as the market price of our common stock decreases, the number of shares we will have to issue upon each draw down on the Structured Secondary increases, to a maximum of 8,851,661 shares. Therefore drawing down upon the Structured Secondary when the price of our common stock is decreasing will have an additional dilutive effect to your ownership percentage and may result in additional downward pressure on the price of our common stock.

Special Note Regarding Forward Looking Statements

This Form 10-K includes or incorporates by reference forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Forward-looking statements, which are based on assumptions and describe our future plans, strategies and expectations, are generally identifiable by the use of the words "anticipate," "believe," "estimate," "expect," "intend," "project," or similar expressions. These forward-looking statements are subject to risks, uncertainties and assumptions about us. Important factors that could cause actual results to differ materially from the forward-looking statements we make in this Form 10-K are set forth under the caption "Risk Factors" and elsewhere in this prospectus and the documents incorporated by reference in this Form 10-K. If one or more of these risks or uncertainties materialize, or if any underlying assumptions prove incorrect, our actual results, performance or achievements may vary materially from any future results, performance or achievements expressed or implied by these forward-looking statements. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirely by the cautionary statements in this paragraph.

Item 2. ***Properties***

We maintain our headquarters, encompassing our executive office, manufacturing, engineering and research and development operations, in one leased 45,064 square foot facility in Petaluma, California. The lease, which was signed on April 30, 2004, and is filed as an exhibit to this Form 10-K, expires on December 31, 2009. The prior lease for the same facility was due to expire in March 2004. In the prior lease, we leased 120,000 sq. ft. and occupied 80,000 sq. ft., with the balance subleased or available for sublease. The new lease for 57,418 sq. ft. is for the occupied space only and the sub-tenants' leases have been assigned to the landlord. Other than certain large pieces of capital equipment leased by us, we own substantially all of the machinery and equipment used in our facilities. We believe that our existing facilities are adequate to meet our requirements for several years.

We lease an 18,000 square foot facility in Santa Barbara, California for manufacturing and support of Sputtered Films tools. We currently occupy about 10,700 sq. ft. with the remaining portion being sublet. The lease expires in September 2005 with an option to extend for three additional years.

We lease sales, service and process support space in Munich, Germany; Kawasaki, Japan; Catania, Italy; and Hsin Chu City, Taiwan.

Item 3. ***Legal Proceedings***

Sputtering Films, Inc. v. Advanced Modular Sputtering, et al., filed in Santa Barbara County Superior Court.

Our subsidiary, Sputtered Films, Inc. ("SFI") filed an action against two former employees, Sergey Mishin and Rose Stuart-Curran, and the company they formed after leaving SFI, Advanced Modular Sputtering ("AMS"), alleging misappropriation of trade secrets, violation of signed employee Secrecy Agreements, unfair business practices and other claims arising out of AMS's apparent possession and use of SFI's drawings and specifications for SFI's Endeavor Sputtering Machine and the Series IV S-Gun. SFI believes that the sputtering tools marketed by AMS result from unauthorized use of SFI's drawings, specifications and other trade secret technology. The case was filed in December 2003, and a trial is anticipated prior to the end of 2004.

.

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

No matter was submitted to a vote of security holders during the fourth quarter of fiscal year 2004.

PART II

Item 5. ***Market for the Registrant's Common Equity, Related Stockholder Matters and Issue Purchases of Equity Securities***

Since May 6, 2003, our common stock has traded on the Nasdaq SmallCap Market under the symbol TGAL. Prior to this date, our common stock traded on the Nasdaq National Market since October 19, 1995. The following table sets forth the range of high and low sales prices for our common stock for each quarter during the prior two fiscal years.

	High	Low
FISCAL YEAR 2003		
First Quarter	$1.420	$0.130
Second Quarter	1.300	0.330
Third Quarter	0.880	0.130
Fourth Quarter	0.790	0.250
FISCAL YEAR 2004		
First Quarter	$0.830	$0.300
Second Quarter	1.640	0.500
Third Quarter	3.150	0.960
Fourth Quarter	4.050	1.790

The approximate number of record holders of our common stock as of March 31, 2004 was 402. We have not paid any cash dividends since our inception and do not anticipate paying cash dividends in the foreseeable future. Further, our domestic line of credit restricts the declaration and payment of cash dividends.

Equity Compensation Plan Information

Plan Category	Number of securities to be issued upon exercise of outstanding options	Weighted-average exercise price of outstanding options	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	(b)	(c)
Equity compensation Plans approved by security holders			
Equity Incentive Plan	1,195,700	$ 4.41	—
1990 Stock Option Plan	158,626	5.73	—
1998 Equity Participation Plan	5,471,002	1.34	533,521
Directors Stock Option Plan	565,000	1.77	—
Total	7,390,328	$ 1.97	533,521

Warrants Outstanding

	Year Ended March 31,		
	2004	2003	2002
Number of securities to be issued upon exercise of outstanding warrants	5,006,551	1,693,552	1,218,552
Weighted-average exercise price of outstanding warrants	$ 1.39	$ 2.77	$ 3.30

Since March 31, 2001, we have issued and sold the following unregistered securities.

Common Stock

On February 11, 2004, we signed a $25 million equity facility with Kingsbridge Capital Limited ("Kingsbridge"). The arrangement will allow the us to sell shares of our common stock to Kingsbridge at our sole discretion over a 24-month period on a "when and if needed" basis. Kingsbridge is required under the terms of the arrangement to purchase our stock following the effectiveness of a registration statement. The price of the common shares issued under the agreement is based on a discount to the volume-weighted average market price during a specified drawdown period. We have no obligation to draw down all or any portion of the commitment. The maximum amount of shares that we may issue to Kingsbridge under the equity facility is 8,851,661.

In connection with the agreement, on February 11, 2004, we issued fully vested warrants to Kingsbridge to purchase 300,000 shares of our common stock at an exercise price of $4.11 per share. This transaction was effected in reliance on Regulation D under the Securities Act.

On December 5, 2003, we closed a transaction in which we purchased substantially all of the assets of Simplus Systems Corporation, a Delaware corporation, in exchange for 1,499,994 shares of our common stock. The transaction was effected in reliance on Regulation D under the Securities Act.

On June 30, 2003, we entered into agreements with investors to raise up to $7,165 in a private placement to institutional and individual investors of (i) an aggregate of $7,165 in principal amount of our 2% convertible debentures, convertible into common stock at $0.35 per share and (ii) warrants to purchase approximately 4,100 shares of our common stock, exercisable at $0.50 per share. The first tranche of approximately $929 of the private placement was completed on June 30, 2003 and the second tranche was completed on September 9, 2003 following shareholder approval. This transaction was effected in reliance on Rule 506 of Regulation D.

On August 30, 2002, we issued and sold 350,000 shares of our common stock to consultants upon exercise of warrants at an exercise price of $1.20 in lieu of cash payments. This transaction was effected in reliance on Rule 501 of Regulation D.

On August 30, 2002, we issued and sold 1,499,987 shares of our common stock in connection with our acquisition of Sputtered Films, Inc., a California corporation ("SFI") pursuant to an Agreement and Plan of Merger dated as of August 13, 2002. The transaction was effected in reliance on Regulation D.

On June 26, 2002, we issued and sold 125,000 shares of our common stock to Silicon Valley Bank upon exercise of a warrant at an exercise price of $2.00. This transaction was effected in reliance on Rule 501 of Regulation D.

On December 31, 2001, we closed a private placement in which we sold to accredited investors 1,661,005 units, each unit consisting of one share of common stock and one warrant to purchase one-half of a share of common stock, for proceeds of $2.2 million, net of $0.1 million in cash stock issuance costs. We also granted to the placement agent warrants to purchase 83,050 shares of our common stock. The warrants have an exercise price of $2.50 per share and expire on December 31, 2006. This transaction was effected in reliance on Regulation D.

Item 6. *Selected Financial Data*

	Year Ended March 31,				
	2004	**2003**	**2002**	**2001**	**2000**
	(In thousands, except per share data)				
Consolidated Statements of Operations Data:					
Revenue	$ 16,528	$ 14,100	$ 21,606	$ 38,205	$ 26,438
Gross profit (loss)	4,647	(66)	6,676	13,915	9,231
Operating loss	(7,180)	(12,617)	(8,235)	(7,226)	(12,932)
Income (loss) before cumulative effect of change in accounting principle (2)	(12,602)	(12,625)	(8,730)	1,096	(12,571)
Net income (loss)	(12,602)	(12,625)	(8,730)	699	(12,571)
Net income (loss) per share: (1)					
Basic	(0.56)	(0.82)	(0.67)	0.06	(1.15)
Diluted	(0.56)	(0.82)	(0.67)	0.05	(1.15)
Shares used in per share computation:					
Basic	22,442	15,311	13,030	12,499	10,964
Diluted	22,442	15,311	13,030	12,838	10,964

	March 31,				
	2004	**2003**	**2002**	**2001**	**2000**
	(In thousands, except per share data)				
Consolidated Balance Sheet Data:					
Cash and cash equivalents	$ 7,049	$ 912	$ 8,100	$ 12,649	$ 12,627
Working capital	8,823	5,041	20,816	26,551	24,993
Total assets	22,658	17,209	29,227	42,252	35,573
Debt obligations (excluding capital leases and 2% convertible debentures)	2,450	426	922	3,884	560
Stockholders' equity	14,955	11,123	22,286	28,609	27,431

(1) See Note 3 of our Consolidated Financial Statements for an explanation of the computation of earnings per share.
(2) During the fourth quarter of fiscal 2001, we implemented SAB 101, retroactive to the beginning of the fiscal year. This was reported as a cumulative effect of a change in accounting principle as of April 1, 2000. The cumulative effect of the change in accounting principle on prior years resulted in a charge to income of $397 (net of income taxes of $25), which was included in income for the year ended March 31, 2001. For fiscal 2001, we recognized $478 in revenue that was included in the cumulative effect of the change in accounting principle.

Item 7. ***Management's Discussion and Analysis of Financial Condition and Results of Operations***

Information contained herein contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, which can be identified by the use of forward-looking terminology such as "may," "will," "expect," "anticipate," "estimate" or "continue" or the negative thereof or other variations thereon or comparable terminology or which constitute projected financial information. The following contains cautionary statements identifying important factors with respect to such forward-looking statements, including certain risks and uncertainties, that could cause actual results to differ materially from those in such forward-looking statements. See "Risk Factors."

Company Overview

Tegal Corporation, a Delaware corporation ("Tegal"), designs, manufactures, markets and services plasma etch and deposition systems that enable the production of integrated circuits ("ICs"), memory and related microelectronics devices used in personal computers, wireless voice and data telecommunications, contact-less transaction devices, radio frequency identification devices ("RFID's"), smart cards, data storage and micro-level actuators. Etching and deposition constitute two of the principal IC and related device production process steps and each must be performed numerous times in the production of such devices.

We were formed in December 1989 to acquire the operations of the former Tegal Corporation, a division of Motorola, Inc. ("Motorola"). Our predecessor company was founded in 1972 and acquired by Motorola in 1978. We completed our initial public offering in October 1995.

On August 30, 2002, we acquired Sputtered Films, Incorporated ("SFI"), a privately held California corporation, pursuant to an Agreement and Plan of Merger dated August 13, 2002. SFI is a leader in the design, manufacture and service of high performance physical vapor deposition sputtering systems for the semiconductor and semiconductor packaging industry. SFI was founded in 1967 with the development of the S-Gun, a core technology of the acquired company.

On November 11, 2003, we acquired substantially all of the assets and certain liabilities of Simplus Systems Corporation, ("Simplus"), a development stage company, pursuant to an asset purchase agreement. Simplus had developed a deposition cluster tool and certain patented processes for barrier, copper seed and high-K dielectric applications. Simplus had coined the term "nano-layer deposition" or "NLD" to describe its unique approach to chemical vapor deposition ("CVD"). The Company is continuing to develop these NLD processes and related tools, and is in the process of marketing them to a limited number of key customers and joint development partners.

Critical Accounting Policies and Estimates

Our discussion and analysis of the financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to inventory, warranty obligations, purchase order commitments, bad debts, income taxes, intangible assets, restructuring and contingencies and litigation. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements:

Revenue Recognition

Revenue is only recognized when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the sales price is fixed or determinable, and collectibility is reasonably assured. We defer revenue recognition for new product sales until both installation and customer acceptance has occurred. For sales of existing products, upon the transfer of title and risk of loss, revenue is recorded at the lesser of the fair value of the equipment or the contractual amount billable upon shipment. The remainder is recorded as deferred revenue and recognized as revenue upon installation and customer acceptance. Revenue for spare part sales is generally recognized upon shipment. Services revenue is recognized as the related services are provided, unless

services are paid for in advance according to service contracts, in which case revenue is deferred and recognized over the service period using the straight-line method.

Accounts Receivable – Allowance for Sales Returns and Doubtful Accounts

We maintain an allowance for doubtful accounts receivable for estimated losses resulting from the inability of our customers to make required payments. If the financial condition of our customers were to deteriorate, or even a single customer was otherwise unable to make payments, additional allowances may be required. Given the average selling prices of our systems, a single customer default could have a material adverse effect on our consolidated financial position, results of operations, and cash flows. In addition we maintain an allowance for product returns.

Inventories

Inventories are stated at the lower of cost or market, reduced by provisions for excess and obsolescence. Cost is computed using standard cost, which approximates actual cost on a first-in, first-out basis and includes material, labor and manufacturing overhead costs. We estimate the effects of excess and obsolescence on the carrying values of our inventories based upon estimates of future demand and market conditions. We establish provisions for related inventories in excess of production demand. Should actual production demand differ from our estimates, additional inventory write-downs may be required, as was the case in the third quarter of fiscal 2004. Any excess and obsolete provision is released only if and when the related inventories is sold or scrapped.

Impairment of Long-Lived Assets

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If undiscounted expected future cash flows are less than the carrying value of the assets, an impairment loss is recognized based on the excess of the carrying amount over the fair value of the assets. No impairment charge has been recorded for the years ended 2004, 2003 and 2002, respectively.

Warranty Obligations

We provide for the estimated cost of our product warranties at the time revenue is recognized. Our warranty obligation is affected by product failure rates, material usage rates and the efficiency by which the product failure is corrected. Should actual product failure rates, material usage rates and labor efficiencies differ from our estimates, revisions to the estimated warranty liability may be required.

Deferred Taxes

We record a valuation allowance to reduce our deferred tax assets to the amount that is more likely than not to be realized. Based on the uncertainty of future taxable income, we have fully reserved our deferred tax assets as of March 31, 2004 and 2003. In the event we were to determine that we would be able to realize our deferred tax assets in the future, an adjustment to the deferred tax asset would increase income in the period such determination was made.

Results of Operations

Tegal designs, manufactures, markets and services plasma etch and deposition systems that enable the production of integrated circuits ("ICs"), memory and related microelectronics devices used in personal computers, wireless voice and data telecommunications, contact-less transaction devices, radio frequency identification devices ("RFID's"), smart cards, data storage and micro-level actuators. With the acquisitions of Sputtered Films and Simplus Systems Corporation we now also provide deposition capabilities. The acquisition of Sputtered Films secured a source for a complementary deposition technology for our new materials strategy. Simplus has developed a deposition cluster tool and certain patented processes for barrier, copper seed and high-K dielectric applications. Simplus coined the term "nano-layer deposition" or "NLD" to describe its unique approach to chemical vapor deposition ("CVD").

The following table sets forth certain financial data for the years indicated as a percentage of revenue:

	Year ended March 31,		
	2004	2003	2002
Revenue	100.0%	100.0%	100.0%
Cost of revenue	71.9	100.5	69.1
Gross profit (loss)	28.1	(0.5)	30.9
Operating expenses:			
Research and development expenses	20.0	34.2	27.4
Sales and marketing expenses	14.2	20.7	18.5
General and administrative expenses	24.0	34.1	23.1
In-process research and development	13.3	—	—
Total operating expenses	71.5	89.0	69.0
Operating loss	(43.4)	(89.5)	(38.1)
Other expense, net	(32.8)	—	(2.3)
Net loss	(76.2)%	(89.5)%	(40.4)%

Years Ended March 31, 2004, 2003 and 2002

Revenue

Our revenue is derived from sales of new and refurbished systems, spare parts and non-warranty service. Revenue increased 17 percent in fiscal 2004 from fiscal 2003 (to $16,528 from $14,100). The revenue increase in fiscal 2004 as compared to fiscal 2003 was principally attributable to the mix of higher priced systems and two large upgrades on critical etch tools. Spares and service sales were flat year to year. Our revenue is derived from sales of new and refurbished systems, spare parts and non-warranty service. Revenue decreased 35 percent in fiscal 2003 from fiscal 2002 (to $14,100 from $21,606). The revenue decrease in fiscal 2003 compared to fiscal 2002 was principally attributable to a sharp decrease in the sale of our 900 series systems during the economic slow down and two fewer 6500 series system sales, offset in part by the sale of one Endeavor system, in addition to lower spares and service sales. We believe the lower spares and service sales is the result of lower usage of the systems previously installed, occurring naturally as a result of lower capacity utilization by our customers..

International sales accounted for approximately 67, 66 and 67 percent of total revenue in fiscal 2004, 2003 and 2002, respectively. We expect that international sales will continue to account for a significant portion of our revenue.

Gross Profit (Loss)

Our gross profit (loss) as a percentage of revenue (gross margin) increased to 28.1 percent in fiscal 2004 compared to (0.5) percent in fiscal 2003. The gross margin increase in fiscal 2004 as compared to fiscal 2003 was principally due to increased sales activity and better absorption of overhead accompanied by reduced department expenses in operations and service. Additionally we had a provision for excess and obsolete inventory of approximately $967 in the third quarter of 2004 as compared to a provision of $1,922 in the second quarter of 2003. Our gross profit (loss) as a percentage of revenue (gross margin) decreased to (0.5) percent in fiscal 2003 compared to 31 percent in fiscal 2002. The gross margin decrease in fiscal 2003 as compared to fiscal 2002 was principally due to provisions for excess and obsolete inventory for approximately $1,922 in the second quarter, accompanied by lower gross margins for system sales because of lower volumes and continued high overhead costs. None of the written down inventory was sold in fiscal year 2004 or fiscal year 2003.

Our gross profit as a percentage of revenue has been, and will continue to be, affected by a variety of factors, including the mix and average selling prices of systems sold and the costs to manufacture, service and support new product introductions and enhancements. Gross margins for our 6500 series systems are typically lower than those of our more mature 900 series systems due to the inefficiencies and lower vendor discounts associated with lower order volumes and increased service, installation and warranty support. However, gross profit improvement is one of our highest priorities. We believe that the results of our overhead reductions, will begin to exhibit themselves in gross profit improvements, especially as our sales volume increases.

Research and Development

Research and development expenses consist primarily of salaries, prototype material and other costs associated with our research and development efforts. In absolute dollars, research and development expenses decreased to $3,305 in fiscal 2004 from $4,815 in fiscal 2003. The absolute dollar decrease in fiscal 2004 expenses from fiscal year 2003 was due primarily to cuts in expenses within non-essential programs. As a percentage of revenue, research and development decreased to 20.0 percent from 34.2 percent in fiscal 2003. In absolute dollars, research and development expenses decreased to $4,815 in fiscal 2003 from $5,928 in fiscal 2002. The absolute dollar decrease in fiscal 2003 expenses from fiscal 2002 was due primarily to cuts in expenses. As a percentage of revenue, research and development increased to 34.2 percent in fiscal 2003 from 27.4 percent in fiscal 2002. Although our research and development expense in absolute dollars is decreasing year over year, we continue to maintain active development efforts in support of our new materials strategy. For several years, our research and development efforts have been focused primarily on customer needs for process solutions rather than hardware developments, which typically require substantially more investment.

Sales and Marketing

Sales and marketing expenses primarily consist of salaries, commissions, trade show promotion and advertising expenses. In absolute dollars, sales and marketing expenses decreased to $2,347 in fiscal 2004 from $2,922 in fiscal 2003. As a percentage of revenue, sales and marketing expenses decreased to 14.2 percent in fiscal 2004 from 20.7 percent in fiscal 2003. The absolute dollar decrease in fiscal 2004 from fiscal 2003 was primarily due to our cuts in expenses, such as a reduced presence at regional trade shows and conferences and lower advertising expenses. In absolute dollars, sales and marketing expenses decreased to $2,922 in fiscal 2003 from $3,996 in fiscal 2002. As a percentage of revenue, sales and marketing expenses increased to 20.7 percent in fiscal 2003 from 18.5 percent in fiscal 2002. The absolute dollar decrease in fiscal 2003 from fiscal 2002 was primarily due to our cuts in expenses. Additionally we have converted from direct sales to manufacturer's representatives in some foreign markets where business is very light. Nevertheless, we believe that we have sufficient coverage in our foreign markets to ensure that we are under consideration by customers who are in a position to commit funds to capital equipment purchases.

General and Administrative

General and administrative expenses consist of salaries, legal, accounting and related administrative services and expenses associated with general management, finance, information systems, human resources and investor relation's activities. General and administrative expenses in absolute dollars decreased to $3,973 in fiscal 2004 from $4,814 in fiscal 2003. The absolute dollar decreases in spending were related to continued strategic expense cuts across all functions. As a percentage of revenues, general and administrative expenses decreased to 24.0 percent, from 34.1 percent in fiscal 2003. General and administrative expenses in absolute dollars decreased slightly to $4,814 in fiscal 2003 from $4,987 in fiscal 2002. The absolute dollar decreases in spending were related to continued strategic expense cuts, offset in part by the cost of the acquisition of Sputtered Films and their operations in August 2002. As a percentage of revenues, general and administrative expenses increased to 34.1 percent, up from 23.1 percent in fiscal 2002. We continue to seek improvements in productivity in all general and administrative expense areas through reduction and cross training of personnel, tighter management of outside service providers and the lowering of costs associated with being a public company.

In-Process Research & Development

In-process Research & Development (“IPR&D”) consists of those products obtained through acquisition that are not yet proven to be technologically feasible but have been developed to a point where there is value associated with them in relation to potential future revenue. Because technological feasibility was not yet proven and no alternative future uses are believed to exist for the in-process technologies, the assigned value of $2,202 was expensed immediately upon the date of the acquisition.

The fair value underlying the $2,202 assigned to IPR&D in the Simplus acquisition was determined by identifying research projects in areas for which technological feasibility had not been established and there was no alternative future use. Projects in the IPR&D category are certain design change improvements on the existing 150 mm and 200 mm systems and the development of a 300 mm system. The design change improvements on the existing systems is estimated to cost approximately $500,000 to $1 million, is

approximately 90% complete and will be completed by December 31, 2004. The development of a 300 mm system is estimated to be approximately 10% complete, and to cost between $2 Million and $4 Million over the next two to four years, as market demand materializes.

The IPR&D value of $2,202 was determined by an income approach where fair value is the present value of projected free cash flows that will be generated by the products incorporating the acquired technologies under development, assuming they are successfully completed. The estimated net free cash flows generated by the products over a seven-year period were discounted at a rate of 32% percent in relation to the stage of completion and the technical risks associated with achieving technological feasibility. The net cash flows for such projects were based on management's estimates of revenue, expenses and asset requirements. Any delays or failures in the completion of these projects could impact expected return on investment and future results of operations. In addition, our financial condition would be adversely affected if the value of other intangible assets acquired became impaired.

All of these projects have completion risks related to functionality, architecture performance, process technology availability, continued availability of key technical personnel, product reliability and availability of software support. To the extent that estimated completion dates are not met, the risk of competitors' product introductions is greater and revenue opportunity may be permanently lost.

Other Expense, Net

Other expense, net consists principally of, interest income, interest expense and gains and losses on foreign exchange. We recorded net non-operating expense of $5,422 in fiscal 2004 and $8 in fiscal 2003. In 2004, interest expense increased due to $5,480 of interest expense that was primarily attributable to the accretion of the debt discount and the amortization of the debt issuance costs related to the debenture financing (see Note 7 to the accompanying notes to consolidated financial statements). We recorded net non-operating expense of $8 in fiscal 2003 and $495 in fiscal 2002. In 2003, interest expense was reduced due to reduced borrowings on both the Japanese and domestic lines of credit.

Income Taxes

Our effective tax rate was zero percent in all three fiscal years. No tax benefit was recorded for the losses incurred in fiscal 2004, 2003 and 2002 due to uncertainty related to the realization of such benefits. All deferred tax assets have been fully reserved.

Liquidity and Capital Resources

Net cash used in operations was $3,179 in fiscal 2004, due principally to a net loss of $12,602 offset by non cash expense from depreciation and amortization, warrants issued for services rendered, and non cash interest expense, and a non cash charge for acquired IPR&D related to the Simplus acquisition. Additionally, the net loss is offset by a net decrease in inventory offset by an increase in accounts receivable, and a net decrease in accounts payable, accrued liabilities, and an increase in prepaid expenses and other assets. Net cash used in operations was $5,984, in fiscal 2003, due principally to a loss of $12,625 (after adjusting for depreciation and amortization) and an increase in accounts payable and a decrease in accrued liabilities and deferred revenue, offset in part by a decrease in accounts receivable, inventory and prepaid assets.

Net capital expenditures totaled $254, $479 and $501, in fiscal 2004, 2003 and 2002, respectively. Capital expenditures in all three years were incurred principally for demonstration equipment, leasehold improvements and to acquire design tools, analytical equipment and computers. Fiscal 2003 investing activities also included $184 of cash transaction costs related to the SFI acquisition, net of cash acquired.

Cash proceeds from financing activities totaled $9,734 for fiscal 2004 and were primarily from the sale of debentures and the subsequent exercise of common stock warrants by service providers and debenture holders and borrowing on the domestic and Japanese lines of credit. Net cash used in financing activities totaled $820 for fiscal 2003 primarily related to the repayment of the domestic and Japanese lines of credit.

On January 19, 2004, the Company entered into a new line of credit with Silicon Valley Bank that will be available until January 19, 2005. The new line of credit has a maximum borrowing capacity of $3.5 million, bears interest of prime plus 1.0% and is collateralized by substantially all of the Company's domestic and Japanese assets. As of March 31, 2004, the Company had $1,347 outstanding under this domestic line of credit, which was further limited by the amounts of accounts receivable and inventories on the Company's balance sheet.

On February 11, 2004, the Company signed a $25 million equity facility with Kingsbridge Capital, a firm that specializes in the financing of small to medium sized technology-based companies. The arrangement will allow the Company to sell shares of its common stock to Kingsbridge at its sole discretion over a 24-month period on a "when and if needed" basis. Kingsbridge Capital is required under the terms of the arrangement to purchase Tegal's stock following the effectiveness of a registration statement. The price of the common shares issued under the agreement is based on a discount to the volume-weighted average market price during a specified drawdown period. The Company has no obligation to draw down all or any portion of the commitment.

In connection with the agreement, the Company issued fully vested warrants to Kingsbridge Capital to purchase 300,000 shares of the Company's common stock at an exercise price of $4.11 per share. The fair value of such options, which amounted to approximately $756 was capitalized as a transaction cost and included in other assets. The following variables were used to determine the fair value of such instruments under the Black-Scholes option pricing model: volatility of 114%, term of five years, risk free interest of 3.91% and underlying stock price equal to fair market value at the time of grant.

As of March 31, 2004, the Company’s Japanese subsidiary had $979 outstanding under its line of credit which is collateralized by Japanese customer promissory notes held by such subsidiary in advance of payment on customers’ accounts receivable. The Japanese bank line bears interest at Japanese prime (1.375% as of March 31, 2004) plus 1.0%, and has a total capacity of 150 million yen (approximately $1,420 at exchange rates prevailing on March 31, 2004).

Notes payable as of March 31, 2004 consisted primarily of one outstanding note to the California Trade and Commerce Agency for $124. The unsecured note from the California Trade and Commerce Agency carries an annual interest rate of 5.75% with monthly interest only payments of approximately $4.2 per month. Although the payment deadlines are being met, the note is currently in technical default due to the merger of Sputtered Films and Tegal Corporation.

The Company also entered into a 2% convertible debenture financing which resulted in gross proceeds of $7,165. The terms and conditions of the 2% convertible debentures are described in notes 7 and 13 to the accompanying consolidated financial statements.

In December 2001, the Company issued warrants in conjunction with a private placement. During fiscal year 2004, 62,135 warrants were exercised in the amount of $155.

The consolidated financial statements contemplate the realization of assets and the satisfaction of liabilities in the normal course of business. The Company incurred net losses of $12,602, $12,625 and $8,730 for fiscal 2004, 2003 and 2002, respectively. The Company generated negative cash flows from operations of $3,179, $5,984 and $3,603 for fiscal 2004, 2003 and 2002, respectively. To finance its operations, the Company raised approximately $6,183 in net proceeds from the sale of 2% convertible debentures and exercise of warrants during fiscal 2004 (see Note 7 to the accompanying notes to the consolidated financial statements). Management believes that these proceeds, combined with the effects of its cost compression program, will be adequate to fund operations through fiscal year 2005. However, projected sales may not materialize and unforeseen costs may be incurred**.** If the projected sales do not materialize, the Company will need to reduce expenses further and raise additional capital through the issuance of debt or equity securities. If additional funds are raised through the issuance of preferred stock or debt, these securities could have rights, privileges or preferences senior to those of common stock, and debt covenants could impose restrictions on the Company's operations. The sale of equity or debt could result in additional dilution to current stockholders, and such financing may not be available to the Company on acceptable terms, if at all. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded assets or the amount or classification of liabilities or any other adjustments that might be necessary should the Company be unable to continue as a going concern. Additionally, the 2% convertible debentures agreement includes a material adverse change clause which allows the debenture holders to demand the immediate payment of all outstanding balances upon the debenture holders’ determination of the occurrence of deemed material adverse changes to the Company’s financial condition, business or operations as determined by the debenture holders based on required financial reporting and other criteria. These issues raise substantial doubt about the Company’s ability to continue as a going concern. Our independent accountants have included a going concern explanatory paragraph in their report dated June 25, 2004, included elsewhere in this Form 10-K.

For more information on our capital resources, see “Risk Factors” in Part II, Item 5.

The following summarizes our contractual obligations at March 31, 2004, and the effect such obligations are expected to have on our liquidity and cash flows in future periods (in thousands) excluding 2% convertible debentures which were fully redeemed June 15, 2004:

Contractual obligations:	Total	Less than 1 Year	1-3 Years	3-5 Years	After 5 Years
Non-cancelable capital lease obligations	$ 37	$ 11	$ 24	$ 2	$ -
Non-cancelable operating lease obligations	6,064	1,333	2,034	1,944	753
Notes payable and bank lines of credit, excluding 2% convertible debentures	2,450	2,450	-	-	-
Total contractual cash obligations	$ 8,551	$ 3,794	$ 2,058	$ 1,946	$ 753

Certain sales contracts of the Company include provisions under which customers would be indemnified by the Company in the event of, among other things, a third-party claim against the customer for intellectual property rights infringement related to the Company's products. There are no limitations on the maximum potential future payments under these guarantees. The Company has accrued no amounts in relation to these provisions as no such claims have been made and the Company believes it has valid, enforceable rights to the intellectual property embedded in its products.

Item 7A. ***Quantitative and Qualitative Disclosure about Market Risk***

Market Risk Disclosure

We are exposed to financial market risks, including changes in foreign currency exchange (“FX”) rates and interest rates. To mitigate the risks associated with FX rates, we utilize derivative financial instruments. We do not use derivative financial instruments for speculative or trading purposes.

We manufacture the majority of our products in the United States of America; however, we service customers worldwide and thus have a cost base that is diversified over a number of European and Asian currencies as well as the U.S. dollar. This diverse base of local currency costs serves to mitigate partially the earnings effect of potential changes in value of our local currency denominated revenue. Additionally, we denominate our export sales in U.S. dollars, whenever possible.

We manage short-term exposures to changing FX rates with financial market transactions, principally through the purchase of forward FX contracts to offset the earnings and cash-flow impact of the nonfunctional currency-denominated receivables. Forward FX contracts are denominated in the same currency as the receivable being hedged, and the term of the forward FX contract matches the term of the underlying receivable. The receivables being hedged arise from trade transactions affecting us.

We do not hedge our foreign currency exposures in a manner that would entirely eliminate the effects of changes in FX rates on our operations. Accordingly, our reported revenue and results of operations have been, and may in the future be, affected by changes in the FX rates. We have utilized a sensitivity analysis for the purpose of identifying market risk in relation to underlying transactions that are sensitive to FX rates including foreign currency forward exchange contracts and nonfunctional currency denominated receivables. The net amount that is exposed to changes in foreign currency rates was evaluated against a 10% change in the value of the foreign currency versus the U.S. dollar. Based on this analysis, we believe that we are not materially sensitive to changes in foreign currency rates on our net exposed FX position.

A 43 basis-point move in the weighted average interest rates (10% of our weighted average interest rates in 2004) affecting our floating rate financial instruments as of March 31, 2004 would have an immaterial effect on our pretax results of operations over the next fiscal year. During the year ended March 31, 2004, the company’s hedges were ineffective.

All of the potential changes noted above are based on sensitivity analyses performed on our balances as of March 31, 2004. We also have market risk on their fixed rate debt (2% convertible debentures).

Item 8. ***Financial Statements and Supplementary Data***

TEGAL CORPORATION

CONSOLIDATED BALANCE SHEETS

	March 31,	
	2004	2003
	(In thousands, except share and per share data)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 7,049	$ 912
Accounts receivable, net of allowances for sales returns and doubtful accounts of $270 and $213 at March 31, 2004 and 2003, respectively	4,729	2,681
Inventories	3,719	7,032
Prepaid expenses and other current assets	905	465
Total current assets	16,402	11,090
Property and equipment, net	4,039	4,916
Intangible assets, net	1,190	959
Other assets	1,027	244
Total assets	$ 22,658	$ 17,209
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Notes payable and bank lines of credit	$ 2,450	389
2% Convertible debentures, net	74	—
Accounts payable	1,645	1,923
Accrued product warranty	366	734
Deferred revenue	440	324
Accrued expenses and other current liabilities	2,604	2,679
Total current liabilities	7,579	6,049
Long-term portion of capital lease obligations	26	37
Other long term obligations	98	—
Total long term liabilities	124	37
Total liabilities	7,703	6,086
Commitments and contingencies (Note 6)		
Stockholders' equity:		
Preferred stock; $0.01 par value; 5,000,000 shares authorized; none issued and outstanding	—	—
Common stock; $0.01 par value; 100,000,000 shares authorized; 36,583,850 and 16,091,762 shares issued and outstanding at March 31, 2004 and 2003, respectively	366	161
Additional paid-in capital	85,376	68,806
Accumulated other comprehensive income	124	465
Accumulated deficit	(70,911)	(58,309)
Total stockholders' equity	14,955	11,123
Total liabilities and stockholders' equity	$ 22,658	$ 17,209

See accompanying notes to consolidated financial statements.

TEGAL CORPORATION

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended March 31,		
	2004	2003	2002
	(In thousands, except share and per share data)		
Revenue	$ 16,528	$ 14,100	$ 21,606
Cost of revenue	11,881	14,166	14,930
Gross profit (loss)	4,647	(66)	6,676
Operating expenses:			
Research and development expenses	3,305	4,815	5,928
Sales and marketing expenses	2,347	2,922	3,996
General and administrative expenses	3,973	4,814	4,987
In-process research and development	2,202	—	—
Total operating expenses	11,827	12,551	14,911
Operating loss	(7,180)	(12,617)	(8,235)
Interest expense, net	(5,521)	(329)	(414)
Other income (expense), net	99	321	(81)
Total other expense, net	(5,422)	(8)	(495)
Net loss	$ (12,602)	$(12,625)	$ (8,730)
Net loss per share:			
Basic and diluted	$ (0.56)	$ (0.82)	$ (0.67)
Weighted average shares used in per share computations:			
Basic and diluted	22,442	15,311	13,030

See accompanying notes to consolidated financial statements.

TEGAL CORPORATION

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Common Stock		Additional Paid-in	Accumulated Other Comprehensive	Accumulated	Total Stock-Holders'	Compre-hensive
	Shares	Amount	Capital	Income	Deficit	Equity	Loss
			(In thousands, except share and per share data)				
Balances at March 31, 2001	12,572,252	$ 126	$ 65,087	$ 350	$ (36,954)	$ 28,609	
Common stock issued under option and stock purchase plans	77,681	1	97	—	—	98	
Common stock sold	1,661,005	16	2,131	—	—	2,147	
Net loss	—	—	—	—	(8,730)	(8,730)	$ (8,730)
Cumulative translation adjustment	—	—	—	162	—	162	162
Total comprehensive loss	—	—	—	—	—	—	$ (8,568)
Balances at March 31, 2002	14,310,938	143	67,315	512	(45,684)	22,286	
Common stock issued under option and stock purchase plans	55,412	1	25	—	—	26	
Common stock issued for acquisition	1,499,987	15	1,170	—	—	1,185	
Common stock issued for services rendered	225,425	2	102	—	—	104	
Warrants and options to purchase common stock issued for services rendered	—	—	194	—	—	194	
Net loss	—	—	—	—	(12,625)	(12,625)	$ (12,625)
Cumulative translation adjustment	—	—	—	(47)	—	(47)	(47)
Total comprehensive loss	—	—	—	—	—	—	$ (12,672)
Balances at March 31, 2003	16,091,762	161	68,806	465	(58,309)	11,123	
Common stock issued under option and stock purchase plans	90,269	1	68	—	—	69	
Common stock issued for acquisition	1,499,994	15	2,327	—	—	2,342	
Restricted stock issued for services rendered	158,311		332	—	—	332	
Options and warrants, issued in previous years, exercised for services rendered	470,899	6	399	—	—	405	
Warrants and options to purchase common stock issued for services rendered	—	—	756	—	—	756	
Debentures – value of Beneficial conversion feature	—	—	5,190	—	—	5,190	
Debentures – fair value of warrants issued to investors and brokers	—	—	1,724	—	—	1,724	
Debentures – interest & accelerated discount	—	—	4,033	—	—	4,033	
Debentures – debt issuance in form of warrants	—	—	784	—	—	784	
Debentures – converted to shares	15,685,769	157	(157)	—	—	—	
Debentures – interest converted to shares	95,609	1	(1)	—	—	—	
Debentures – investor warrants exercised	892,497	9	437	—	—	446	
Debentures – broker warrants exercised	1,536,605	15	522	—	—	537	
Private Institutional Offering December 2001 – warrants exercised	62,135	1	156	—	—	157	
Net loss	—	—	—	—	(12,602)	(12,602)	$ (12,602)
Cumulative translation adjustment	—	—	—	(341)	—	(341)	(341)
Total comprehensive loss	—	—	—	—	—	—	$ (12,943)
Balances at March 31, 2004	36,583,850	$ 366	$ 85,376	$ 124	$ (70,911)	$ 14,955	

See accompanying notes to consolidated financial statements.

TEGAL CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended March 31,		
	2004	2003	2002
		(In thousands)	
Cash flows from operating activities:			
Net loss	$ (12,602)	$ (12,625)	$ (8,730)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	1,338	1,043	891
In-process research and development	2,202	—	—
Provision for doubtful accounts and sales returns allowances	56	(186)	272
Non cash interest expense - accretion of debt discount and amortization of debt issuance costs	5,480	—	—
Fair value of warrants and options issued for services rendered	332	143	—
Excess and obsolete inventory provision	967	1,922	—
Changes in operating assets and liabilities, net of acquisitions:			
Accounts receivable	(2,362)	363	5,361
Inventories	2,508	3,406	1,927
Prepaid expenses and other assets	(286)	1,004	692
Accounts payable	(311)	477	(2,973)
Accrued expenses and other current liabilities	(190)	(151)	(826)
Accrued product warranty	(411)	(581)	(336)
Customer deposits	(15)	15	—
Deferred revenue	115	(814)	119
Net cash used in operating activities	(3,179)	(5,984)	(3,603)
Cash flows from investing activities:			
Purchases of property and equipment	(254)	(295)	(501)
Business acquisition, net of cash acquired	—	(184)	—
Net cash used in investing activities	(254)	(479)	(501)
Cash flows from financing activities:			
Gross proceeds from the issuance of 2% convertible debentures	7,165	—	—
2% convertible debentures cash issuance costs	(982)	—	—
Net proceeds from issuance of common stock	1,613	21	2,245
Borrowings under notes payable and bank lines of credit	2,474	5,590	23,834
Repayments of notes payable and bank lines of credit	(527)	(6,386)	(26,722)
Payments on capital lease financing	(9)	(45)	(74)
Net cash provided by (used in) financing activities	9,734	(820)	(717)
Effect of exchange rates on cash and cash equivalents	(164)	95	272
Net increase (decrease) in cash and cash equivalents	6,137	(7,188)	(4,549)
Cash and cash equivalents at beginning of year	912	8,100	12,649
Cash and cash equivalents at end of year	$ 7,049	$ 912	$ 8,100
Supplemental disclosures of cash paid during the year for:			
Interest	$ 119	$ 581	$ 508

Supplemental Schedule of Non Cash Investing Activities (amounts in thousands, except shares):

The Company reclassified finished goods inventory of $3,698 to property and equipment during the year ended March 31, 2003 as the systems are being used for customer testing, training and demonstration purposes and the Company does not believe such equipment will be sold in the upcoming twelve months.

On August 30, 2002, the Company acquired the outstanding capital stock of Sputtered Films, Inc. Consideration totaled $1,560 and consisted of 1,499,987 shares of the Company's common stock valued at $1,185 and transaction costs of $375. The purchase price was allocated as follows:

Assets acquired:	
Current assets	$ 708
Fixed assets	824
Technology	782
Trade name	253
Total assets	2,567
Liabilities assumed:	
Current liabilities	(1,007)
Net assets acquired	$ 1,560

On November 11, 2003, the Company purchased certain assets and assumed certain liabilities of Simplus Systems. Consideration totaled $2,522 and consisted of 1,499,994 shares of the Company's common stock valued at $2,310, fully vested Tegal employee stock options to purchase 58,863 shares of the Company's common stock at an exercise price of $3.09 per share, valued at $32 and transaction costs of $180. The purchase price was allocated as follows:

Assets acquired:	
Fixed assets	48
Identifiable intangible assets	389
In-process research and development	2,202
Total assets	2,639
Liabilities assumed:	
Current liabilities	(117)
Net assets acquired	$ 2,522

See accompanying notes to consolidated financial statements.

TEGAL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(All amounts in thousands, except per share data and share data, unless otherwise noted)

Note 1. ***Description of Business and Summary of Significant Accounting Policies***

Description of Business

Tegal Corporation, a Delaware corporation ("Tegal" or the "Company"), designs, manufactures, markets and services plasma etch and deposition systems that enable the production of integrated circuits ("ICs"), memory and related microelectronics devices used in personal computers, wireless voice and data telecommunications, contact-less transaction devices, radio frequency identification devices ("RFID's"), smart cards, data storage and micro-level actuators. Etching and deposition constitute two of the principal IC and related device production process steps and each must be performed numerous times in the production of such devices.

On August 30, 2002, the Company acquired all of the outstanding common stock of Sputtered Films, Incorporated ("SFI"), a privately held California corporation pursuant to an Agreement and Plan of Merger dated August 13, 2002. Sputtered Films is a leader in the design, manufacture and service of high performance physical vapor deposition sputtering systems for the semiconductor and semiconductor packaging industry. SFI was founded in 1967 with the development of the S-Gun, core technology of the acquired company.

On November 11, 2003, the Company acquired substantially all of the assets and certain liabilities of Simplus Systems Corporation, ("Simplus"), a development stage company, pursuant to an asset purchase agreement. Simplus had developed a deposition cluster tool and certain patented processes for barrier, copper seed and high-K dielectric applications. Simplus had coined the term "nano-layer deposition" or "NLD" to describe its unique approach to chemical vapor deposition ("CVD"). The Company is continuing to develop these NLD processes and related tools, and is in the process of marketing them to a limited number of key customers and joint development partners.

Basis of Presentation

The consolidated financial statements contemplate the realization of assets and the satisfaction of liabilities in the normal course of business. The Company incurred net losses of $12,602, $12,625 and $8,730 for fiscal years 2004, 2003 and 2002, respectively. The Company generated negative cash flows from operations of $3,179, $5,984 and $3,603 for fiscal years 2004, 2003 and 2002, respectively. To finance its operations during 2004, the Company raised approximately $6,183 in net proceeds from the sale of 2% convertible debentures and exercise of warrants (see Note 7 to the accompanying notes to consolidated financing). Management believes that these proceeds, combined with the effects of its cost compression program, will be adequate to fund operations through fiscal year 2005. However, projected sales may not materialize and unforeseen costs may be incurred**.** If the projected sales do not materialize, the Company will need to reduce expenses further and raise additional capital through the issuance of debt or equity securities. If additional funds are raised through the issuance of preferred stock or debt, these securities could have rights, privileges or preferences senior to those of common stock, and debt covenants could impose restrictions on the Company's operations. The sale of equity or debt could result in additional dilution to current stockholders, and such financing may not be available to the Company on acceptable terms, if at all. The failure to raise additional funds may adversely affect the Company's ability to achieve its intended business objectives. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded assets or the amount or classification of liabilities or any other adjustments that might be necessary should the Company be unable to continue as a going concern. Additionally, the 2% convertible debentures agreement includes a material adverse change clause which allows the debenture holders to demand the immediate payment of all outstanding balances upon the debenture holders' determination of the occurrence of deemed material adverse changes to the Company's financial condition, business or operations as determined by the debenture holders based on required financial reporting and other criteria. These factors raise substantial doubt about the Company's ability to continue as a going concern.

The consolidated financial statements include the accounts of the Company and all of its subsidiaries. Intercompany transactions and balances are eliminated in consolidation. Accounts denominated in foreign currencies are translated using the foreign currencies as the functional currencies. Assets and liabilities of foreign operations are translated to U.S. dollars at current rates of exchange and revenues and expenses are translated using weighted average rates. The effects of translating the financial statements of foreign

subsidiaries into U.S. dollars are reported as accumulated other comprehensive income, a separate component of stockholders' equity. Gains and losses from foreign currency transactions are included in the statements of operations as a separate component of other expense, net.

The preparation of financial statements in conformity with generally accepted accounting principles in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could vary from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid debt instruments having a maturity of three months or less on the date of purchase to be cash equivalents.

At March 31, 2004, 2003 and 2002, all of the Company's investments are classified as cash equivalents in the consolidated balance sheets. The investment portfolio at March 31, 2004, 2003 and 2002 is comprised of money market funds. At March 31, 2004, 2003 and 2002, the fair value of the Company's investments approximated cost.

Financial Instruments

The carrying amount of the Company's financial instruments, including cash and cash equivalents, accounts receivable and accounts payable, bank lines of credit, notes payable, accrued expenses and other liabilities approximates fair value due to their relatively short maturity. The Company has foreign subsidiaries which operate and sell the Company's products in various global markets. As a result, the Company is exposed to changes in foreign currency exchange rates. The Company utilizes hedge instruments, primarily forward contracts, to manage its exposure associated with firm third-party transactions denominated in non-functional currencies. The Company does not hold derivative financial instruments for speculative purposes. Realized and unrealized gains and losses related to forward contracts considered to be effective hedges are deferred until settlement of the hedged items. They are recognized as other gains or losses when a hedged transaction is no longer expected to occur. Realized and unrealized gains and losses on ineffective hedges are recorded to other expense, net. Foreign currency gains and losses included in other expense, net were not significant for the years ended March 31, 2004, 2003 and 2002 (see Note 2 to accompanying notes to the consolidated financial statments).

At March 31, 2004, the Company had forward exchange contracts maturing at various dates throughout fiscal 2005 to exchange 317.7 million Japanese Yen into $2,909.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of temporary cash investments and accounts receivable. Substantially all of the Company's temporary investments are invested in money market funds. The Company's accounts receivable are derived primarily from sales to customers located in the U.S., Europe, and Asia. The Company performs ongoing credit evaluations of its customers and generally requires no collateral. The Company maintains reserves for potential credit losses. Write-offs during the periods presented have been insignificant. As of March 31, 2004, three customers accounted for approximately 43 percent of the accounts receivable balance. As of March 31, 2003, one customer accounted for approximately 38 percent of the accounts receivable balance.

Inventories

Inventories is stated at the lower of cost or market, reduced by provisions for excess and obsolescence. Cost is computed using standard cost, which approximates actual cost on a first-in, first-out basis and includes material, labor and manufacturing overhead costs. We estimate the effects of excess and obsolescence on the carrying values of our inventories based upon estimates of future demand and market conditions. We establish a provision for inventories in excess of production demand. Should actual production demand differ from our estimates, additional inventory provision may be required, as was the case in the third quarter of fiscal 2004. The excess and obsolete provision is only released if and when the related inventory is sold or scrapped. The inventory provision in fiscal 2004 was $967, $1,922 in fiscal 2003 and $0 in fiscal 2002.

Warranty Costs

A warranty is provided under the terms of our system contract. Typically, the warranty period is 6 to 12 months depending on the contract specifications. The Company provides for these costs at the time of revenue recognition based upon prior experience (see Note 2 to accompanying notes to the consolidated financial statements).

Property and Equipment

Property and equipment are recorded at cost. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets, ranging from three to seven years. Leasehold improvements are stated at cost and are amortized using the straight-line method over the shorter of the estimated useful life of the improvements or the lease term. When assets are disposed of, the cost and related accumulated depreciation are removed from the accounts and the resulting gains or losses are included in the results of operations. The Company generally depreciates its assets over the following periods:

	Years
Furniture and machinery and equipment	7
Computer and software	3 - 5
Leasehold improvements	5 or remaining lease life

Impairment of Long-Lived Assets

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If undiscounted expected future cash flows are less than the carrying value of the assets, an impairment loss is recognized based on the excess of the carrying amount over the fair value of the assets.

Income Taxes

Deferred income taxes are recognized for the differences between the tax bases of assets and liabilities and their financial reporting amounts based on enacted tax rates. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

Earnings Per Share

Basic earnings per share (“EPS”) is computed by dividing net income (loss) available to common stockholders by the weighted average number of common shares outstanding during the period. Diluted EPS is computed using the weighted average number of common shares outstanding plus any potentially dilutive securities, except when the effect of including such changes is antidilutive.

Stock-Based Compensation

The Company accounts for stock-based compensation using the intrinsic value method prescribed in Accounting Principles Board Opinion No. 25, “Accounting for Stock Issued to Employees,” and related interpretations, including FASB Interpretation No. 44 (“FIN 44”), “Accounting for Certain Transactions Involving Stock Compensation — an interpretation of APB Opinion No. 25.” The Company’s policy is to grant options with an exercise price equal to the closing market price of the Company’s stock on the grant date. Accordingly, no compensation cost for stock option grants has been recognized in the Company’s statements of operations. Additional proforma disclosures assuming the Company applied the fair value method of accounting for employee stock compensation under Statement of Financial Accounting Standards (“SFAS”) No. 123, “Accounting for Stock-Based Compensation” as amended by SFAS No. 148, “Accounting for Stock-Based Compensation – Transition and Disclosure” are as follows.

As required by SFAS No. 123 for proforma disclosure purposes only, the Company has calculated the estimated grant date fair value of its stock option awards using the Black-Scholes model. The Black-Scholes model, as well as other currently accepted option valuation models, was developed to estimate the fair value of freely tradable, fully transferable options without vesting restrictions. These models also require highly subjective assumptions, including future stock price volatility and expected time until exercise, which greatly affect the calculated grant date fair value.

The following assumptions are included in the estimated grant date fair value calculations for the Company's stock option awards and Employee Qualified Stock Purchase Plan ("Employee Stock Purchase Plan"):

	2004	2003	2002
Expected life (years):			
Stock options	4.0	4.0	4.0
Employee stock purchase plan	0.5	0.5	0.5
Volatility:			
Stock options	119%	165%	85%
Employee stock purchase plan	119%	165%	85%
Risk-free interest rate	2.62%	2.45%	4.3%
Dividend yield	0%	0%	0%

The weighted average estimated grant date fair value, as defined by SFAS No. 123, for stock option awards granted during fiscal 2004, 2003 and 2002 was $0.90, $0.62 and $1.02 per option, respectively.

The following table summarizes information with respect to stock options and warrants outstanding as of March 31, 2004 (number of shares in thousands):

	Outstanding Options as of March 31, 2004			Exercisable at March 31, 2004	
Range of Exercise Prices	Number of Options & Warrants	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Number of Options & Warrants	Weighted Average Exercise Price
$0.35 — $1.50	8,223	$ 0.78	8.29	4,643	$ 0.60
$1.51 — $2.14	730	1.97	6.87	180	1.51
$2.25 — $3.00	1,071	2.52	3.81	1,047	2.52
$3.09 — $3.25	571	3.23	5.39	568	3.23
$3.38 — $3.88	205	3.48	8.74	205	3.48
$4.11 — $4.25	810	4.20	7.23	510	4.25
$4.69 — $6.88	543	5.34	3.49	543	5.38
$7.68 — $8.00	65	7.71	5.88	65	7.71
$8.25 — $8.75	169	8.66	7.38	169	8.66
$12.00 — $12.00	10	12.00	2.70	10	12.00
$ 0.35 — $12.00	12,397	$ 1.73	7.39	7,940	$ 1.94

The weighted average estimated grant date fair values per share, as defined by SFAS No. 123, for rights granted under the employee stock purchase plan during fiscal 2004, 2003 and 2002 were $0.35, $0.29 and $0.47, respectively.

Had the Company recorded compensation costs based on the estimated grant date fair value (as defined by SFAS 123) for awards granted under its stock option plans and Employee Plan, the Company's net loss and loss per share would have been increased to the proforma amounts below for the years ended March 31, 2004, 2003 and 2002:

	2004	2003	2002
Net loss as reported	$ (12,602)	$ (12,625)	$ (8,730)
Proforma compensation expense at fair value	$ (458)	$ (285)	$ (1,347)
Proforma net loss	$ (13,060)	$ (12,910)	$ (10,077)
Proforma net loss per share:			
Basic and diluted	$ (0.58)	$ (0.84)	$ (0.77)

Comprehensive Loss

Comprehensive loss is defined as the change in equity of the Company during a period from transactions and other events and circumstances excluding transactions resulting from investments by owners and distributions to owners. The primary difference between net loss and comprehensive loss for the Company is attributable to foreign currency translation adjustments. Comprehensive loss is shown in the statement of stockholders' equity.

New Accounting Pronouncements

In January 2003, the FASB issued FASB Interpretation No. 46, "Consolidation of Variable Interest Entities—An Interpretation of ARB No. 51." FIN 46 requires certain variable interest entities to be consolidated by the primary beneficiary of the entity if the equity investors in the entity do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. FIN 46 is effective immediately for all new variable interest entities created or acquired after January 31, 2003. In December 2003, the FASB issued a revision of FIN 46, or FIN 46R, that delays the implementation date for certain interests created or acquired prior to January 31, 2003 until the first interim or annual period ending after March 15, 2004. FIN 46R was effective immediately for all new variable interest entities created or acquired after January 31, 2003. Since January 31, 2003, we have not invested in any entitiies we believe are variable interest entities. For those arrangements entered into prior to February 1, 2003, we are required to adopt the provisions of FIN 46R (as revised December 2003) at the end of the first quarter of fiscal 2004. The Company's adoption of FIN 46R did not result in consolidation of any entities.

In May 2003, the Financial Accounting Standard Board, or FASB, issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of Both Liabilities and Equity." SFAS No. 150 establishes standards for how companies classify and measure certain financial instruments with characteristics of both liabilities and equity. It requires companies to classify a financial instrument that is within its scope as a liability (or an asset in some circumstances). SFAS No. 150 was effective beginning the second quarter of fiscal 2004. We believe that the adoption of this standard has had and will continue to have no material impact on our consolidated financial statements.

On March 31, 2004, the Financial Accounting Standards Board issued a proposed Statement, "Share-Based Payment", that addresses the accounting for share-based payment transactions in which an enterprise receives employee services in exchange for equity instruments of the enterprise or liabilities that are based on the fair value of the enterprise's equity instruments or that may be settled by the issuance of such equity instruments. The proposed Statement would eliminate the ability to account for share-based compensation transactions using APB Opinion No. 25, "Accounting for Stock Issued to Employees", and generally would require instead that such transactions be accounted for using a fair-value-based method. It is anticipated that this exposure draft would be finalized during the summer of 2004 and would be required to be applied by the Company for years ended subsequent to December 15, 2004. Had the Company adopted the proposed exposure draft, compensation expense of approximately $460 would have been recognized in the consolidated statements of operations for the year ended March 31, 2004.

Note 2. ***Balance Sheet and Statement of Operations Detail***

Inventories consisted of:

	March 31, 2004	March 31, 2003
Raw materials	$ 1,563	$ 3,218
Work in process	1,147	1,937
Finished goods and spares	1,009	1,877
	$ 3,719	$ 7,032

Property and equipment, net, consisted of:

	March 31, 2004	March 31, 2003
Machinery and equipment	$ 4,347	$ 4,994
Demo lab equipment	4,468	5,591
Computer and software	1,972	2,324
Leasehold improvements	3,143	3,509
	13,930	16,418
Less accumulated depreciation and amortization	(9,891)	(11,502)
	$ 4,039	$ 4,916

Machinery and equipment at March 31, 2004 and 2003, includes approximately $56 of assets under leases that have been capitalized. Accumulated amortization for such equipment approximated $28 and $13, respectively.

A summary of accrued expenses and other current liabilities follows:

	March 31, 2004	March 31, 2003
Accrued compensation costs	$ 747	$ 756
Income taxes payable	500	504
Other	1,357	1,419
	$ 2,604	$ 2,679

Product warranty and guarantees:

The Company provides warranty on all system sales based on the estimated cost of product warranties at the time revenue is recognized. The warranty obligation is affected by product failure rates, material usage rates, and the efficiency by which the product failure is corrected. Warranty activity for the years ended March 31, 2004 and 2003 is as follows:

	Year ended March 31, 2004	Year ended March 31, 2003
Balance at the beginning of the period	$ 734	$ 1,205
Additional warranty accruals for warranties issued during the year	419	427
Changes in accruals related to pre-existing warranties	(227)	(203)
Settlements made during the year	(560)	(695)
Balance at the end of the year	$ 366	$ 734

Certain of the Company's sales contracts include provisions under which customers would be indemnified by the Company in the event of, among other things, a third-party claim against the customer for intellectual property rights infringement related to the Company's products. There are no limitations on the maximum potential future payments under these guarantees. The Company has accrued no amounts in relation to these provisions as no such claims have been made and the Company believes it has valid, enforceable rights to the intellectual property embedded in its products.

Note 3. ***Earnings Per Share***

SFAS No. 128, "Earnings Per Share," requires dual presentation of basic and diluted net income (loss) per share on the face of the statement of operations. Basic EPS is computed by dividing loss available to common stockholders (numerator) by the weighted average number of common shares outstanding (denominator) for the period. Diluted EPS gives effect to all dilutive potential common shares outstanding during the period. The computation of diluted EPS uses the average market prices during the period. All amounts in the following table are in thousands except per share data.

	Year Ended March 31,		
	2004	2003	2002
Basic net loss per share:			
Loss available to common stockholders	$(12,602)	$(12,625)	$ (8,730)
Weighted average common shares outstanding	22,442	15,311	13,030
Basic and diluted net loss per share	$ (0.56)	$ (0.82)	$ (0.67)

Stock options and warrants outstanding and in the money at March 31, 2004 of 8,016,520, March 31, 2003 of 4,739,559, and March 31, 2002 of 4,153,413 were excluded from the computations of diluted net loss per share because of their anti-dilutive effect on diluted loss per share.

Note 4. ***Notes Payable and Bank Lines of Credit***

On January 19, 2004, the Company entered into a new line of credit with Silicon Valley Bank that will be available until January 19, 2005. The new line of credit has a maximum borrowing capacity of $3.5 million, bears interest at a prime plus 1.0%, 5% as of March 31, 2004 and is collateralized by substantially all of the Company's domestic and Japanese assets. As of March 31, 2004, the Company had $1,347 outstanding under this domestic line of credit, which was further limited by the amounts of accounts receivable and inventories on the Company's consolidated balance sheets.

In addition, as of March 31, 2004, the Company's Japanese subsidiary had $979 outstanding under its line of credit which is collateralized by Japanese customer promissory notes held by such subsidiary in advance of payment on customers' accounts receivable. The Japanese bank line bears interest at Japanese prime (1.375% as of March 31, 2004) plus 1.0%, and has a total capacity of 150 million yen (approximately $1,420 at exchange rates prevailing on March 31, 2004).

In addition, notes payable as of March 31, 2004 consisted of one outstanding note to the California Trade and Commerce Agency for $124. The unsecured note from the California Trade and Commerce Agency carries an annual interest rate of 5.75% with monthly interest only payments of approximately $4.2 per month. Although the payment deadlines are being met, the note is currently in technical default due to the merger of Sputtered Films and Tegal Corporation. The default could result in the California Trade and Commerce Agency calling the note, therfore, this note payable is classified as a current liability.

The weighted average interest rate for all notes payable and bank lines of credit was 4.53% in fiscal year 2004.

Note 5. ***Income Taxes***

The components of loss before benefit for income taxes are as follows:

	Year Ended March 31,		
	2004	2003	2002
Domestic	$ (12,396)	$(12,090)	$(8,280)
Foreign	(206)	(535)	(450)
	$ (12,602)	$(12,625)	$(8,730)

The income tax provision differs from the amount computed by applying the statutory U.S. federal income tax rate as follows:

	Year Ended March 31,		
	2004	2003	2002
Income tax benefit at U.S. statutory rate	$ (4,285)	$ (4,293)	$(2,968)
State taxes net of federal benefit	(265)	(419)	(283)
Utilization of foreign losses	—	182	—
Deferred tax assets benefit	4,367	4,042	3,146
Other	183	488	105
Income tax provision	$ —	$ —	$ —

The components of deferred taxes are as follows:

	March 31,	
	2004	2003
Revenue recognized for tax and deferred for book	$ 217	$ 246
Non-deductible accruals and reserves	4,414	3,834
Net operating loss carryforwards	19,665	14,831
Tax credits	3,058	2,975
Uniform capitalization adjustment	148	644
Other	306	911
Total	27,808	23,441
Valuation allowance	(27,808)	(23,441)
Net deferred tax asset	$ —	$ —

We have recorded no net deferred tax assets at March 31, 2004 and 2003, respectively. The Company has provided a valuation allowance of $27.8 million and $23.4 million at March 31, 2004 and March 31, 2003, respectively. The valuation allowance fully reserves all net operating loss carryforwards, credits and non-deductible accruals and reserves, for which realization of future benefit is uncertain. The valuation allowance increased by $4.4 million and $4 million during the years ended March 31, 2004 and 2003 respectively.

At March 31, 2004, the Company had net operating loss carryforwards of approximately $54.1 million and $21.7 million, for federal and state respectively. These net operating loss carryforwards will begin to expire, if not utilized, in the year ending March 31, 2020 and 2006 for federal and state income tax purposes, respectively and will completely expire in 2024.

At March 31, 2004, the Company also has research and experimentation credit carryforwards of $2.3 million and $1.1 million for federal and state income tax purposes, respectively. The federal research and experimentation credit carryforwards will begin to expire, if not utilized, in year 2006 and will completely expire in 2014.

Note 6. ***Commitments and Contingencies***

The Company has several non-cancelable operating leases and capital leases, primarily for general office, production and warehouse facilities, that expire over the next five years. Future minimum lease payments under these leases are as follows:

Year Ending March 31, 2004	Capital Leases	Operating Leases
	As of March 31, 2004	
2005	15	1,333
2006	15	1,056
2007	13	978
2008	2	960
2009	—	984
Thereafter	—	753
Total minimum lease payments	45	$ 6,064
Less amount representing interest	(8)	
Present value of minimum lease payments	37	
Less current portion	(11)	
Long term capital lease obligation	$ 26	

Most leases provide for the Company to pay real estate taxes and other maintenance expenses. Rent expense for operating leases, net of sublease income, was $479, $1,273 and $1,289, during the years ended March 31, 2004, 2003 and 2002, respectively.

The Company signed a new lease agreement dated April 30, 2004 for the manufacturing and corporate office facility in Petaluma, California to occupy 57,418 square feet. The lease expires December 31, 2009. The prior lease for the same facility was expired in March 2004. The Company was leasing 120,000 sq. ft. and occupying 80,000 with the balance subleased or available for sublease. The new lease for 51,418 sq. ft. is for the occupied space only and the sub-tenants' leases have been assigned to the landlord.

Note 7. 2% ***Convertible Debentures*****:**

On June 30, 2003, the Company signed definitive agreements with investors to raise up to $7,165 in a private placement of convertible debt financing to be completed in two tranches. The first tranche, which closed on June 30, 2003, involved the sale of debentures in the principal amount of $929. The Company received $424 in cash on June 30, 2003 and the remaining balance of $505 on July 1, 2003, which was recorded as an other receivable as of June 30, 2003. The closing of the second tranche, which occurred on September 9, 2003 following shareholder approval on September 8, 2003, resulted in the receipt of approximately $6,236 in gross proceeds on September 10, 2003.

The debentures agreement includes a Material Adverse Change ("MAC") clause which allows the debenture holders to demand the immediate payment of all outstanding balances upon the debenture holders' determination of the occurrence of a deemed material adverse change to the Company's financial condition, business or operations. Potential material adverse changes that may cause the Company to default on the debentures include any significant adverse effect on the Company's financial condition arising from an event not previously disclosed in the Company's filings with the Securities and Exchange Commission ("SEC"), such as a significant litigation judgment against the Company, bankruptcy, or termination of the majority of the Company's customer relationships. The MAC clause is effective until the conversion of all outstanding debentures. As a result of the MAC clause, the debentures are classified as current liabilities.

The Company was required to pay a cash fee of up to 6.65% of the gross proceeds of the debentures to certain financial advisors upon the closing of the second tranche. A fee of $448 has been recorded as a debt issuance cost and was paid in September 2003. The financial advisors also were granted warrants to purchase 1,756,127 shares of the Company's common stock at an exercise price of $0.35 per share. These warrants were valued at $1,387 using the Black-Scholes option pricing model with the following variables: stock fair value of $0.93, term of five years, volatility of 95% and risk-free interest rate of 2.5%. During fiscal year ended March 31, 2004, the financial advisors exercised warrants for 1,536,605 shares (plus 23,393 warrants remitted as payments), leaving advisor warrants for 196,129 shares unexercised at the end of the quarter.

The debentures accrue interest at the rate of 2% per annum. Both the principal and accrued interest, thereon of these debentures are convertible at the rate of $0.35 per share. The principal of the debentures is convertible into 20,471,428 shares of the Company's common stock. The closing prices of the Company's common stock on June 30, 2003 and September 9, 2003, the closing dates for the

first and second tranches, were $0.55 and $1.49. Therefore, a beneficial conversion feature exists which needs to be accounted for under the provisions of EITF 00-27, *Application of Issue 98-5 to Certain Convertible Instruments.* A beneficial feature also exists in connection with the conversion of the interest on the debentures into shares of common stock.

As of March 31, 2004, debenture holders converted debentures in the principal amount of $5,490 into 15,685,769 shares of the Company's common stock. In addition, 95,609 shares were issued which represented interest payable to the debenture holders at the time of the conversions. As of March 31, 2004, there remained 2% convertible debentures in the principal amount of $1,673 convertible into 4,785,659 shares of the Company's common stock.

In addition, the debenture holders were granted warrants to purchase 4,094,209 shares of the Company's common stock at an exercise price of $0.50. The warrants expire after eight years. The warrants were valued using the Black-Scholes model with the following variables: fair value of common stock of $0.35 for the first tranche debentures and $0.93 for the second tranche debentures, volatility of 37% and risk-free interest rate of 2.5%. As of March 31, 2004, the debenture holders had exercised warrants to purchase 892,497 shares (plus 1,770 warrants remitted as payments) of the Company's common stock. As of March 31, 2004, there remained unexercised warrants held by the debenture holders for 3,199,942 of the Company's common stock.

The relative fair value of the warrants has been classified as equity with the beneficial conversion feature because it meets all the equity classification criteria of EITF 00-19, *Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock.*

The following table presents the amounts originally allocated to the beneficial conversion feature and warrants and the outstanding balance of debt at March 31, 2004 after accounting for these two equity instruments and conversions (in thousands):

	First Tranche	Second Tranche	Total
Debentures – principal amount	$ 929	$ 6,236	$ 7,165
Beneficial conversion feature (included in equity)	(605)	(4,585)	(5,190)
Warrants (included in equity)	(73)	(1,651)	(1,724)
Conversions to common stock	(846)	(3,203)	(4,049)
Accretion of debt discount	599	3,273	3,872
Net amount of 2% convertible debentures	$ 4	$ 70	$ 74

The value of the beneficial conversion feature, warrants and debt issuance costs are being amortized as interest expense over the life of the debt using the effective interest method. Related interest expense for fiscal 2004 amounted to $5,480. This amount is comprised of nominal interest, amortization of beneficial conversion feature and amortization of debt issuance costs.

The debt issuance costs associated with the debentures amounted to $2,369 and are comprised of $982 in cash issuance costs and $1,387 associated with warrants issued to financial advisors. Approximately $603 of these costs were allocable to the warrants and were therefore offset into equity. The remaining balance of $1,766 was recorded as an asset to be amortized over the life of the debt. As of March 31, 2004, $283 is included in current assets.

Amortization will accelerate if the Company repays the debt early, upon conversion, if the material adverse change clause is invoked, or if it is deemed that such invocation is probable given the presence of negative factors or if the debt is converted into common stock. The Company assesses the probability of the occurrence of the material adverse change clause on a quarterly basis.

Note 8. ***Acquisition and Intangible Assets***

Sputtered Films Incorporated:

On August 30, 2002, the Company acquired Sputtered Films, Inc., a California corporation ("Sputtered Films") pursuant to an Agreement and Plan of Merger dated August 13, 2002. Sputtered Films is a leader in the design and manufacture of sputtering equipment for semiconductor, photomask, advanced packaging (including flip chip) and compound semiconductor applications. The acquisition of Sputtered Films secured a source for a complementary deposition technology for the Company's new materials strategy. The total acquisition cost was $1,560,000, comprised of 1,499,987 shares of the Company's common stock valued at $1,185,000 and transaction costs of $375,000. The results of Sputtered Films' operations have been included in the Company's results commencing on August 31, 2002.

The purchase price of this acquisition has been allocated to the acquired assets and assumed liabilities on the basis of their fair values as of the date of the acquisition, as determined by an appraisal performed by an independent valuation specialist. The fair value of the assets acquired and liabilities assumed, based on the allocation of the purchase price, is summarized as follows:

Current assets	$ 708
Property and equipment	824
Technology	782
Trade name	253
Total assets acquired	2,567
Current liabilities	(1,007)
Net assets acquired	$ 1,560

Simplus Systems Corporation:

On November 11, 2003, the Company acquired substantially all of the assets and certain liabilities of Simplus Systems Corporation, (“Simplus”), a development stage company, pursuant to an asset purchase agreement. Simplus had developed a deposition cluster tool and certain processes for barrier, copper seed and high-K dielectric applications. The purchase consideration of $2,522 includes 1,499,994 shares of the Company’s common stock valued at $2,310; 58,863 fully vested employee stock options to purchase Tegal common stock at an exercise price of $3.09 per share valued at $32, and acquisition costs of $180. This transaction was accounted for as a purchase of assets in accordance with EITF Issue No. 98-3, Determining Whether a Nonmonetary Transaction Involves Receipt of Productive Assets or of a Business ..

The Company completed the preliminary allocation of the purchase price of Simplus. The following table represents the preliminary allocation of the purchase price for Simplus. In estimating the fair value of the assets acquired and liabilities assumed, management considered various factors, including an independent appraisal.

Fair value fixed assets acquired	$ 48
Work Force	50
Patents	339
In-process research and development	2,202
Assumed liabilities	(117)
	$ 2,522

The assets will be amortized over a period of years shown on the following table:

Fixed assets acquired	1 year
Work Force	2 years
Patents	5 years

The fair value underlying the $2,202 assigned to acquired in-process research and development (“IPR&D”) in the Simplus acquisition was charged to the Company’s results of operations during the quarter ended December 31, 2003 and was determined by identifying research projects in areas for which technological feasibility had not been established and there was no alternative future use. Projects in the IPR&D category are certain design change improvements on the existing 150 mm and 200 mm systems and the development of a 300 mm system. The design change improvements on the existing systems is estimated to cost approximately $500,000 to $1 million, is approximately 90% complete and will be completed by December 31, 2004. The development of a 300 mm system is estimated to be approximately 10% complete, and to cost between $2 and $4 million over the next two to four years, as market demand materializes.

The IPR&D value of $2,202 was determined by an income approach where fair value is the present value of projected free cash flows that will be generated by the products incorporating the acquired technologies under development, assuming they are successfully completed. The estimated net free cash flows generated by the products over a seven-year period were discounted at a rate of 32% in relation to the stage of completion and the technical risks associated with achieving technological feasibility. The net cash flows for such projects were based on management’s estimates of revenue, expenses and asset requirements. Any delays or failures in the completion of these projects could impact expected return on investment and future results of operations. In addition, the Company's financial condition would be adversely affected if the value of other intangible assets acquired became impaired.

All of these projects have completion risks related to functionality, architecture performance, process technology availability, continued availability of key technical personnel, product reliability and availability of software support. To the extent that estimated completion dates are not met, the risk of competitors' product introductions is greater and revenue opportunity may be permanently lost.

As of March 31, 2004, intangible assets, net consisted of the following:

	Gross	Accumulated Amortization	Net
Technology	$ 782	$ (155)	$ 627
Trade name	253	(51)	202
Workforce	50	(12)	38
Patents	339	(16)	323
Total	$ 1,424	$ (234)	$ 1,190

As of March 31, 2003, intangible assets consisted of the following:

	Gross	Accumulated Amortization	Net
Technology	$ 782	$ (57)	$ 725
Trade name	253	(19)	234
Total	$ 1,035	$ (76)	$ 959

The estimated future amortization expense of intangible assets as of March 31, 2004 is as follows:

2005	$ 217
2006	216
2007	197
2008	197
2009	180
Thereafter	183
Total	$ 1,190

The following unaudited proforma financial results of Tegal Corporation and Sputtered Films for the year ended March 31, 2004 and 2003, give effect to the acquisition of Sputtered Films as if the acquisition had occurred on the first day of the periods presented and includes adjustments such as amortization of intangible assets directly attributable to the acquisition, and expected to have a continuing impact on the combined company.

The unaudited proforma financial results are provided for comparative purposes only and are not necessarily indicative of what the Company's actual results would have been had the forgoing transaction been consummated on such date, nor does it give effect to the synergies, cost savings and other charges expected to result from the acquisition. Accordingly, the proforma financial results do not purport to be indicative of the Company's results of operations as of the date hereof or for any period ended on the date hereof or for any other future date or period.

Unaudited Proforma Financial Information (in thousands, except per share amounts):

	Year ended March 31,	
	2004	2003
Revenue	$ 16,528	$ 15,764
Net loss	$ (12,602)	$ (13,257)
Net loss per share, basic and diluted	$ (0.56)	$ (0.80)
Shares used in per share computations:		
Basic	22,442	16,547
Diluted	22,442	16,547

Note 9. ***Sale of Common Stock and Warrants***

On February 11, 2004, the Company signed a $25 million equity facility with Kingsbridge Capital, a firm that specializes in the financing of small to medium sized technology-based companies. The arrangement will allow the Company to sell shares of its common stock to Kingsbridge at its sole discretion over a 24-month period on a "when and if needed" basis. Kingsbridge Capital is required under the terms of the arrangement to purchase Tegal's stock following the effectiveness of a registration statement. The price of the common shares issued under the agreement is based on a discount to the volume-weighted average market price during a specified drawdown period. The Company has no obligation to draw down all or any portion of the commitment.

In connection with the agreement, the Company issued fully vested warrants to Kingsbridge Capital to purchase 300,000 shares of the Company's common stock at an exercise price of $4.11 per share. The fair value of such options, which amounted to approximately $756 was capitalized as a transaction cost. The following variables were used to determine the fair value of such instruments under the Black-Scholes option pricing model: volatility of 114%, term of five years, risk free interest of 3.91% and underlying stock price equal to fair market value at the time of grant.

During fiscal 2004 the Company granted 578,311 options to purchase shares of the Company's common stock to certain non-employees. The fair value of such shares amounted to approximately $332, was recorded as an operating expense.

On October 28, 2003, the Board of Directors granted options to purchase 3,410,000 shares of the Company’s common stock at an exercise price of $1.03 per share, which was the closing price of the Company’s common stock on October 28, 2003, to certain employees and directors of the Company. On December 18, 2003, the Company granted options to purchase 500,000 shares of the Company’s common stock at an exercise price of $2.14 per share to certain employees, which was the closing price of the Company’s common stock on December 18, 2003.

In August 2002, the Company granted 62,650 options to purchase shares of the Company’s common stock at an exercise price of $0.83 to consultants for services rendered. The estimated fair value of the vested options for fiscal 2003 amounted to $7 and was recorded as an operating expense. The following variables were used to determine the fair value of such instruments under the Black-Scholes option pricing model: volatility of 85%, term of four years, risk free interest of 3.40% and underlying stock price equal to fair market value at the time of grant.

During fiscal 2003, the Company granted 225,425 shares of common stock to consultants for services rendered. The fair value of such shares, which amounted to approximately $104, was recorded as an operating expense.

In July 2002, the Company granted 125,000 warrants to purchase shares of the Company's common stock at an exercise price of $2.00 to a financial institution in connection with establishing a receivables credit facility. The fair value of such warrants, which amounted to approximately $82, was recorded as a debt offering cost and is being amortized over the two-year life of the associated line of credit. The amortization for fiscal 2003 amounted to $32 and was recorded as interest expense. The following variables were used to determine the fair value of such instruments under the Black-Scholes option pricing model: volatility of 85%, term of two years, risk free interest of 4.95% and underlying stock price equal to fair market value at the time of grant.

In September 2002, the Company granted 350,000 warrants to purchase shares of the Company's common stock at an exercise price of $1.20 to consultants in lieu of cash payments. The fair value of such warrants, which amounted to approximately $105, was capitalized as a transaction cost under purchase accounting. The following variables were used to determine the fair value of such instruments under the Black-Scholes option pricing model: volatility of 85%, term of four years, risk free interest of 4.95% and underlying stock price equal to fair market value at the time of grant.

Note 10. ***Employee Benefit Plans***

Equity Incentive Plan

Pursuant to the Amended and Restated Equity Incentive Plan (“Equity Incentive Plan”), options and stock purchase rights to purchase 3,500,000 shares of common stock could be granted to management and consultants. The exercise price of options and the purchase price of stock purchase rights generally has been the fair value of the Company’s common stock on the date of grant. At the date of issuance of the stock options, all options are exercisable; however the Company has the right to repurchase any stock acquired pursuant to the exercise of stock options upon termination of employment or consulting agreement at the original exercise price for up to four years from the date the options were granted, with the repurchase rights ratably expiring over that period of time. Incentive stock options are exercisable for up to ten years from the grant date of the option. Nonqualified stock options are exercisable for up to 15 years from the grant date of the option. The Equity Incentive Plan expired in December 1999. Consequently no shares were available for issuance under the Equity Incentive Plan as of March 31, 2004.

1990 Stock Option Plan

Pursuant to the terms of the Company’s 1990 Stock Option Plan (“1990 Option Plan”), options and stock purchase rights to purchase 550,000 shares of common stock could be granted to employees of the Company or its affiliates. Incentive stock options are exercisable for a period of up to ten years from the date of grant of the option and nonqualified stock options are exercisable for a period of up to ten years and two days from the date of grant of the option. At the date of issuance of the stock options, all options are exercisable; however, the Company has the right to repurchase any stock acquired pursuant to the exercise of stock options upon termination of employment at the original exercise price for up to four years from the date the options were granted, with the repurchase rights ratably expiring over that period of time. The 1990 Option Plan expired on March 10, 2000. Consequently no shares were available for issuance under the 1990 Option Plan as of March 31, 2004.

1998 Equity Participation Plan

Pursuant to the terms of the Company’s Amended 1998 Equity Participation Plan (“Equity Plan”), which was authorized as a successor plan to the Company’s Equity Incentive Plan and 1990 Option Plan, 6,400,000 shares of common stock may be granted upon the exercise of options and stock appreciation rights or upon the vesting of restricted stock awards. The exercise price of options generally will be the fair value of the Company’s common stock on the date of grant. Options are generally subject to vesting at the discretion of the Compensation Committee of the Board of Directors (the “Committee”). At the discretion of the Committee, vesting may be accelerated when the fair market value of the Company’s stock equals a certain price established by the Committee on the date of grant. Incentive stock options will be exercisable for up to ten years from the grant date of the option. Non-qualified stock options will be exercisable for a maximum term to be set by the Committee upon grant. As of March 31, 2004, 533,521 shares were available for issuance under the Equity Plan.

Directors Stock Option Plan

Pursuant to the terms of the Stock Option Plan for Outside Directors, as amended, (“Directors Plan”), up to 600,000 shares of common stock may be granted to outside directors. Under the Directors Plan, each outside director who was elected or appointed to the Board on or after September 15, 1998 shall be granted an option to purchase 20,000 shares of common stock and on each second anniversary after the applicable election or appointment shall receive an additional option to purchase 20,000 shares, provided that such outside director continues to serve as an outside director on that date. For each outside director, 10,000 shares will vest on the first and second anniversaries of the option grant date, contingent upon continued service as a director. Vesting may be accelerated, at the discretion of the Board, when the fair market value of the Company’s stock equals a certain price set by the Board on the date of grant of the option. The Directors Plan allows for additional grants at the discretion of the Compensation Committee. As of March 31, 2004, no shares were available for issuance under the Directors Plan.

The following table summarizes the Company's stock option activity for the four plans described above and weighted average exercise price within each transaction type for each of the years ended March 31, 2004, 2003 and 2002 (number of shares in thousands):

	2004		2003		2002	
	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price
Options outstanding at beginning of year	3,421	$ 3.19	2,959	$ 3.69	2,844	$ 3.94
Options canceled	(497)	3.23	(92)	3.76	(157)	4.48
Options granted	4,771	1.14	558	0.58	275	1.58
Options exercised	(305)	2.23	(4)	0.24	(3)	0.24
Options outstanding March 31	7,390	1.97	3,421	$ 3.19	2,959	$ 3.69

Awards

The Company granted 158,311 shares of restricted stock from the Company's Equity Plan to consultants during fiscal year 2004 in exchange for services rendered.

Employee Qualified Stock Purchase Plan

The Company has offered an Employee Qualified Stock Purchase Plan ("Employee Plan") under which rights are granted to purchase shares of common stock at 85% of the lesser of the market value of such shares at the beginning of a six month offering period or at the end of that six month period. Under the Employee Plan, the Company is authorized to issue up to 500,000 shares of common stock. 20,208 common stock shares were purchased in fiscal 2004 and 50,813 common shares were purchased in fiscal 2003. Shares available for future purchase under the Employee Plan were 71,052 at March 31, 2004.

Savings and Investment Plan

The Company has established a defined contribution plan that covers substantially all U.S. employees. Employee contributions of up to four percent of each U.S. employee's compensation will be matched by the Company based upon a percentage to be determined annually by the Board. Employees may contribute up to 15 percent of their compensation, not to exceed a prescribed maximum amount. The Company made contributions to the plan of $8, $10 and $17 in the years ended March 31, 2004, 2003 and 2002, respectively.

Note 11. *Stockholder Rights Plan*

On June 11, 1996, the Board adopted a Preferred Shares Rights Agreement ("Rights Agreement") and pursuant to the Rights Agreement authorized and declared a dividend of one preferred share purchase right ("Right") for each common share of the Company's outstanding shares at the close of business on July 1, 1996. The Rights are designed to protect and maximize the value of the outstanding equity interests in the Company in the event of an unsolicited attempt by an acquirer to take over the Company in a manner or under terms not approved by the Board. Each Right becomes exercisable to purchase one one-hundredth of a share of Series A Junior Participating Preferred Stock at an exercise price of $45.00 upon certain circumstances associated with an unsolicited takeover attempt and expires on June 11, 2006. The Company may redeem the Rights at a price of $0.01 per Right. The Agreement was amended on January 15, 1999.

Note 12. ***Segment Information***

The Company's business is completely focused on one industry segment, the design, manufacturing and servicing of plasma etch systems and deposition systems used in the manufacturing of integrated circuits and related devices.

The following is a summary of the Company's operations by geography:

Revenues:	Years Ended March 31,		
Sales to customers located in:	2004	2003	2002
United States	$ 5,538	$ 4,864	$ 7,168
Asia, excluding Japan	1,241	1,537	3,903
Japan	6,485	2,934	4,094
Germany	170	353	731
Italy	1,480	1,851	2,617
Europe, excluding Germany and Italy	1,614	2,561	3,093
Total sales	$ 16,528	$ 14,100	$ 21,606

	March 31,	
	2004	2003
Long-lived assets at year-end:		
United States	$ 5,195	$ 5,807
Europe	6	19
Japan	15	16
Asia, excluding Japan	13	33
Total long-lived assets	$ 5,229	$ 5,875

The Company's sales are primarily to domestic and international semiconductor manufacturers. The top five customers accounted for approximately 54%, 40% and 46% of the Company's total net revenues for the years ended March 31, 2004, 2003 and 2002, respectively. Three customers accounted for 17%, 15% and 12% of the Company's total net revenues for the year ended March 31, 2004. Two customers accounted for 15% and 10% of the Company's total net revenues for the year ended March 31, 2003. One customer accounted for 15% and two customers accounted for 12% each of the Company's total net revenues for the year ended March 31, 2002.

Note 13. Subsequent Events

2% Convertible Debenture Financing

As of June 15, 2004, all of the Company's outstanding 2% convertible debentures had been converted into the Company's common stock (see Note 7 to the accompanying notes to consolidated financial statements). The principal and interest amount of the debentures converted was $1,688, which was converted into 4,825,118 shares of the Company's common stock.

Acquisition of First Derivative Systems, Inc.

On May 28, 2004, Tegal purchased substantially all of the assets of First Derivative Systems, Inc. ("FDSI") for 1,410,622 shares of common stock and approximately $200,000 in assumed liabilities, pursuant to a purchase agreement dated April 29, 2004. All of the shares of common stock are subject to a registration rights agreement in which the Company has agreed to register the shares with the Securities and Exchange Commission for resale. In addition, the Company entered into employment agreements with key FDSI personnel. FDSI, a privately held development stage company based in Goleta, CA, was founded in 1999 as a spin-off of Sputtered Films, Inc., which itself was acquired by Tegal in August 2002. FDSI had developed a high-throughput, low cost-of-ownership physical vapor deposition ("PVD") system with highly differentiated technology for leading edge memory and logic device production on 300 millimeter wafers.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Tegal Corporation:

In our opinion, the consolidated financial statements listed in the index appearing under Item 15(a)(1) present fairly, in all material respects, the financial position of Tegal Corporation and its subsidiaries at March 31, 2004 and March 31, 2003, and the results of their operations and their cash flows for each of the three years in the period ended March 31, 2004 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company’s management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (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, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring net losses and has generated negative cash flows from operations. These factors raise substantial doubt about the Company’s ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ PricewaterhouseCoopers LLP

San Jose, California
June 25, 2004

Quarterly Results of Operations (Unaudited)

The following table sets forth our unaudited selected financial data for each of the eight quarterly periods in the two-year period, ended March 31, 2004.

	Three Months Ended							
	Mar. 31, 2004	Dec. 31, 2003	Sept. 30, 2003	June 30 2003	Mar. 31, 2003	Dec. 31, 2002	Sept. 30, 2002	June 30, 2002
	(In thousands, except per share data)							
Quarterly Financial Data:								
Revenue	$ 6,157	$3,276	$3,210	$3,885	$ 4,002	$3,701	$2,675	$3,722
Gross profit (loss)	2,673	(55)	992	1,037	1,275	88	(1,632)	203
Net loss	(1,559)	(8,119)	(1,670)	(1,254)	(1,695)	(3,262)	(4,822)	(2,846)
Net loss per share*								
Basic and diluted	(0.06)	(0.35)	(0.10)	(0.08)	(0.09)	(0.20)	(0.33)	(0.20)

---

* Net loss per share is computed independently for each of the quarters presented. Therefore, the sum of the quarterly net loss per share may not equal the annual net loss per share.

Item 9. ***Changes in and Disagreements with Accountants on Accounting and Financial Disclosure***

None.

Item 9A. ***Controls and Procedures***

(a) *Evaluation of Disclosure Controls and Procedures*. As required by SEC Rule 13a-15(b), the Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and the Company's Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures as of the end of the quarter covered by this report. The evaluation also took into account a written confirmation of a reportable condition recently provided by our independent accountants stating that they noted certain matters involving our accounting for the 2% convertible debentures and related debt issuance costs. The reportable condition arose from the accounting for our 2% convertible debentures with warrants and related measurement and recognition of beneficial conversion and warrant discounts and issuance costs. As a result of the above, the Company restated its unaudited condensed consolidated financial statements for the three and nine-month periods ended December 31, 2003 as filed on Form 10Q/A on June 25, 2004.

The reportable condition letter acknowledges that accounting for 2% convertible debentures with warrants and related measurement and recognition of beneficial conversion and warrant discounts and issuance costs requires a deep understanding of complex evolving areas of generally accepted accounting principles that are subject to interpretations and where applications of such principles requires judgment.

The reportable condition letter recommends the Company expand and enhance its accounting function to include sufficient knowledge of accounting for complex financing transactions including the convertible debenture financing referred above.

Based on their evaluation as of a date at the end of the quarter covered by this annual report on Form 10-K, the Company’s principal executive officer and principal financial officer have concluded that the Company’s disclosure controls and procedures (as defined in Rules 13a-14(c) under the Securities Exchange Act of 1934 are effective, except with respect to the reportable condition referred above.

(b) *Changes in Internal Controls*. There were no significant changes in the Company’s internal controls or in other factors that could significantly affect these controls subsequent to the date of their evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

PART III

Certain information required by Part III is omitted from this Report in that we will file a definitive proxy statement pursuant to Regulation 14A (the “Proxy Statement”) no later than 120 days after the end of the fiscal year covered by this Report, and certain information included therein is incorporated herein by reference. Only those sections of the Proxy Statement that specifically address the items set forth herein are incorporated by reference. Such incorporation does not include the Compensation Committee Report or the Performance Graph included in the Proxy Statement.

Item 10. ***Directors and Executive Officers of the Registrant***

The information concerning our directors and executive officers required by this Item is incorporated by reference to our Proxy Statement under the caption “Election of Directors” and “Executive Officers of the Registrant”.

The information regarding compliance with Section 16(a) of the Securities Exchange Act of 1934, as amended, is incorporated by reference to the Company’s Proxy Statement under the caption “Section 16(a) Beneficial Ownership Reporting Compliance.”

The additional information required by this Item is incorporated by reference to our Proxy Statement.

Item 11. ***Executive Compensation***

The information required by this Item is incorporated by reference to our Proxy Statement under the caption "Executive Compensation."

Item 12. ***Security Ownership of Certain Beneficial Owners and Management***

The information required by this Item is incorporated by reference to our Proxy Statement under the captions "Principal Stockholders" and "Ownership of Stock by Management."

Item 13. ***Certain Relationships and Related Transactions***

The information required by this Item is incorporated by reference to our Proxy Statement under the caption "Certain Transactions."

Item 14. ***Principal Accountant Fees and Services***

The information required by this Item is incorporated by reference to our Proxy Statement under the caption "Independent Public Accountant".

PART IV

Item 15. ***Exhibits, Financial Statement Schedule and Reports on Form 8-K***

(a) The following documents are filed as part of this Form 10-K:

(1) Financial Statements

The Company's Financial Statements and notes thereto appear in this Form 10-K according to the following Index of Consolidated Financial Statements:

	Page
Consolidated Balance Sheets as of March 31, 2004 and 2003	29
Consolidated Statements of Operations for the years ended March 31, 2004, 2003 and 2002	30
Consolidated Statements of Stockholders' Equity for the years ended March 31, 2004, 2003 and 2002	31
Consolidated Statements of Cash Flows for the years ended March 31, 2004, 2003 and 2002	32
Notes to Consolidated Financial Statements	34
Report of Independent Registered Public Accounting Firm	50

(2) Financial Statement Schedule

	Page
Schedule II — Valuation and Qualifying Accounts	56

Schedules other than those listed above have been omitted since they are either not required, not applicable, or the required information is shown in the consolidated financial statements or related notes.

(b) Reports on Form 8-K

Current Report on Form 8-K dated February 12, 2004, under Item 5 and Item 7 thereof.

(c) Exhibits

The following exhibits are referenced or included in this report:

Exhibit Number	Description
2.1	Agreement and Plan of Merger by and among Tegal Corporation, SFI Acquisition Corp., Sputtered Films, Inc. and the Shareholder Agent dated as of August 13, 2002 (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report filed with the SEC on August 16, 2002)
2.2	Asset Acquisition Agreement by and between Tegal Corporation and Simplus Systems Corporation, dated November 10, 2003 (incorporated by reference to Exhibit 2.1 to Tegal's Current Report on Form 8-K (SEC File No. 000-26824) filed on December 9, 2003)
3.1	Certificate of Incorporation of the Registrant, as amended (incorporated by reference to Exhibits 3(i).1 and 3(i).2 included in Registrant's Registration Statement on Form S-1 (File No. 33-84702) declared effective by the Securities and Exchange Commission on October 18, 1995)
3.2	Amendment to the Certificate of Incorporation (incorporated by reference to Exhibit 4.2 to the Registrant's Registration Statement on Form S-3 (File No. 333-108921) declared effective by the Securities and Exchange Commission on October 14, 2003)
3.3	By-laws of Registrant (incorporated by reference to Exhibit 3(ii) included in Registrant's Registration Statement on Form S-1 (File No. 33-84702) declared effective by the Securities and Exchange Commission on October 18, 1995)
*4.1	Form of Certificate for Common Stock
4.2	First Amendment to Rights Agreement between the registrant and ChaseMellon Shareholder Services, dated as of January 15, 1999 (incorporated by reference to Exhibit 99.1 to the Registrant's Current Report filed with the SEC on January 1, 1999)

Exhibit Number	Description
4.3	Rights Agreement between the Registrant and ChaseMellon Shareholder Services dated as of June 11, 1996 (incorporated by reference to Registrant's current report filed with the SEC on June 28, 1996)
**10.1	Employment Agreement between the Registrant and Stephen P. DeOrnellas dated December 16, 1997 (incorporated by reference to Exhibit 10.10 to the Registrant's Annual Report on Form 10-K for the fiscal year ended March 31, 1998 filed with the SEC on May 20, 1998)
**10.2	Employment Agreement between Registrant and Michael L. Parodi dated as of December 17, 1997 (incorporated by reference to Exhibit 10.18 to the Registrant's Annual Report on Form 10-K for the fiscal year ended March 31, 1998 filed with the SEC on May 20, 1998)
10.3	Form of Unit Purchase Agreement dated December 31, 2001 (incorporated by reference to Exhibit (i) to the Registrant's Quarterly Report filed with the SEC on February 13, 2002)
10.4	Form of Warrant (incorporated by reference to Exhibit (ii) to the Registrant's Quarterly Report filed with the SEC on February 13, 2002)
**10.5	Third Amended and Restated Stock Option Plan for Outside Directors (incorporated by reference to Exhibit (iv) to the Registrant's Quarterly Report filed with the SEC on February 13, 2002)
10.6	Security and Loan Agreement between Registrant and Silicon Valley Bank dated as of June 26, 2002 (incorporated by reference to Exhibit (10.6) to the Registrant's Annual Report on Form 10K for the fiscal year ended March 31, 2003 filed with the SEC on June 27, 2003)
10.7	Lease between the Registrant and Jane Crocker, formerly Jane C. Jacobs, as Trustee under the Jane C. Jacobs Trust Agreement dated October 5, 1990 ("Crocker") and Norman E. MacKay ("MacKay") dated as of April 29, 2003 (incorporated by reference to Exhibit (10.7) to the Registrant's Annual Report on Form 10K for the fiscal year ended March 31, 2003 filed with the SEC on June 27, 2003)
10.8	Security and Loan Agreement [Exim] between Registrant and Silicon Valley Bank dated as of June 26, 2002 (incorporated by reference to Exhibit (10.8) to the Registrant's Annual Report on Form 10K for the fiscal year ended March 31, 2003 filed with the SEC on June 27, 2003)
10.9	Intellectual Property Security Agreement between Registrant and Valley Bank dated as of June 26, 2002 (incorporated by reference to Exhibit (10.9) to the Registrant's Annual Report on Form 10K for the fiscal year ended March 31, 2003 filed with the SEC on June 27, 2003)
10.10	Warrant to purchase stock Agreement between Registrant and Silicon Valley Bank dated as of June 26, 2002 (incorporated by reference to Exhibit (10.10) to the Registrant's Annual Report on Form 10K for the fiscal year ended March 31, 2003 filed with the SEC on June 27, 2003)
**10.11	Employment Agreement between Registrant and Thomas Mika dated as of August 12, 2002 (incorporated by reference to Exhibit (10.11) to the Registrant's Annual Report on Form 10K for the fiscal year ended March 31, 2003 filed with the SEC on June 27, 2003)
**10.12	Employment Agreement between Registrant and Carole Anne Demachkie dated as of August 30, 2002 (incorporated by reference to Exhibit (10.12) to the Registrant's Annual Report on Form 10K for the fiscal year ended March 31, 2003 filed with the SEC on June 27, 2003)
*21.1	List of Subsidiaries of the Registrant
23.1	Consent of Independent Registered Public Accounting Firm
24.1	Power of Attorney (incorporated by reference to the signature page to this Annual Report)
31.1	Section 302 Certification of the Chief Executive Officer
31.2	Section 302 Certification of the Chief Financial Officer
32.1	Section 906 Certification of the Chief Executive Officer and Chief Financial Officer

---

* Incorporated by reference to identically numbered exhibits included in Registrant's Registration Statement on Form S-1 (File No. 33-84702) declared effective by the Securities and Exchange Commission on October 18, 1995.

** Management contract for compensatory plan or arrangement.

TEGAL CORPORATION

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS
Years Ended March 31, 2002, 2003, 2004

Description	Balance At Beginning of Year	Charged to Costs and Expenses	Charged to Other Accounts	Deductions	Balance At End of Year
			(In thousands)		
Year ended March 31, 2002:					
Allowances for doubtful accounts	114	216	24	(15)	339
Sales returns and allowances	8	92	—	(57)	43
Cash discounts	5	20	—	(8)	17
Year ended March 31, 2003:					
Allowances for doubtful accounts	339	64	—	(238)	165
Sales returns and allowances	43	44	—	(65)	22
Cash discounts	17	16	—	(7)	26
Year ended March 31, 2004:					
Allowances for doubtful accounts	165	64	—	(19)	210
Sales returns and allowances	22	38	—	(1)	59
Cash discounts	26	(20)	—	(5)	1

SIGNATURES

Pursuant to the requirements 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.

TEGAL CORPORATION

By: /s/ MICHAEL L. PARODI
Michael L. Parodi
Chairman, President & Chief Executive Officer

Dated: June 28, 2004

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Michael L. Parodi, his or her attorney-in-fact, with the powers of substitution, for him or her in any and all capacities, to sign any amendments to this Report of Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

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.

Signature	Title	Date
/s/ MICHAEL L. PARODI Michael L. Parodi	Chairman, President, Chief Executive Officer and Director (Principal Executive Officer)	June 28, 2004
/s/ THOMAS R. MIKA Thomas R. Mika	Chief Financial Officer (Principal Financial and Accounting Officer)	June 28, 2004
/s/ EDWARD A. DOHRING Edward A. Dohring	Director	June 28, 2004
/s/ JEFFRY KRAUSS Jeffrey Krauss	Director	June 28, 2004
/s/ DUANE WADSWORTH Duane Wadsworth	Director	June 28, 2004

INDEX TO EXHIBITS

Exhibit Number	Description of Exhibit
2.1	Agreement and Plan of Merger by and among Tegal Corporation, SFI Acquisition Corp., Sputtered Films, Inc. and the Shareholder Agent dated as of August 13, 2002 (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report filed with the SEC on August 16, 2002)
2.2	Asset Acquisition Agreement by and between Tegal Corporation and Simplus Systems Corporation, dated November 10, 2003 (incorporated by reference to Exhibit 2.1 to Tegal's Current Report on Form 8-K (SEC File No. 000-26824) filed on December 9, 2003)
3.1	Certificate of Incorporation of the Registrant, as amended (incorporated by reference to Exhibits 3(i).1 and 3(i).2 included in Registrant's Registration Statement on Form S-1 (File No. 33-84702) declared effective by the Securities and Exchange Commission on October 18, 1995)
3.2	Amendment to the Certificate of Incorporation (incorporated by reference to Exhibit 4.2 to the Registrant's Registration Statement on Form S-3 (File No. 333-108921) declared effective by the Securities and Exchange Commission on October 14, 2003)
3.3	By-laws of Registrant (incorporated by reference to Exhibit 3(ii) included in Registrant's Registration Statement on Form S-1 (File No. 33-84702) declared effective by the Securities and Exchange Commission on October 18, 1995)
*4.1	Form of Certificate for Common Stock
4.2	First Amendment to Rights Agreement between the registrant and ChaseMellon Shareholder Services, dated as of January 15, 1999 (incorporated by reference to Exhibit 99.1 to the Registrant's Current Report filed with the SEC on January 1, 1999)
4.3	Rights Agreement between the Registrant and ChaseMellon Shareholder Services dated as of June 11, 1996 (incorporated by reference to Registrant's current report filed with the SEC on June 28, 1996)
**10.1	Employment Agreement between the Registrant and Stephen P. DeOrnellas dated December 16, 1997 (incorporated by reference to Exhibit 10.10 to the Registrant's Annual Report on Form 10-K for the fiscal year ended March 31, 1998 filed with the SEC on May 20, 1998)
**10.2	Employment Agreement between Registrant and Michael L. Parodi dated as of December 17, 1997 (incorporated by reference to Exhibit 10.18 to the Registrant's Annual Report on Form 10-K for the fiscal year ended March 31, 1998 filed with the SEC on May 20, 1998)
10.3	Form of Unit Purchase Agreement dated December 31, 2001 (incorporated by reference to Exhibit (i) to the Registrant's Quarterly Report filed with the SEC on February 13, 2002)
10.4	Form of Warrant (incorporated by reference to Exhibit (ii) to the Registrant's Quarterly Report filed with the SEC on February 13, 2002)
**10.5	Third Amended and Restated Stock Option Plan for Outside Directors (incorporated by reference to Exhibit (iv) to the Registrant's Quarterly Report filed with the SEC on February 13, 2002)
10.6	Security and Loan Agreement between Registrant and Silicon Valley Bank dated as of June 26, 2002 (incorporated by reference to Exhibit (10.6) to the Registrant's Annual Report on Form 10K for the fiscal year ended March 31, 2003 filed with the SEC on June 27, 2003)
10.7	Lease between the Registrant and Jane Crocker, formerly Jane C. Jacobs, as Trustee under the Jane C. Jacobs Trust Agreement dated October 5, 1990 ("Crocker") and Norman E. MacKay ("MacKay") dated as of April 29, 2003 (incorporated by reference to Exhibit (10.7) to the Registrant's Annual Report on Form 10K for the fiscal year ended March 31, 2003 filed with the SEC on June 27, 2003)
10.8	Security and Loan Agreement [Exim] between Registrant and Silicon Valley Bank dated as of June 26, 2002
10.9	Intellectual Property Security Agreement between Registrant and Valley Bank dated as of June 26, 2002
10.10	Warrant to purchase stock Agreement between Registrant and Silicon Valley Bank dated as of June 26, 2002
**10.11	Employment Agreement between Registrant and Thomas Mika dated as of August 12, 2002 (incorporated by reference to Exhibit (10.11) to the Registrant's Annual Report on Form 10K for the fiscal year ended March 31, 2003 filed with the SEC on June 27, 2003)
**10.12	Employment Agreement between Registrant and Carole Anne Demachkie dated as of August 30, 2002 (incorporated by reference to Exhibit (10.12) to the Registrant's Annual Report on Form 10K for the fiscal year

Exhibit Number	Description of Exhibit
	ended March 31, 2003 filed with the SEC on June 27, 2003)
*21	List of Subsidiaries of the Registrant
23.1	Consent of Independent Registered Public Accounting Firm
24.1	Power of Attorney (incorporated by reference to the signature page to this Annual Report)
31.1	Section 302 Certification of the Chief Executive Officer
31.2	Section 302 Certification of the Chief Financial Officer
32.1	Section 906 Certification of the Chief Executive Officer and Chief Financial Officer

EXHIBIT 10.7

NINTH AMENDMENT TO LEASE

This Ninth Amendment to Lease Agreement is entered into as of April 26, 2004 ("Reference Date"), by and between **JANE CROCKER, formerly Jane C. Jacobs, as Trustee under the Jane C. Jacobs Trust Agreement dated October 5, 1990** ("Crocker") and **NORMAN E. MACK AY** ("MacKay") (Crocker and MacKay hereinafter collectively referred to as "Landlord") and **TEGAL CORPORATION, a Delaware corporation** ("Tenant"), with reference to the following facts:

RECITALS:

A. WHEREAS, the Premises as defined below are currently leased to Tenant by Landlord pursuant to that certain Lease Agreement dated as of August 15, 1986 ("Original Lease") as the Original Lease was amended numerous times through and including the last amendment entitled Eighth Amendment to Lease Agreement dated as of January 12, 2004. The Amendments and the Original Lease are collectively referred to as the "Lease."

B. WHEREAS, the Premises consist of an approximate 47,464 square feet portion of an approximately 120,000 square feet building located at 2201 South McDowell Boulevard in Petaluma, California ("Premises").

C. WHEREAS, Tenant desires to add approximately 9,954 square feet of additional space to the Premises under Lease for such area known as the "Additional Expansion Space" ("Additional Expansion Space").

D. WHEREAS, Landlord approves of Tenant's request to occupy and lease such Additional Space as of May 1, 2004 and thereafter as hereinafter set forth..

E. WHEREAS, Landlord and Tenant desire to modify and amend certain provisions of the Lease as hereinafter set forth.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, the parties agree, as follows:

1. Recitals. The Recitals set forth above are incorporated herein by reference into this Ninth Amendment to Lease as though set forth at length herein.

2. Premises. The Premises shall be modified and increased to add approximately 9,954 square feet of area cross-hatched on **Exhibit A** hereto (the content of which is incorporated herein by reference) bringing the total area of the Premises under the Lease, as hereby amended, to approximately 57,418 square feet and hereinafter all references to the Premises shall be to said 57,418 square feet. The effective date of the addition of such Additional Expansion Space to the area of the Premises for all purposes under the Lease shall be May 1, 2004.

3. Basic Rent.* As a result of the addition of said 9,954 square feet of Additional Expansion Space to the Premises, Basic Rent commencing on May 1, 2004 for the Premises shall be, as follows:

Period	Monthly Basic Rent	Annual Basic Rent
5-1-2004 thru 12-31-2004	$72,174.43	$577,395.44 (8 months)
1-1-2005 thru 12-31-2005	$74,339.66	$892,075.92
1-1-2006 thru 12-31-2006	$76,569.85	$918,838.20
1-1-2007 thru 12-31-2007	$78,866.95	$946,403.40
1-1-2008 thru 12-31-2008	$81,232.96	$974,795.52
1-1-2009 thru 12-31-2009	$83,669.95	$1,004,039.40

***Note:** Section 3 of the Eighth Amendment to Lease is hereby deleted and superseded by the new Basic rent Schedule set forth above.

4. Tenant's Share. Section 4 of the Eighth Amendment to Lease is hereby modified by deleting "39.55%" and inserting in its place "47.85%."

5. No Landlord' Work. Landlord shall not be obligated to make any alterations to the Additional Expansion Space in connection with this Ninth Amendment. Tenant hereby takes the Additional Expansion Space in its "**AS IS**," **"WHERE IS"** condition. Tenant shall be allowed to use the cubicles, tables, chairs, furniture and other personal property located in the said Additional Expansion Space with the understanding that such personal property belongs to Landlord pursuant to the terms of paragraph 10 to that Seventh Amendment to Lease and the Bill of Sale which is ***Exhibit B*** to such Seventh Amendment to Lease between the parties and that at the termination of the Lease, or earlier surrender of the Additional Expansion Space to Landlord, that such personal property shall remain in such space or be removed by Tenant at the sole election of Landlord without cost to Landlord.

6. Brokerage Commissions. Tenant warrants that it has not had any dealings with any real estate brokers, leasing agents, salesmen, or incurred any obligations for the payment of real estate brokerage commissions or finder's fees which would be earned or due and payable by reason of the execution of this Ninth Amendment. Landlord warrants that it has not had any dealings with any real estate brokers, leasing agents, salesmen, or incurred any obligations for the payment of real estate brokerage commissions or finder's fees which would be earned or due and payable by reason of the execution of this Ninth Amendment

In the event that any person or broker makes a claim for such a commission based upon any contact, dealings or communication, the party whose conduct is the basis for the making of such claim shall indemnify, defend and hold harmless the other party against and from any commission, fee, liability, damage, cost and expense, including, without limitation, attorney's fees arising out of or resulting from any such claim.

7. Full Force and Effect. Except as supplemented and/or modified by this Ninth Amendment, to the best of Landlord's and Tenant's knowledge, this Lease is in full force and effect and neither party has any defenses to the enforcement of this Lease.

8. Entirety. Except as provided in this Ninth Amendment, this Lease is the entire agreement between the parties and there are no agreements or representations between the parties except as expressed herein. Moreover, no subsequent change or modification of this Lease, as amended, shall be binding unless in writing and fully executed by Landlord and Tenant. In the event of a conflict between the terms, conditions, and provisions of this Lease and this Ninth Amendment, the terms, conditions, and provisions of this Ninth Amendment shall control.

9. Miscellaneous. Any breach or default under any provision of this Ninth Amendment shall be a breach or default under this Lease and any breach or default under this Lease shall be a breach or default under this Ninth Amendment. All capitalized terms not defined herein shall have the meaning set forth in the Lease.

10. Counterparts. This Ninth Amendment may be executed in one or more counterparts, each of which shall be deemed an original, and all of which, taken together, shall constitute one and the same instrument. Furthermore, this Ninth Amendment may be executed and delivered by the exchange of electronic facsimile copies of counterparts of the signed documents, which facsimile copies or counterparts shall be binding on the parties and such execution and delivery shall have the same force and effect as any other delivery of a manually signed original of this Ninth Amendment.

11. Effective Date. This Ninth Amendment shall be effective only when it has been executed in writing by all of the parties hereto, when such Ninth Amendment has been delivered by Landlord and Tenant to each other and on such date when the last signatory necessary to execute this Ninth Amendment shall have executed it.

IN WITNESS THEREOF, Landlord and Tenant have executed this Ninth Amendment to Lease as of the Effective Date.

TENANT:

TEGAL CORPORATION, Inc., a Delaware corporation

By: /s/ Mike Parodi
Its: President & CEO
Dated: April 30, 2004

LANDLORD:

JANE C. CROCKER, Trustee and NORMAN E. MAC KAY

By: /s/ Jane C. Crocker, Trustee .
Its: Owner .
Dated: April 29, 2004

By:
By: /s/ Norman E. MacKay .
Its: Owner .
Dated: April 29, 2004

(Crocker, Tegal 9th Amend. to Lease 4/22/04)

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Forms S-8 (Nos. 333-12473, 333-66781, 333-00462, 333-88373, 333-51294 and 333-110650) and Form S-2 (No. 333-83840) and Forms S-3 (Nos. 333-107422, 333-108291 and 333-113045) of Tegal Corporation of our report dated June 25, 2004 relating to the consolidated financial statements and financial statement schedule, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

San Jose, California
June 25, 2004

EXHIBIT 31.1

CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Michael L. Parodi, certify that:

1. I have reviewed this annual report on Form 10-K of Tegal Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-14(e)) for the registrant and we have:

   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation;

   (c) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):

   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls over financial reporting.

Date: June 28, 2004

/s/ Michael L. Parodi
Chief Executive Officer and President

EXHIBIT 31.2

CERTIFICATION OF THE CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Thomas R. Mika, certify that:

1. I have reviewed this annual report on Form 10-K of Tegal Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-14(e)) for the registrant and we have:

   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation;

   (c) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):

   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls over financial reporting.

Date: June 28, 2004

/s/ Thomas R. Mika
Chief Financial Officer

EXHIBIT 32.1

CERTIFICATION PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002
(18 U.S.C. SECTION 1350)

In connection with the Annual Report of Tegal Corporation., a Delaware corporation (the "Company"), on Form 10-K for the year ending March 31, 2004 as filed with the Securities and Exchange Commission (the "Report"), I, Michael L. Parodi, President and Chief Executive Officer of the Company, certify, pursuant to § 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350), that to my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ Michael L. Parodi
Chief Executive Officer and President
June 28, 2004

CERTIFICATION PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002
(18 U.S.C. SECTION 1350)

In connection with the Annual Report of Tegal Corporation, a Delaware corporation (the "Company"), on Form 10-K for the year ending March 31, 2004 as filed with the Securities and Exchange Commission (the "Report"), I, Thomas R. Mika, Chief Financial Officer of the Company, certify, pursuant to § 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350), that to my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ Thomas R. Mika
Chief Financial Officer
June 28, 2004