UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(MARK ONE)

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

For the quarterly period ended March 31, 2003

or

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

For the transition period from _______________ to _______________

Commission file number 0-23621

MKS INSTRUMENTS, INC.

(Exact name of registrant as specified in its charter)

Massachusetts (State or other jurisdiction of incorporation or organization)	04-2277512 (I.R.S. Employer Identification No.)
Six Shattuck Road, Andover, Massachusetts (Address of principal executive offices)	01810 (Zip Code)

Registrant's telephone number, including area code (978) 975-2350

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

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

Number of shares outstanding of the issuer's common stock as of April 30, 2003: 51,383,573

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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS.

MKS INSTRUMENTS, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share data)

	March 31, 2003 (Unaudited)	December 31, 2002
ASSETS		
Current assets:		
Cash and cash equivalents	$ 80,527	$ 88,820
Short-term investments	42,558	39,894
Trade accounts receivable, net	49,499	45,505
Inventories	72,423	73,235
Other current assets	5,039	6,098
Total current assets	250,046	253,552
Long-term investments	19,000	15,980
Property, plant and equipment, net	80,734	82,595
Goodwill, net	259,719	259,781
Acquired intangible assets, net	63,943	67,720
Other assets	5,931	5,995
Total assets	$679,373	$685,623
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Short-term borrowings	$ 13,427	$ 13,877
Current portion of long-term debt	4,265	4,263
Current portion of capital lease obligations	265	332
Accounts payable	17,323	15,301
Accrued compensation	7,189	6,117
Other accrued expenses	19,952	21,654
Total current liabilities	62,421	61,544
Long-term debt	11,107	11,469
Long-term portion of capital lease obligations	200	257
Other liabilities	1,621	1,663
Commitments and contingencies (Note 12)		
Stockholders' equity:		
Common Stock, no par value, 200,000,000 shares authorized; 51,383,573 and 51,359,753 issued and outstanding at March 31, 2003 and December 31, 2002, respectively	113	113
Additional paid-in capital	579,265	579,175
Retained earnings	21,193	28,623
Accumulated other comprehensive income	3,453	2,779
Total stockholders' equity	604,024	610,690
Total liabilities and stockholders' equity	$679,373	$685,623

The accompanying notes are an integral part of the consolidated financial statements.

MKS INSTRUMENTS, INC.
CONSOLIDATED STATEMENTS OF INCOME
(in thousands, except per share data)
(Unaudited)

	Three Months Ended March 31, 2003	Three Months Ended March 31, 2002
Net sales	$ 72,777	$ 59,067
Cost of sales	47,371	39,847
Gross profit	25,406	19,220
Research and development	11,232	9,132
Selling, general and administrative	17,819	17,058
Amortization of acquired intangible assets	3,778	2,205
Purchase of in-process research and development	--	6,100
Loss from operations	(7,423)	(15,275)
Interest expense	288	329
Interest income	568	755
Loss before income taxes	(7,143)	(14,849)
Provision (benefit) for income taxes	287	(3,062)
Net loss	$ (7,430)	$(11,787)
Net loss per share:		
Basic and diluted	$ (0.14)	$ (0.25)
Weighted average common shares outstanding:		
Basic and diluted	51,380	46,288

The accompanying notes are an integral part of the consolidated financial statements.

MKS INSTRUMENTS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(Unaudited)

	Three Months Ended March 31, 2003	Three Months Ended March 31, 2002
Cash flows from operating activities:		
Net loss	$ (7,430)	$ (11,787)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	7,558	5,612
Purchase of in-process research and development	--	6,100
Other	221	62
Changes in operating assets and liabilities net of effects of businesses acquired:		
Trade accounts receivable	(4,213)	(10,325)
Inventories	765	(1,775)
Other current assets	1,059	5,401
Accrued expenses and other current liabilities	(712)	577
Accounts payable	2,023	3,344
Net cash used in operating activities	(729)	(2,791)
Cash flows from investing activities:		
Purchases of short-term and long-term investments	(24,600)	(37,731)
Maturities and sales of short-term and long-term investments	18,843	20,647
Purchases of property, plant and equipment	(1,691)	(1,335)
Increase in other assets	159	37
Purchases of businesses, net of cash acquired	--	(5,716)
Net cash used in investing activities	(7,289)	(24,098)
Cash flows from financing activities:		
Proceeds from short-term borrowings	11,789	1,505
Payments on short-term borrowings	(12,316)	--
Principal payments on long-term debt	(357)	(684)
Proceeds from exercise of stock options	90	2,610
Principal payments under capital lease obligations	(90)	(121)
Net cash provided by (used in) financing activities	(884)	3,310
Effect of exchange rate changes on cash and cash equivalents	609	(170)
Decrease in cash and cash equivalents	(8,293)	(23,749)
Cash and cash equivalents at beginning of period	88,820	120,869
Cash and cash equivalents at end of period	$ 80,527	$ 97,120
Supplemental disclosure of cash flow information:		
Cash paid during the period for:		
Interest	$ 81	$ 129
Income taxes	$ 861	$ 1,517
Noncash transactions during the period:		
Stock issued for acquisitions	$ --	$ 282,341

The accompanying notes are an integral part of the consolidated financial statements.

(Tables in thousands, except per share data)

1) Basis of Presentation

The terms "MKS" and the "Company" refer to MKS Instruments, Inc. and its subsidiaries. The interim financial data as of March 31, 2003 and for the three months ended March 31, 2003 and 2002 is unaudited; however, in the opinion of MKS, the interim data includes all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of the results for the interim periods. The unaudited financial statements presented herein have been prepared in accordance with the instructions to Form 10-Q and do not include all the information and note disclosures required by generally accepted accounting principles. The financial statements should be read in conjunction with the December 31, 2002 audited financial statements and notes thereto included in the MKS Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 31, 2003.

2) Stock-Based Compensation

The Company applies Accounting Principles Board Opinion ("APB") No. 25, "Accounting for Stock Issued to Employees" and related interpretations in accounting for its stock-based compensation plans. Accordingly, no compensation expense is recorded for options issued to employees in fixed amounts and with fixed exercise prices at least equal to the fair market value of the Company's common stock at the date of grant.

The Company has adopted the provisions of 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," through disclosure only. All stock-based awards to non-employees are accounted for at their fair value in accordance with SFAS No. 123.

The following table illustrates the effect on net loss and net loss per share if the Company had applied the fair value recognition provisions of SFAS No. 123 to stock-based employee awards.

	Three Months Ended March 31, 2003	Three Months Ended March 31, 2002
Net loss:		
Net loss as reported	$ (7,430)	$ (11,787)
Deduct: Total stock-based employee compensation expense determined under the fair-value-based method for all awards, net of tax	(4,902)	(3,151)
Pro forma net loss	$ (12,332)	$ (14,938)
Basic net loss per share:		
Net loss as reported	$ (0.14)	$ (0.25)
Pro forma net loss	$ (0.24)	$ (0.32)
Diluted net loss per share:		
Net loss as reported	$ (0.14)	$ (0.25)
Pro forma net loss	$ (0.24)	$ (0.32)

There is no tax benefit included in the stock-based employee compensation expense determined under the fair-value-based method for the three months ended March 31, 2003, as the Company established a full valuation allowance for its net deferred tax assets.

(Tables in thousands, except per share data)

The weighted average fair value of options at the date of grant was estimated using the Black-Scholes model and was $9.81 with the following assumptions in the three months ended March 31, 2003: expected life of 5 years, weighted average interest rate of 2.99%, expected volatility of 81%, and no dividend yield. In the three months ended March 31, 2002, the weighted average fair value of options at the date of grant was $16.31 with the following assumptions for that period: expected life of 5 years, weighted average interest rate of 4.39%, expected volatility of 81%, and no dividend yield.

3) Use of Estimates

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an on-going basis, management evaluates its estimates and judgments, including those related to revenue recognition, accounts receivable, inventory, intangible assets, goodwill, other long-lived assets, in-process research and development, income taxes, deferred tax valuation allowance, and investments. Management bases its estimates and judgments on historical experience and on various other factors that are believed 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.

4) Recent Accounting Pronouncements

In January 2003, the Financial Accounting Standards Board ("FASB") issued FASB Interpretation No. 46 ("FIN 46"), "Consolidation of Variable Interest Entities," which addresses consolidation by a business of variable interest entities in which it is the primary beneficiary. The Interpretation is effective immediately for certain disclosure requirements and variable interest entities created after January 31, 2003, and periods beginning after June 15, 2003 for variable interest entities created before February 1, 2003. The Company does not expect the adoption of FIN 46 to have a material impact on its consolidated financial position or results of operations.

In November 2002, the EITF reached a consensus on issue 00-21, "Revenue Arrangements with Multiple Deliverables." EITF 00-21 addresses revenue recognition on arrangements encompassing multiple elements that are delivered at different points in time, defining criteria that must be met for elements to be considered to be a separate unit of accounting. If an element is determined to be a separate unit of accounting, the revenue for the element is recognized at the time of delivery. EITF 00-21 is effective for revenue arrangements entered into in fiscal periods beginning after June 15, 2003. The Company does not expect that the pronouncement will have a material impact on its consolidated financial position or results of operations.

5) Goodwill and Intangible Assets

Intangible Assets

Acquired amortizable intangible assets consisted of the following as of March 31, 2003:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life
Completed technology	$ 69,394	$(18,712)	$50,682	6 years
Customer relationships	6,640	(1,973)	4,667	7 years
Patents, trademarks, tradenames and other...	12,394	(3,800)	8,594	7 years
	$ 88,428	$(24,485)	$63,943	6 years

(Tables in thousands, except per share data)

Acquired amortizable intangible assets consisted of the following as of December 31, 2002:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life
Completed technology	$ 69,394	$(15,629)	$53,765	6 years
Customer relationships	6,640	(1,743)	4,897	7 years
Patents, trademarks, tradenames and other	12,394	(3,336)	9,058	7 years
	$ 88,428	$(20,708)	$67,720	6 years

Aggregate amortization expense related to acquired intangibles for the three months ended March 31, 2003 was $3,778,000, and was $2,205,000 for the three months ended March 31, 2002. Estimated amortization expense related to acquired intangibles for each of the five succeeding fiscal years is as follows:

Year	Amount
2003	$ 14,469
2004	14,145
2005	13,244
2006	11,143
2007	10,536

Goodwill

The change in the carrying amount of goodwill during the three months ended March 31, 2003 was not material.

6) Cash and Cash Equivalents and Investments

Cash and Cash equivalents consist of the following:

	March 31, 2003	December 31, 2002
Cash and Money Market Instruments	$47,640	$51,538
Commercial Paper	26,774	31,216
Federal Government and Government Agency Obligations	5,114	6,066
Corporate Obligations	999	--
	$80,527	$88,820

Short-term available-for-sale investments at market value maturing within one year consist of the following:

	March 31, 2003	December 31, 2002
Federal Government and Government Agency Obligations	$26,948	$28,636
Corporate Obligations	--	858
Commercial Paper	15,610	10,400
	$42,558	$39,894

(Tables in thousands, except per share data)

Long-term available-for-sale investments at market value with maturities of 1 to 5 years consist of the following:

	March 31, 2003	December 31, 2002
Federal Government and Government Agency Obligations	$ 6,568	$ 2,061
Commercial Paper	4,754	--
Corporate Obligations	7,678	13,919
	$19,000	$15,980

Gross unrealized gains and losses on available-for-sale investments were not material at March 31, 2003 and December 31, 2002.

7) Net Loss Per Share

The following table sets forth the computation of basic and diluted net loss per share:

	Three Months Ended March 31, 2003	2002
Numerator		
Net loss	$ (7,430)	$(11,787)
Denominator		
Shares used in net loss per common share - basic and diluted	51,380	46,288
Net loss per common share		
Basic and diluted	$ (0.14)	$ (0.25)

For purposes of computing diluted earnings per share, weighted average common share equivalents do not include stock options with an exercise price greater than the average market price of the common shares during the period. All options outstanding during the three months ended March 31, 2003 and 2002 are excluded from the calculation of diluted net loss per common share because their inclusion would be anti-dilutive. There were options to purchase approximately 8,242,000 and 7,548,000 shares of the Company's common stock outstanding as of March 31, 2003 and 2002, respectively.

8) Inventories

Inventories consist of the following:

	March 31, 2003	December 31, 2002
Raw material	$35,247	$36,630
Work in process	12,069	11,617
Finished goods	25,107	24,988
	$72,423	$73,235

(Tables in thousands, except per share data)

9) Stockholders' Equity

Total comprehensive loss was as follows:

	Three Months Ended March 31, 2003	2002
Net loss	$(7,430)	$(11,787)
Other comprehensive income (loss), net of taxes:		
Changes in value of financial instruments designated as hedges of currency and interest rate exposures	1	(156)
Foreign currency translation adjustment	770	(340)
Unrealized gain (loss) on investments	(97)	(55)
Other comprehensive income (loss), net of taxes	674	(551)
Total comprehensive loss	$(6,756)	$(12,338)

10) Income Taxes

The Company records income taxes using the asset and liability method. Deferred income tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective income tax bases, and operating loss and tax credit carryforwards. The Company evaluates the realizability of its net deferred tax assets and assesses the need for a valuation allowance on a quarterly basis. The future benefit to be derived from its deferred tax assets is dependent upon its ability to generate sufficient future taxable income to realize the assets. The Company records a valuation allowance to reduce its net deferred tax assets to the amount that may be more likely than not to be realized. To the extent the Company establishes a valuation allowance, an expense will be recorded within the provision for income taxes line on the statement of income.

As a result of incurring significant operating losses since 2001, the Company determined that it is more likely than not that its deferred tax assets may not be realized, and since the fourth quarter of 2002 has established a full valuation allowance for its net deferred tax assets. Accordingly, the Company has not recorded a deferred tax benefit from the net operating loss incurred in the three months ended March 31, 2003. The provision for income taxes of $287,000 for the three months ended March 31, 2003 is comprised of tax expense from foreign operations and state taxes.

In periods subsequent to establishing a valuation allowance, if the Company were to determine that it would be able to realize its net deferred tax assets in excess of their net recorded amount, an adjustment to the valuation allowance would be recorded as a reduction to income tax expense in the period such determination was made. Also in future periods, if the Company were to determine that it would not be able to realize the recorded amount of its net deferred tax assets, an adjustment to the valuation allowance would be recorded as an increase to income tax expense in the period such determination was made.

11) Segment Information and Significant Customer

During 2002, the Company consolidated its product groups to accelerate product development, rationalize manufacturing operations, and reduce operating costs. This realignment of operations has organized the Company into three product groups: Instruments and Control Systems; Power and Reactive Gas Products; and Vacuum Products. The Company's products are derived from MKS' core competencies in pressure measurement and control; materials delivery; gas and thin-film composition analysis; control and information management; power and reactive gas generation; and vacuum technology. The Company's operating segments are aggregated into one reportable segment because the products are manufactured and distributed in a similar manner, have similar long-term margins and are sold to a similar customer base. The segment information for the three months ended March 31, 2002 has been reclassified to conform with these internal organizational changes.

(Tables in thousands, except per share data)

Net sales to unaffiliated customers are based on the location in which the sale originated. Transfers between geographic areas are at negotiated transfer prices and have been eliminated from consolidated net sales. Net sales to unaffiliated customers and long-lived assets by geographic area were as follows:

	Three Months Ended March 31, 2003			
	United States	Far East	Europe	Total
Net sales to unaffiliated customers	$ 43,125	$20,316	$9,336	$ 72,777
Long-lived assets	$362,136	$41,487	$6,704	$410,327

	Three Months Ended March 31, 2002			
	United States	Far East	Europe	Total
Net sales to unaffiliated customers	$ 39,394	$11,336	$8,337	$ 59,067
Long-lived assets	$352,785	$57,275	$6,059	$416,119

Included in the Far East are Japan, Korea, Singapore, Taiwan, China and Hong Kong. Included in Europe are Germany, France and the United Kingdom. Net sales to unaffiliated customers from Japan were $13,393,000 and $7,290,000 for the three months ended March 31, 2003 and 2002, respectively. Long-lived assets within Japan amounted to $10,576,000 and $10,997,000 at March 31, 2003 and 2002, respectively.

The Company had one customer comprising 17% and 16% of net sales for the three months ended March 31, 2003 and 2002, respectively.

12) Commitments and Contingencies

On November 3, 1999, On-Line Technologies, Inc. ("On-Line"), which was acquired by the Company in April 2001, brought suit in federal district court in Connecticut against Perkin-Elmer, Inc. and certain other defendants for infringement of On-Line's patent related to its FTIR spectrometer product. The suit sought injunctive relief and damages for infringement. Perkin-Elmer, Inc. filed a counterclaim seeking invalidity of the patent, costs, and attorneys' fees. In June 2002, the defendants filed a motion for summary judgment. In April 2003 the court granted the motion and dismissed the case. The Company has appealed this decision.

The Company is subject to legal proceedings and claims, which have arisen in the ordinary course of business. In the opinion of management, the ultimate disposition of these matters will not have a material adverse effect on the Company's results of operations, financial condition or cash flows.

13) Acquisitions

On January 31, 2002, MKS completed its acquisition of the ENI Business ("ENI") of Emerson Electric Co., a supplier of solid-state radio frequency (RF) and direct current (DC) plasma power supplies, matching networks and instrumentation to the semiconductor and thin-film processing industries. The reasons for the acquisition of ENI were based upon the ability to offer higher value and more integrated application solutions by combining ENI's solid-state power conversion technology with the Company's core competency in plasma and reactive gas solutions. On March 13, 2002, MKS acquired Tenta Technology Ltd. ("Tenta"), a company that designs and supplies modular, computer-based process control systems for 300mm semiconductor process tool applications. The reasons for the acquisition were based upon the ability to offer higher value and more integrated application solutions by integrating Tenta's process controllers with MKS digital network products to provide a more complete process control solution. The acquisitions have been accounted for under the purchase method of accounting. The results of operations of these acquired companies are included in the Company's consolidated statement of income as of and since the date of purchase.

(Tables in thousands, except per share data)

The following unaudited pro forma information presents a summary of the historical results of operations of the Company as if the ENI and Tenta acquisitions had occurred at the beginning of the period.

	Three Months Ended March 31, 2002
Net sales	$ 63,207
Net loss	$ (7,087)
Net loss per share:	
Basic	$ (0.14)
Diluted	$ (0.14)

The unaudited pro forma results for the three months ended March 31, 2002 excludes approximately $1.3 million of non-recurring charges directly related to the transactions. Additionally, the charge for purchase of in-process research and development was not included in the unaudited pro forma results, because it was non-recurring and directly related to the transaction.

14) Restructuring and Asset Impairment Charges

During 2002, the Company implemented a consolidation of recent acquisitions to accelerate product development, rationalize manufacturing operations, and reduce operating costs. As a result, the Company recorded restructuring and asset impairment charges of $2,726,000 during 2002. The activity for the three months ended March 31, 2003 related to the restructuring accrual is outlined as follows:

	Balance December 31, 2002	Cash Payments	Balance March 31, 2003
Workforce reductions	$ 331	$ (75)	$ 256
Facility consolidations	1,159	(21)	1,138
	$ 1,490	$ (96)	$1,394

15) Product Warranties

The Company provides for the estimated costs to fulfill customer warranty obligations upon the recognition of the related revenue. While the Company engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its component suppliers, the Company's warranty obligation is affected by product failure rates, utilization levels, material usage, and supplier warranties on parts delivered to the Company. Should actual product failure rates, utilization levels, material usage, or supplier warranties on parts differ from the Company estimates, revisions to the estimated warranty liability would be required.

Product warranty activity for the three months ended March 31, 2003 was as follows:

Balance as of December 31, 2002	$ 6,921
Provisions for product warranties	315
Direct charges to the warranty liability	(1,052)
Balance as of March 31, 2003	$ 6,184

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

MKS believes that this Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. When used herein, the words "believes," "anticipates," "plans," "expects," "estimates" and similar expressions are intended to identify forward-looking statements. These forward-looking statements reflect management's current opinions and are subject to certain risks and uncertainties that could cause results to differ materially from those stated or implied. MKS assumes no obligation to update this information. Risks and uncertainties include, but are not limited to, those discussed in the section entitled "Factors That May Affect Future Results."

OVERVIEW

MKS develops, manufactures and provides instruments, components and integrated subsystems used to measure, control, power and monitor critical parameters of semiconductor and other advanced manufacturing process environments.

On January 31, 2002, MKS completed its acquisition of the ENI Business ("ENI") of Emerson Electric Co., a supplier of solid-state radio frequency (RF) and direct current (DC) plasma power supplies, matching networks and instrumentation to the semiconductor and thin-film processing industries. The reasons for the acquisition of ENI were based upon the ability to offer higher value and more integrated application solutions by combining ENI's solid-state power conversion technology with the Company's core competency in plasma and reactive gas solutions. The acquisition has been accounted for under the purchase method of accounting. Also in 2002, MKS acquired three companies that expanded its position in distributed computer-based process control and data management. On March 13, 2002, MKS acquired Tenta Technology, Ltd. ("Tenta"), a privately held company that designs and supplies modular, computer-based process control systems for 300mm semiconductor process tool applications. On April 5, 2002, MKS acquired IPC Fab Automation GmbH ("IPC"), a privately held developer and provider of web-based hardware and software that enables e-diagnostics and advanced process control for advanced manufacturing applications. On October 1, 2002, MKS acquired EquipNet Ltd. ("EquipNet"), a privately held company that develops web-based connectivity equipment for the semiconductor industry. The results of operations of these acquired companies are included in the Company's consolidated statement of income as of and since the date of the purchase.

The Company's customers include semiconductor capital equipment manufacturers, semiconductor device manufacturers, industrial manufacturing companies and university, government and industrial research laboratories. During 2002, 2001 and 2000, MKS estimates that approximately 70%, 64% and 76% of its net sales, respectively, were to semiconductor capital equipment manufacturers and semiconductor device manufacturers. MKS expects that sales to such customers will continue to account for a substantial majority of its sales. In 2002, 2001 and 2000, sales to MKS' top ten customers accounted for approximately 49%, 39% and 52%, respectively, of MKS' net sales. During 2002, 2001 and 2000, Applied Materials, Inc. accounted for approximately 23%, 18% and 30%, respectively, of MKS' net sales.

A significant portion of MKS' sales are to operations in international markets. International sales include sales by MKS' foreign subsidiaries, but exclude direct export sales, which were less than 10% of MKS' total net sales for each of the years ended December 31, 2002, 2001 and 2000. International sales accounted for approximately 36% of net sales in 2002, 31% of net sales in 2001 and 23% of net sales in 2000. Sales by MKS' Japan subsidiary comprised 14%, 12% and 11% of net sales in 2002, 2001 and 2000, respectively.

RESULTS OF OPERATIONS

The following table sets forth for the periods indicated the percentage of total net sales of certain line items included in MKS' consolidated statement of income data.

	Three months ended March 31, 2003	Three months ended March 31, 2002
Net sales	100.0%	100.0%
Cost of sales	65.1	67.5
Gross profit	34.9	32.5
Research and development	15.4	15.5
Selling, general and administrative	24.5	28.9
Amortization of acquired intangible assets	5.2	3.7
In-process research and development	--	10.3
Loss from operations	(10.2)	(25.9)
Interest income, net	0.4	0.7
Loss before income taxes	(9.8)	(25.2)
Provision (benefit) for income taxes	0.4	(5.2)
Net loss	(10.2)%	(20.0)%

Net Sales. Net sales increased 23.2% to $72.8 million for the three months ended March 31, 2003 from $59.1 million for the three months ended March 31, 2002. International net sales were approximately $29.7 million for the three months ended March 31, 2003 or 40.7% of net sales and $19.7 million for the same period of 2002 or 33.3% of net sales. The increase was due to increased worldwide demand for the Company's products from the Company's semiconductor capital equipment manufacturer and semiconductor device manufacturer customers during the quarter. Additionally, net sales in 2003 increased approximately $5.3 million from increased revenues of ENI and Tenta, the companies acquired during the three months ended March 31, 2002.

The semiconductor capital equipment market has experienced a significant downturn since 2001. As a result, since 2001 the Company has experienced a significant reduction in demand for its products from its semiconductor capital equipment manufacturer and semiconductor device manufacturer customers. The semiconductor capital equipment industry has been cyclical, and the Company cannot determine how long the downturn will last. In the absence of significant improvement, net sales could continue to decline or remain low, and the amount of goodwill, other long-lived assets, and inventory considered realizable could be significantly reduced.

Gross Profit. Gross profit as a percentage of net sales increased to 34.9% for the three months ended March 31, 2003 from 32.5% for the three months ended March 31, 2002. The increase was primarily due to overhead costs being a lower percentage of the higher net sales, and cost saving initiatives.

Research and Development. Research and development expense increased 23.0% to $11.2 million or 15.4% of net sales for the three months ended March 31, 2003 from $9.1 million or 15.5% of net sales for the three months ended March 31, 2002. The increase was due to increased compensation expense of $1.1 million and increased expenses for project materials of $1.0 million, primarily from including a full quarter of costs during 2003 of the companies acquired during 2002.

Selling, General and Administration. Selling, general and administration expenses increased 4.5% to $17.8 million or 24.5% of net sales for the three months ended March 31, 2003 from $17.1 million or 28.9% of net sales for the three months ended March 31, 2002. The increase was due to increased compensation expense of $0.4 million and other selling expenses, primarily from including a full quarter of costs during 2003 of the companies acquired during 2002.

Amortization of Acquired Intangible Assets. Amortization expense of $3.8 million for the three months ended March 31, 2003 represents the amortization of the identifiable intangibles resulting from the acquisitions completed by MKS. The increase in amortization expense of $1.6 million as compared to the three months ended March 31, 2002 is due to amortization of intangible assets from the companies acquired in 2002.

Purchase of In-process Technology. In-process research and development of $6.1 million for the three months ended March 31, 2002 arose from the acquisition of ENI.

In January 2002, the Company acquired ENI in a transaction accounted for under the purchase method. The purchase price was allocated to the assets acquired, including intangible assets, based on their estimated fair values. The intangible asset allocation as of March 31, 2002 included approximately $6.1 million for acquired in-process technology for projects, generally expected to have durations of 12 months, that did not have future alternative uses.

Interest Income (Expense), Net. During the three months ended March 31, 2003, the Company generated net interest income of $0.3 million, primarily from interest on its invested cash and investments, offset by interest expense on outstanding debt. Interest income declined $0.2 million to $0.6 million for the three months ended March 31, 2003 from $0.8 million for the three months ended March 31, 2002. The decrease was due to lower interest rate yields during 2003.

Provision (benefit) for Income Taxes. The Company recorded a provision for income taxes of $0.3 million for the three months ended March 31, 2003, for an effective tax rate of 4.0%. As a result of incurring significant operating losses since 2001, the Company determined that it is more likely than not that its deferred tax assets may not be realized, and since the fourth quarter of 2002 has established a full valuation allowance for its net deferred tax assets. Accordingly, the Company has not recorded a deferred tax benefit from the net operating loss incurred in the three months ended March 31, 2003. The provision for income taxes of $0.3 million is comprised of tax expense from foreign operations and state taxes. Until an appropriate level of profitability is reached, the Company will not record deferred tax benefits from its net operating losses in future results of operations.

The Company's effective tax rate for the three months ended March 31, 2002 was a benefit of 20.6%. The effective tax rate differed from the statutory rate of 35% due to the impact of non-deductible charges associated with acquisitions made in 2002.

LIQUIDITY AND CAPITAL RESOURCES

The Company has financed its operations and capital requirements through a combination of cash provided by operations, long-term real estate financing, capital lease financing and short-term lines of credit.

Operations used cash of $0.7 million for the three months ended March 31, 2003. The cash flow from operations for the first quarter of 2003 was impacted by the net loss of $7.4 million, offset by non-cash charges included in the net loss for depreciation and amortization of $7.6 million. Additionally, changes in operating assets and liabilities reduced cash by $1.1 million, primarily from an increase in accounts receivable of $4.2 million, offset by changes in other current assets of $1.1 million and accounts payable of $2.0 million. Investing activities utilized cash of $7.3 million for the three months ended March 31, 2003 primarily from purchases of available-for-sale investments. Financing activities used cash of $0.9 million, primarily for payments on debt.

Working capital was $187.6 million as of March 31, 2003, a decrease of $4.4 million from December 31, 2002. MKS entered into a credit agreement on July 31, 2002 whereby MKS has a combined $40.0 million line of credit with two banks. The credit agreement expires on July 31, 2003 and has no collateral provisions. The Company was in compliance with all debt covenants as of March 31, 2003.

MKS believes that its working capital, together with the cash anticipated to be generated from operations and funds available from existing credit facilities, will be sufficient to satisfy its estimated working capital and planned capital expenditure requirements through at least the next 12 months.

FACTORS THAT MAY AFFECT FUTURE RESULTS

MKS' BUSINESS DEPENDS SUBSTANTIALLY ON CAPITAL SPENDING IN THE SEMICONDUCTOR INDUSTRY WHICH IS CHARACTERIZED BY PERIODIC FLUCTUATIONS THAT MAY CAUSE A REDUCTION IN DEMAND FOR MKS' PRODUCTS.

MKS estimates that approximately 70% of its sales during 2002, 64% of its sales during 2001, and 76% of its sales during 2000 were to semiconductor capital equipment manufacturers and semiconductor device manufacturers, and it expects that sales to such customers will continue to account for a substantial majority of its sales. MKS' business depends upon the capital expenditures of semiconductor device manufacturers, which in turn depend upon the demand for semiconductors. Periodic reductions in demand for the products manufactured by semiconductor capital equipment manufacturers and semiconductor device manufacturers may adversely affect MKS' business, financial condition and results of operations. Historically, the semiconductor market has been highly cyclical and has experienced periods of overcapacity, resulting in significantly reduced demand for capital equipment. For example, in 1996 and 1998, the semiconductor capital equipment industry experienced significant declines, which caused a number of MKS' customers to reduce their orders. More recently, in 2001, 2002 and 2003, MKS has experienced a significant reduction in demand from OEM customers, and lower gross margins due to reduced absorption of manufacturing overhead. MKS incurred significant charges for excess and obsolete inventory of $16.6 million in 2001. The charges were primarily caused by a significant reduction in demand including reduced demand for older technology products. In addition, many semiconductor manufacturers have operations and customers in Asia, a region which in recent years has experienced serious economic problems including currency devaluations, debt defaults, lack of liquidity and recessions. MKS cannot be certain that semiconductor downturns will not recur. A decline in the level of orders as a result of any future downturn or slowdown in the semiconductor capital equipment industry could have a material adverse effect on MKS' business, financial condition and results of operations.

MKS' QUARTERLY OPERATING RESULTS HAVE VARIED, AND ARE LIKELY TO CONTINUE TO VARY SIGNIFICANTLY. THIS MAY RESULT IN VOLATILITY IN THE MARKET PRICE FOR MKS' SHARES.

A substantial portion of MKS' shipments occur shortly after an order is received and therefore MKS operates with a low level of backlog. As a result, a decrease in demand for MKS' products from one or more customers could occur with limited advance notice and could have a material adverse effect on MKS' results of operations in any particular period. A significant percentage of MKS' expenses are relatively fixed and based in part on expectations of future net sales. The inability to adjust spending quickly enough to compensate for any shortfall would magnify the adverse impact of a shortfall in net sales on MKS' results of operations. Factors that could cause fluctuations in MKS' net sales include:

- the timing of the receipt of orders from major customers;
- shipment delays;
- disruption in sources of supply;
- seasonal variations of capital spending by customers;
- production capacity constraints; and
- specific features requested by customers.

For example, MKS was in the process of increasing its production capacity when the semiconductor capital equipment market began to experience a significant downturn in 1996. This downturn had a material adverse effect on MKS' operating results in the second half of 1996 and the first half of 1997. After an increase in business in the latter half of 1997, the market experienced another downturn in 1998, which had a material adverse effect on MKS' 1998 and first quarter 1999 operating results. More recently, the semiconductor capital equipment market experienced a significant downturn during 2001, 2002 and 2003. As a result, MKS has experienced a reduction in demand from OEM customers, which has had a material adverse effect on MKS' operating results. During 2001 gross margins were negatively affected by significant charges for excess and obsolete inventory of $16.6 million in 2001. The charges were primarily caused by a significant reduction in demand including reduced demand for older technology products. As a result of the factors discussed above, it is likely that MKS will in the future experience quarterly or annual fluctuations and that, in one or more future quarters, its operating results will fall below the expectations of public market analysts or investors. In any such event, the price of MKS' common stock could decline significantly.

THE LOSS OF NET SALES TO ANY ONE OF MKS' MAJOR CUSTOMERS WOULD LIKELY HAVE A MATERIAL ADVERSE EFFECT ON MKS.

MKS' top ten customers accounted for approximately 49% of its net sales in 2002, 39% of its net sales in 2001 and 52% of its net sales in 2000. The loss of a major customer or any reduction in orders by these customers, including reductions due to market or competitive conditions, would likely have a material adverse effect on MKS' business, financial condition and results of operations. During 2002, 2001 and 2000, one customer, Applied Materials, accounted for approximately 23%, 18% and 30%, respectively, of MKS' net sales. None of MKS' significant customers, including Applied Materials, has entered into an agreement requiring it to purchase any minimum quantity of MKS' products. The demand for MKS' products from its semiconductor capital equipment customers depends in part on orders received by them from their semiconductor device manufacturer customers.

Attempts to lessen the adverse effect of any loss or reduction through the rapid addition of new customers could be difficult because prospective customers typically require lengthy qualification periods prior to placing volume orders with a new supplier. MKS' future success will continue to depend upon:

- its ability to maintain relationships with existing key customers;

- its ability to attract new customers; and

- the success of its customers in creating demand for their capital equipment products which incorporate MKS' products.

AS PART OF MKS' BUSINESS STRATEGY, MKS HAS ENTERED INTO AND MAY ENTER INTO OR SEEK TO ENTER INTO BUSINESS COMBINATIONS AND ACQUISITIONS THAT MAY BE DIFFICULT TO INTEGRATE, DISRUPT ITS BUSINESS, DILUTE STOCKHOLDER VALUE OR DIVERT MANAGEMENT ATTENTION.

MKS acquired Compact Instrument Technology, LLC ("Compact Instrument") in March 2000, Telvac Engineering, Ltd. ("Telvac") in May 2000, Spectra Instruments, LLC ("Spectra") in July 2000, D.I.P., Inc. ("D.I.P.") in September 2000, Applied Science and Technology, Inc. ("ASTeX") in January 2001, On-Line Technologies, Inc. ("On-Line") in April 2001, the ENI Business ("ENI") of Emerson Electric Co. in January 2002, Tenta Technology Ltd. ("Tenta") in March 2002, IPC Fab Automation GmbH ("IPC") in April 2002 and EquipNet Ltd. ("EquipNet") in October 2002. As a part of its business strategy, MKS may enter into additional business combinations and acquisitions. Acquisitions are typically accompanied by a number of risks, including the difficulty of integrating the operations and personnel of the acquired companies, the potential disruption of MKS' ongoing business and distraction of management, expenses related to the acquisition and potential unknown liabilities associated with acquired businesses.

As a result of its recent acquisitions, the Company has added several different decentralized accounting systems, resulting in a complex reporting environment. The Company expects that it will need to continue to modify its accounting policies, internal controls, procedures and compliance programs to provide consistency across all its operations.

If MKS is not successful in completing acquisitions that it may pursue in the future, it may be required to reevaluate its growth strategy, and MKS may have incurred substantial expenses and devoted significant management time and resources in seeking to complete proposed acquisitions that will not generate benefits for it.

In addition, with future acquisitions, MKS could use substantial portions of its available cash as all or a portion of the purchase price. MKS could also issue additional securities as consideration for these acquisitions, which could cause significant stockholder dilution. MKS' acquisitions of Compact Instrument, Telvac, Spectra, D.I.P., ASTeX, On-Line, ENI, Tenta, IPC, and EquipNet and any future acquisitions may not ultimately help MKS achieve its strategic goals and may pose other risks to MKS.

AN INABILITY TO CONVINCE SEMICONDUCTOR DEVICE MANUFACTURERS TO SPECIFY THE USE OF MKS' PRODUCTS TO MKS' CUSTOMERS, WHO ARE SEMICONDUCTOR CAPITAL EQUIPMENT MANUFACTURERS, WOULD WEAKEN MKS' COMPETITIVE POSITION.

The markets for MKS' products are highly competitive. Its competitive success often depends upon factors outside of its control. For example, in some cases, particularly with respect to mass flow controllers, semiconductor device manufacturers may direct semiconductor capital equipment manufacturers to use a specified supplier's product in their equipment. Accordingly, for such products, MKS' success will depend in part on its ability to have semiconductor device manufacturers specify that MKS' products be used at their semiconductor fabrication facilities. In addition, MKS may encounter difficulties in changing established relationships of competitors that already have a large installed base of products within such semiconductor fabrication facilities.

IF MKS' PRODUCTS ARE NOT DESIGNED INTO SUCCESSIVE NEW GENERATIONS OF ITS CUSTOMERS' PRODUCTS, MKS WILL LOSE SIGNIFICANT NET SALES DURING THE LIFESPAN OF THOSE PRODUCTS.

New products designed by semiconductor capital equipment manufacturers typically have a lifespan of five to ten years. MKS' success depends on its products being designed into new generations of equipment for the semiconductor industry. MKS must develop products that are technologically current so that they are positioned to be chosen for use in each successive new generation of semiconductor capital equipment. If MKS products are not chosen by its customers, MKS' net sales may be reduced during the lifespan of its customers' products. In addition, MKS must make a significant capital investment to develop products for its customers well before its products are introduced and before it can be sure that it will recover its capital investment through sales to the customers in significant volume. MKS is thus also at risk during the development phase that its products may fail to meet its customers' technical or cost requirements and may be replaced by a competitive product or alternative technology solution. If that happens, MKS may be unable to recover MKS' development costs.

THE SEMICONDUCTOR INDUSTRY IS SUBJECT TO RAPID DEMAND SHIFTS WHICH ARE DIFFICULT TO PREDICT. AS A RESULT, MKS' INABILITY TO EXPAND ITS MANUFACTURING CAPACITY IN RESPONSE TO THESE RAPID SHIFTS MAY CAUSE A REDUCTION IN ITS MARKET SHARE.

MKS' ability to increase sales of certain products depends in part upon its ability to expand its manufacturing capacity for such products in a timely manner. If MKS is unable to expand its manufacturing capacity on a timely basis or to manage such expansion effectively, its customers could implement its competitors' products and, as a result, its market share could be reduced. Because the semiconductor industry is subject to rapid demand shifts which are difficult to foresee, MKS may not be able to increase capacity quickly enough to respond to a rapid increase in demand in the semiconductor industry. Additionally, capacity expansion could increase MKS' fixed operating expenses and if sales levels do not increase to offset the additional expense levels associated with any such expansion, its business, financial condition and results of operations could be materially adversely affected.

SALES TO FOREIGN MARKETS CONSTITUTE A SUBSTANTIAL PORTION OF MKS' NET SALES; THEREFORE, MKS' NET SALES AND RESULTS OF OPERATIONS COULD BE ADVERSELY AFFECTED BY DOWNTURNS IN ECONOMIC CONDITIONS IN COUNTRIES OUTSIDE OF THE UNITED STATES.

International sales include sales by MKS' foreign subsidiaries, but exclude direct export sales, which were less than 10% of MKS' total net sales for each of the years ended December 31, 2002, 2001 and 2000. International sales accounted for approximately 36% of net sales in 2002, 31% of net sales in 2001 and 23% of net sales in 2000.

MKS anticipates that international sales will continue to account for a significant portion of MKS' net sales. In addition, certain of MKS' key domestic customers derive a significant portion of their revenues from sales in international markets. Therefore, MKS' sales and results of operations could be adversely affected by economic slowdowns and other risks associated with international sales.

RISKS RELATING TO MKS' INTERNATIONAL OPERATIONS COULD ADVERSELY AFFECT MKS' OPERATING RESULTS.

MKS has substantial international sales, service and manufacturing operations in Europe and Asia, which exposes MKS to foreign operational and political risks that may harm MKS' business. MKS' international operations are subject to inherent risks, which may adversely affect MKS, including:

- political and economic instability in countries where MKS has sales, service and manufacturing operations, particularly in Asia;

- fluctuations in the value of currencies and high levels of inflation, particularly in Asia and Europe;

- changes in labor conditions and difficulties in staffing and managing foreign operations, including, but not limited to, labor unions;

- greater difficulty in collecting accounts receivable and longer payment cycles;

- burdens and costs of compliance with a variety of foreign laws;

- increases in duties and taxation;

- imposition of restrictions on currency conversion or the transfer of funds;

- changes in export duties and limitations on imports or exports;

- expropriation of private enterprises; and

- unexpected changes in foreign regulations.

If any of these risks materialize, MKS' operating results may be adversely affected.

UNFAVORABLE CURRENCY EXCHANGE RATE FLUCTUATIONS MAY LEAD TO LOWER GROSS MARGINS, OR MAY CAUSE MKS TO RAISE PRICES WHICH COULD RESULT IN REDUCED SALES.

Currency exchange rate fluctuations could have an adverse effect on MKS' net sales and results of operations and MKS could experience losses with respect to its hedging activities. Unfavorable currency fluctuations could require MKS to increase prices to foreign customers which could result in lower net sales by MKS to such customers. Alternatively, if MKS does not adjust the prices for its products in response to unfavorable currency fluctuations, its results of operations could be adversely affected. In addition, sales made by MKS' foreign subsidiaries are denominated in the currency of the country in which these products are sold and the currency it receives in payment for such sales could be less valuable at the time of receipt as a result of exchange rate fluctuations. MKS enters into forward exchange contracts and local currency purchased options to reduce currency exposure arising from intercompany sales of inventory. However, MKS cannot be certain that its efforts will be adequate to protect it against significant currency fluctuations or that such efforts will not expose it to additional exchange rate risks.

KEY PERSONNEL MAY BE DIFFICULT TO ATTRACT AND RETAIN.

MKS' success depends to a large extent upon the efforts and abilities of a number of key employees and officers, particularly those with expertise in the semiconductor manufacturing and similar industrial manufacturing industries. The loss of key employees or officers could have a material adverse effect on MKS' business, financial condition and results of operations. MKS believes that its future success will depend in part on its ability to attract and retain highly skilled technical, financial, managerial and marketing personnel. MKS cannot be certain that it will be successful in attracting and retaining such personnel.

MKS' PROPRIETARY TECHNOLOGY IS IMPORTANT TO THE CONTINUED SUCCESS OF ITS BUSINESS. MKS' FAILURE TO PROTECT THIS PROPRIETARY TECHNOLOGY MAY SIGNIFICANTLY IMPAIR MKS' COMPETITIVE POSITION.

As of December 31, 2002, MKS owned 170 U.S. patents and 128 foreign patents and had 89 pending U.S. patent applications and 286 pending foreign patent applications. Although MKS seeks to protect its intellectual property rights through patents, copyrights, trade secrets and other measures, it cannot be certain that:

- MKS will be able to protect its technology adequately;

- competitors will not be able to develop similar technology independently;

- any of MKS' pending patent applications will be issued;

- intellectual property laws will protect MKS' intellectual property rights; or

- third parties will not assert that MKS' products infringe patent, copyright or trade secrets of such parties.

PROTECTION OF MKS' INTELLECTUAL PROPERTY RIGHTS MAY RESULT IN COSTLY LITIGATION.

Litigation may be necessary in order to enforce MKS' patents, copyrights or other intellectual property rights, to protect its trade secrets, to determine the validity and scope of the proprietary rights of others or to defend against claims of infringement. MKS has been involved in lawsuits enforcing its intellectual property rights in the past, and may be involved in such litigation in the future. Such litigation could result in substantial costs and diversion of resources and could have a material adverse effect on MKS' business, financial condition and results of operations.

THE MARKET PRICE OF MKS' COMMON STOCK HAS FLUCTUATED AND MAY CONTINUE TO FLUCTUATE FOR REASONS OVER WHICH MKS HAS NO CONTROL.

The stock market has from time to time experienced, and is likely to continue to experience, extreme price and volume fluctuations. Recently, prices of securities of technology companies have been especially volatile and have often fluctuated for reasons that are unrelated to the operating performance of the companies. The market price of shares of MKS' common stock has fluctuated greatly since its initial public offering and could continue to fluctuate due to a variety of factors. In the past, companies that have experienced volatility in the market price of their stock have been the objects of securities class action litigation. If MKS were the object of securities class action litigation, it could result in substantial costs and a diversion of MKS' management's attention and resources.

MKS' DEPENDENCE ON SOLE, LIMITED SOURCE SUPPLIERS, AND INTERNATIONAL SUPPLIERS, COULD AFFECT ITS ABILITY TO MANUFACTURE PRODUCTS AND SYSTEMS.

MKS relies on sole, limited source suppliers, and international suppliers, for a few of its components and subassemblies that are critical to the manufacturing of MKS' products. This reliance involves several risks, including the following:

- the potential inability to obtain an adequate supply of required components;

- reduced control over pricing and timing of delivery of components; and

- the potential inability of its suppliers to develop technologically advanced products to support MKS' growth and development of new systems.

MKS believes that in time MKS could obtain and qualify alternative sources for most sole, limited source and international supplier parts. Seeking alternative sources of the parts could require MKS to redesign its systems, resulting in increased costs and likely shipping delays. MKS may be unable to redesign its systems, which could result in further costs and shipping delays. These increased costs would decrease MKS' profit margins if it could not pass the costs to its customers. Further, shipping delays could damage MKS' relationships with current and potential customers and have a material adverse effect on MKS' business and results of operations.

MKS IS SUBJECT TO GOVERNMENTAL REGULATIONS.

MKS is subject to federal, state, local and foreign regulations, including environmental regulations and regulations relating to the design and operation of MKS' power supply products. MKS must ensure that these systems meet certain safety standards, many of which vary across the countries in which MKS' systems are used. For example, the European Union has published directives specifically relating to power supplies. MKS must comply with these directives in order to ship MKS' systems into countries that are members of the European Union. MKS believes it is in compliance with current applicable regulations, directives and standards and has obtained all necessary permits, approvals, and authorizations to conduct MKS' business. However, compliance with future regulations, directives and standards could require it to modify or redesign certain systems, make capital expenditures or incur substantial costs. If MKS does not comply with current or future regulations, directives and standards:

- MKS could be subject to fines;

- MKS' production could be suspended; or

- MKS could be prohibited from offering particular systems in specified markets.

CERTAIN STOCKHOLDERS HAVE A SUBSTANTIAL INTEREST IN MKS AND MAY BE ABLE TO EXERT SUBSTANTIAL INFLUENCE OVER MKS' ACTIONS.

As of January 31, 2003, John R. Bertucci, president, chairman and chief executive officer of MKS, and certain members of his family, in the aggregate, beneficially owned approximately 22.7% of MKS' outstanding common stock. As a result, these stockholders, acting together, are able to exert substantial influence over the actions of MKS. Pursuant to the acquisition of the ENI Business of Emerson Electric Co. ("Emerson"), MKS issued approximately 12,000,000 shares of common stock to Emerson. As of January 31, 2003, Emerson beneficially owned approximately 23.4% of MKS' outstanding common stock, and accordingly, Emerson is able to exert substantial influence over MKS' actions.

SOME PROVISIONS OF MKS' RESTATED ARTICLES OF ORGANIZATION, AS AMENDED, MKS' AMENDED AND RESTATED BY-LAWS AND MASSACHUSETTS LAW COULD DISCOURAGE POTENTIAL ACQUISITION PROPOSALS AND COULD DELAY OR PREVENT A CHANGE IN CONTROL OF MKS.

Anti-takeover provisions could diminish the opportunities for stockholders to participate in tender offers, including tender offers at a price above the then current market value of the common stock. Such provisions may also inhibit increases in the market price of the common stock that could result from takeover attempts. For example, while MKS has no present plans to issue any preferred stock, MKS' board of directors, without further stockholder approval, may issue preferred stock that could have the effect of delaying, deterring or preventing a change in control of MKS. The issuance of preferred stock could adversely affect the voting power of the holders of MKS' common stock, including the loss of voting control to others. In addition, MKS' amended and restated by-laws provide for a classified board of directors consisting of three classes. The classified board could also have the effect of delaying, deterring or preventing a change in control of MKS.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Information concerning market risk is contained in the Management's Discussion and Analysis of Financial Condition and Results of Operations contained in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 31, 2003. MKS enters into local currency purchased options and forward exchange contracts to reduce currency exposure arising from intercompany sales of inventory. There were no material changes in MKS' exposure to market risk from December 31, 2002.

ITEM 4. CONTROLS AND PROCEDURES.

a) Evaluation of disclosure controls and procedures.

Based on their evaluation of the Company's disclosure controls and procedures (as defined in Rule 13a-14(c) and 15d-15(c) under the Securities Exchange Act of 1934) as of a date within 90 days of the filing date of this Form 10-Q, the Company's chief executive officer and chief financial officer have concluded that the Company's disclosure controls and procedures are designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and are operating in an effective manner.

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 most recent evaluation.

As a result of its recent acquisitions, the Company has added several different decentralized accounting systems, resulting in a complex reporting environment. The Company expects that it will need to continue to modify its accounting policies, internal controls, procedures and compliance programs to provide consistency across all its operations.

PART II OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS.

On November 3, 1999, On-Line Technologies, Inc. ("On-Line"), which was acquired by the Company in April 2001, brought suit in federal district court in Connecticut against Perkin-Elmer, Inc. and certain other defendants for infringement of On-Line's patent related to its FTIR spectrometer product. The suit sought injunctive relief and damages for infringement. Perkin-Elmer, Inc. filed a counterclaim seeking invalidity of the patent, costs, and attorneys' fees. In June 2002, the defendants filed a motion for summary judgment. In April 2003 the court granted the motion and dismissed the case. The Company has appealed this decision.

There have been no other material developments since the filing of MKS' Annual Report on Form 10-K on March 31, 2003.

ITEM 2. CHANGES IN SECURITIES AND USE OF PROCEEDS.

(d) Use of Proceeds from Sales of Registered Securities.

The Company has previously provided information on Form 10-Q for the quarter ended September 30, 2000 relating to the use of proceeds from the sale of securities by the Company pursuant to the Registration Statement on Form S-1 (Reg. No. 333-71363) that was declared effective by the Securities and Exchange Commission on March 29, 1999. As of March 31, 2003, approximately $32.2 million of the net proceeds from the securities sold has been used to acquire businesses. There has been no other change to the information previously provided.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES.

None.

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

None.

ITEM 5. OTHER INFORMATION.

None.

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K.

(a) Exhibits

Exhibit No.	Exhibit Description
99.1	Certification of Chief Executive Officer pursuant to 18 U.S.C [sec] 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
99.2	Certification of Chief Financial Officer pursuant to 18 U.S.C [sec] 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

(b) Reports on Form 8-K

None.

SIGNATURE

Pursuant to the requirements 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.

MKS INSTRUMENTS, INC.

May 8, 2003

By: /s/ Ronald C. Weigner

Ronald C. Weigner
Vice President and Chief Financial Officer
(Principal Financial Officer)

CERTIFICATIONS

I, John R. Bertucci, certify that:

1. I have reviewed this quarterly report on Form 10-Q of MKS Instruments, Inc.;

2. Based on my knowledge, this quarterly 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 quarterly report;

3. Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly report;

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

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

   b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this quarterly report (the "Evaluation Date"); and

   c) presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

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

   a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this quarterly report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Dated: May 8, 2003

/s/ John R. Bertucci

John R. Bertucci
Chairman, Chief Executive Officer and President
(Principal Executive Officer)

I, Ronald C. Weigner, certify that:

1. I have reviewed this quarterly report on Form 10-Q of MKS Instruments, Inc.;

2. Based on my knowledge, this quarterly 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 quarterly report;

3. Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly report;

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

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

   b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this quarterly report (the "Evaluation Date"); and

   c) presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

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

   a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this quarterly report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Dated: May 8, 2003

/s/ Ronald C. Weigner

Ronald C. Weigner
Vice President and Chief Financial Officer
(Principal Financial Officer)

EXHIBIT 99.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of MKS Instruments, Inc. (the "Company") for the period ended March 31, 2003 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, John R. Bertucci, Chairman, Chief Executive Officer and President of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

Dated: May 8, 2003

/s/ John R. Bertucci

John R. Bertucci
Chairman, Chief Executive Officer and
President

A signed original of this written statement required by Section 906 has been provided to MKS Instruments, Inc. and will be retained by MKS Instruments, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 99.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of MKS Instruments, Inc. (the "Company") for the period ended March 31, 2003 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Ronald C. Weigner, Vice President and Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

Dated: May 8, 2003

/s/ Ronald C. Weigner

Ronald C. Weigner
Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 has been provided to MKS Instruments, Inc. and will be retained by MKS Instruments, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.