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 September 30, 2005

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	04-2277512
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

90 Industrial Way, Wilmington, Massachusetts	01887
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (978) 284-4000

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 .

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No X .

Number of shares outstanding of the issuer's common stock as of October 28, 2005: 54,251,483

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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS.

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

	September 30, 2005 (Unaudited)	December 31, 2004
ASSETS		
Current assets:		
Cash and cash equivalents	$159,989	$138,389
Short-term investments	111,376	97,511
Trade accounts receivable, net	76,061	82,315
Inventories	97,776	99,633
Deferred income taxes	11,937	12,129
Other current assets	13,723	9,908
Total current assets	470,862	439,885
Long-term investments	1,240	4,775
Property, plant and equipment, net	79,699	80,917
Goodwill, net	255,337	255,740
Acquired intangible assets, net	30,560	41,604
Deferred income taxes	2,597	2,184
Other assets	2,473	3,572
Total assets	$842,768	$828,677
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Short-term borrowings	$ 19,419	$ 22,400
Current portion of long-term debt	1,429	2,069
Current portion of capital lease obligations	394	40
Accounts payable	20,319	23,338
Accrued compensation	11,698	13,767
Income taxes payable	8,943	9,133
Other accrued expenses	21,095	21,438
Total current liabilities	83,297	92,185
Long-term debt	5,595	6,667
Long-term portion of capital lease obligations	843	80
Other liabilities	3,569	3,111
Commitments and contingencies (Note 9)		
Stockholders' equity:		
Preferred Stock, $0.01 par value, 2,000,000 shares authorized; none issued and outstanding	--	--
Common Stock, no par value, 200,000,000 shares authorized; 54,230,946 and 53,839,098 issued and outstanding at September 30, 2005 and December 31, 2004, respectively	113	113
Additional paid-in capital	636,648	631,760
Retained earnings	104,537	82,077
Accumulated other comprehensive income	8,166	12,684
Total stockholders' equity	749,464	726,634
Total liabilities and stockholders' equity	$842,768	$828,677

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

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2005	2004	2005	2004
Net sales	$122,520	$139,651	$380,120	$424,221
Cost of sales	74,863	84,045	231,315	252,993
Gross profit	47,657	55,606	148,805	171,228
Research and development	13,684	14,201	42,922	43,157
Selling, general and administrative	22,341	22,971	69,230	65,784
Amortization of acquired intangible assets	3,382	3,689	10,765	11,073
Restructuring	(278)	--	176	437
Income from operations	8,528	14,745	25,712	50,777
Interest expense	186	100	611	384
Interest income	1,997	542	4,868	1,424
Other income	--	--	--	5,402
Income before income taxes	10,339	15,187	29,969	57,219
Provision for income taxes	3,115	3,037	7,509	11,495
Net income	$ 7,224	$ 12,150	$ 22,460	$ 45,724
Net income per share:				
Basic	$ 0.13	$ 0.23	$ 0.42	$ 0.86
Diluted	$ 0.13	$ 0.22	$ 0.41	$ 0.83
Weighted average common shares outstanding:				
Basic	54,146	53,602	54,000	53,466
Diluted	54,743	54,302	54,529	54,785

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

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

	Nine Months Ended September 30, 2005	Nine Months Ended September 30, 2004
Cash flows from operating activities:		
Net income	$ 22,460	$ 45,724
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	19,792	20,460
Gain on collection of a note receivable	--	(5,042)
Deferred taxes	(1,234)	501
Other	1,065	(423)
Changes in operating assets and liabilities:		
Trade accounts receivable	2,857	(20,399)
Inventories	(896)	(22,546)
Other current assets	(3,014)	(5,475)
Accrued expenses and other current liabilities	221	15,180
Accounts payable	(1,666)	384
Income taxes payable	723	14,720
Net cash provided by operating activities	40,308	43,084
Cash flows from investing activities:		
Purchases of short-term and long-term available for sale investments	(181,868)	(175,061)
Maturities and sales of short-term and long-term available for sale investments	171,394	126,677
Purchases of property, plant and equipment	(7,603)	(13,983)
Proceeds from sale of property, plant and equipment	--	1,294
Proceeds from collection of a note receivable	--	5,042
Other	846	1,023
Net cash used in investing activities	(17,231)	(55,008)
Cash flows from financing activities:		
Proceeds from short-term borrowings	61,247	67,157
Payments on short-term borrowings	(62,175)	(63,478)
Principal payments on long-term debt	(1,969)	(2,139)
Proceeds from issuance of common stock, net of issuance costs	--	32,549
Proceeds from exercise of stock options and employee stock purchase plan	3,970	3,952
Net cash provided by financing activities	1,073	38,041
Effect of exchange rate changes on cash and cash equivalents	(2,550)	(642)
Increase in cash and cash equivalents	21,600	25,475
Cash and cash equivalents at beginning of period	138,389	74,660
Cash and cash equivalents at end of period	$ 159,989	$ 100,135

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

1) Basis of Presentation

The terms "MKS" and the "Company" refer to MKS Instruments, Inc. and its subsidiaries. The interim financial data as of September 30, 2005 and for the three and nine months ended September 30, 2005 and 2004 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 consolidated financial statements presented herein have been prepared in accordance with the instructions to Form 10-Q and do not include all of the information and note disclosures required by generally accepted accounting principles. The consolidated financial statements should be read in conjunction with the December 31, 2004 audited consolidated financial statements and notes thereto included in the MKS Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 16, 2005.

In connection with the preparation of the accompanying financial statements, the Company concluded that it was appropriate to classify its investments in auction rate securities as short-term available-for-sale marketable securities. Such investments were originally classified as cash and cash equivalents at September 30, 2004. Accordingly, the Company has revised the classification to exclude from cash and cash equivalents $23,425,000 of auction rate securities at September 30, 2004, and made a corresponding adjustment to reflect the gross purchases and sales of these securities as investing activities in the accompanying Consolidated Statement of Cash Flows. As a result, cash used in investing activities increased by $23,425,000 for the nine months ended September 30, 2004. This change in classification does not affect previously reported cash flows from operations or cash flows from financing activities. Additionally, certain immaterial amounts in prior periods have been reclassified to be consistent with current period classifications.

The preparation of these consolidated 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 consolidated 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, 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.

2) Stock-Based Compensation

The Company has several stock-based employee compensation plans. The Company accounts for stock-based awards to employees using the intrinsic value method as prescribed by Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," ("APB 25") and related interpretations. Accordingly, no compensation expense is recorded for options issued to employees in fixed amounts 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," ("SFAS 123") through disclosure only.

The following table illustrates the effect on net income and net income per share if the Company had applied the fair value recognition provisions of SFAS 123 to stock-based employee awards.

(Tables in thousands, except per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2005	2004	2005	2004
Net income as reported	$ 7,224	$12,150	$ 22,460	$ 45,724
Deduct: Total stock-based employee compensation expense determined under the fair-value-based method for all awards, net of tax	(1,583)	(6,125)	(22,006)	(18,075)
Pro forma net income	$ 5,641	$ 6,025	$ 454	$ 27,649
Basic net income per share:				
As reported	$ 0.13	$ 0.23	$ 0.42	$ 0.86
Pro forma	$ 0.10	$ 0.11	$ 0.01	$ 0.52
Diluted net income per share:				
As reported	$ 0.13	$ 0.22	$ 0.41	$ 0.83
Pro forma	$ 0.10	$ 0.11	$ 0.01	$ 0.50

There was no tax benefit included in the stock-based employee compensation expense determined under the fair-value-based method for the three and nine months ended September 30, 2004, respectively, as the Company had a full valuation allowance for its net deferred tax assets. For the three and nine months ended September 30, 2005, stock-based employee compensation expense is net of the related tax benefit.

In December 2004, the Financial Accounting Standards Board ("FASB") issued SFAS No. 123R, "Share-Based Payment" ("SFAS 123R"). SFAS 123R replaces SFAS 123 and supersedes APB 25. SFAS 123R focuses primarily on the accounting for transactions in which an entity obtains employee services in share-based payment transactions. SFAS 123R requires companies to recognize in the statement of operations the cost of employee services received in exchange for awards of equity instruments based on the grant-date fair value of those awards. SFAS 123R was originally expected to be effective for the Company beginning in its third quarter of fiscal 2005. In April 2005, the effective date was amended by the Securities and Exchange Commission. As a result, SFAS 123R is now effective for the Company as of the first annual period that begins after June 15, 2005. Accordingly, the Company will adopt SFAS 123R in its first quarter of fiscal 2006. The Company expects to use the modified-prospective transition method and will not restate prior periods for the adoption of SFAS 123R. Although the Company is currently evaluating the provisions of SFAS 123R and its implications on its employee benefit plans, it believes that the adoption of this standard, based on the terms of the options outstanding at September 30, 2005, will have a material effect on its net income for the year ending December 31, 2006.

On January 7, 2005, the Company accelerated the vesting of outstanding stock options granted to employees and officers with an exercise price of $23.00 or greater. As a result of this action, options to purchase approximately 1.6 million shares of the Company's common stock became exercisable on January 7, 2005. No compensation expense was recorded in the Company's Consolidated Statement of Operations for the three months ended March 31, 2005 related to this action as these options had no intrinsic value on January 7, 2005. For purposes of the SFAS 123 pro forma calculation above, the expense related to the options that were accelerated was $16,886,000, net of tax, for the three months ended March 31, 2005. The reason that the Company accelerated the vesting of the identified stock options was to reduce the Company's compensation expense in periods subsequent to the adoption of SFAS 123R.

(Tables in thousands, except per share data)

3) Goodwill and Intangible Assets

Intangible Assets

Acquired amortizable intangible assets consisted of the following as of September 30, 2005:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Completed technology	$72,461	$(48,954)	$23,507
Customer relationships	6,640	(4,266)	2,374
Patents, trademarks, tradenames and other ..	12,393	(7,714)	4,679
	$91,494	$(60,934)	$30,560

Acquired amortizable intangible assets consisted of the following as of December 31, 2004:

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Completed technology	$72,738	$(39,969)	$32,769
Customer relationships	6,640	(3,581)	3,059
Patents, trademarks, tradenames and other ..	12,395	(6,619)	5,776
	$91,773	$(50,169)	$41,604

Aggregate amortization expense related to acquired intangibles for the three and nine months ended September 30, 2005 was $3,382,000 and $10,765,000, respectively. Aggregate amortization expense related to acquired intangibles for the three and nine months ended September 30, 2004 was $3,689,000 and $11,073,000, respectively. Estimated amortization expense related to acquired intangibles for the remainder of 2005 and in total for the year is $3,099,000 and $13,864,000, respectively. Estimated amortization expense for 2006 and for each of the three succeeding fiscal years is as follows:

Year	Amount
2006	$11,763
2007	11,129
2008	2,759
2009	1,205

Goodwill

The change in the carrying amount of goodwill during the three and nine months ended September 30, 2005 was not material.

(Tables in thousands, except per share data)

4) Net Income Per Share

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

	Three Months Ended September 30, 2005	Three Months Ended September 30, 2004	Nine Months Ended September 30, 2005	Nine Months Ended September 30, 2004
Numerator				
Net income	$ 7,224	$12,150	$22,460	$45,724
Denominator				
Shares used in net income per common share - basic	54,146	53,602	54,000	53,466
Effect of dilutive securities:				
Stock options and employee stock purchase plan	597	700	529	1,319
Shares used in net income per common share - diluted	54,743	54,302	54,529	54,785
Net income per common share				
Basic	$ 0.13	$ 0.23	$ 0.42	$ 0.86
Diluted	$ 0.13	$ 0.22	$ 0.41	$ 0.83

For purposes of computing diluted net income per common share, 4,856,000 and 6,378,000 outstanding options for the three and nine months ended September 30, 2005, respectively, and 7,333,000 and 5,002,000 outstanding options for the three and nine months ended September 30, 2004, respectively, were excluded from the calculation as their inclusion would be anti-dilutive. There were options to purchase approximately 9,568,000 and 10,318,000 shares of the Company's common stock outstanding as of September 30, 2005 and 2004, respectively.

5) Inventories

Inventories consist of the following:

	September 30, 2005	December 31, 2004
Raw material	$42,704	$46,479
Work in process	20,169	18,330
Finished goods	34,903	34,824
	$97,776	$99,633

(Tables in thousands, except per share data)

6) Stockholders' Equity

Comprehensive Income

Components of comprehensive income were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2005	2004	2005	2004
Net income	$7,224	$12,150	$22,460	$45,724
Other comprehensive income (loss):				
Changes in value of financial instruments designated as cash flow hedges (net of taxes of $54 and $0 for the three months ended September 30, respectively, and $1,020 and $0 for the nine months ended September 30, respectively)	89	460	1,702	2,368
Foreign currency translation adjustment	(878)	311	(6,207)	(1,041)
Unrealized gain (loss) on investments (net of taxes of $15 and $0 for the three months ended September 30, respectively, and net of benefit of $7 and $0 for the nine months ended September 30, respectively)	26	83	(13)	110
Other comprehensive income (loss)	(763)	854	(4,518)	1,437
Total comprehensive income	$6,461	$13,004	$17,942	$47,161

Common Stock Offering

On January 21, 2004, the Company issued 1,142,857 shares of its common stock at $26.25 per share through a public offering. Proceeds of the offering, net of underwriters' discount and offering expenses, were approximately $28,251,000. On January 23, 2004, the underwriters exercised their over-allotment option and therefore, the Company issued an additional 171,429 shares of its common stock, which generated net proceeds of approximately $4,298,000.

7) 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 consolidated 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 Consolidated Statements of Operations.

As a result of incurring significant operating losses from 2001 through 2003, the Company established a full valuation allowance for its net deferred tax assets. During the fourth quarter of 2004, after examining a number of factors, including historical results and near term earnings projections, the Company determined that it was more likely than not that it would realize all of its net deferred tax assets, except for those related to certain state tax credits. At September 30, 2005, the Company continues to maintain a valuation allowance for certain state tax credits for which it is more likely than not that they will not be realized.

During the second quarter of 2005, the Internal Revenue Service ("IRS") completed its examination of the Company's tax returns for the tax years 1999 through 2002. As a result of this examination, during the quarter

(Tables in thousands, except per share data)

ended June 30, 2005, the Company recorded a benefit to income tax expense of $1,901,000 and a $576,000 reduction of goodwill related to a previous acquisition.

The Company's effective tax rate for the nine months ending September 30, 2005 was 25%. The effective tax rate is less than the statutory tax rate primarily due to completion of the IRS examination, the benefit from U.S. research and development credits and the profits of the Company's international subsidiaries being taxed at rates lower than the U.S. statutory tax rate.

On October 22, 2004, the American Jobs Creation Act of 2004 (the "Act") was signed into law. The Act contains a provision allowing U.S. multinational companies a one-time incentive to repatriate foreign earnings at an effective tax rate of 5.25%. The Company is continuing to study this new provision but does not expect that it will have a material impact on future periods. Through September 30, 2005, the Company has not provided deferred U.S. income taxes on the undistributed earnings of its foreign subsidiaries because such earnings were intended to be permanently reinvested outside the U.S. Determination of the potential deferred income tax liability on these undistributed earnings is not practicable because such liability, if any, is dependent on circumstances existing if and when remittance occurs. At September 30, 2005, the Company had $69,768,000 of undistributed earnings in its foreign subsidiaries.

8) Geographic, Product and Significant Customer Information

The Company operates in one segment for the development, manufacturing, sales and servicing of products that measure, control, power and monitor critical parameters of advanced manufacturing processes. The Company's chief decision maker reviews operating results for the entire Company to make decisions about allocating resources and assessing performance for the entire Company.

Information about the Company's operations in different geographic regions is presented in the tables below. 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.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2005	2004	2005	2004
Geographic net sales				
United States	$ 78,063	$ 93,052	$237,206	$280,971
Japan	19,969	21,181	62,165	63,979
Europe	12,171	11,744	40,077	36,807
Asia	12,317	13,674	40,672	42,464
	$122,520	$139,651	$380,120	$424,221

	September 30, 2005	December 31, 2004
Long-lived assets:		
United States	$67,596	$68,719
Japan	5,674	6,202
Europe	4,656	5,544
Asia	4,246	4,024
	$82,172	$84,489

(Tables in thousands, except per share data)

The Company groups its products into three product groups. Net sales for these product groups are as follows:

	Three Months Ended September 30, 2005	Three Months Ended September 30, 2004	Nine Months Ended September 30, 2005	Nine Months Ended September 30, 2004
Instruments and Control Systems ..	$ 57,732	$ 65,310	$177,021	$191,976
Power and Reactive Gas Products ..	50,459	57,978	158,094	179,932
Vacuum Products	14,329	16,363	45,005	52,313
	$122,520	$139,651	$380,120	$424,221

The Company had one customer comprising 17% and 16%, respectively, and one customer comprising 11% and 10%, respectively, of net sales for the three and nine months ended September 30, 2005. The Company had one customer comprising 19% and 20%, respectively, and one customer comprising 10% and 10%, respectively, of net sales for the three and nine months ended September 30, 2004.

9) Commitments and Contingencies

On April 3, 2003, Advanced Energy Industries, Inc. ("Advanced Energy") filed suit against MKS in federal district court in Colorado (the "Colorado Action"), seeking a declaratory judgment that Advanced Energy's Xstream product does not infringe three patents held by MKS' subsidiary, Applied Science and Technology, Inc. ("ASTeX"). On May 14, 2003, MKS brought suit in federal district court in Delaware (the "Court") against Advanced Energy for infringement of five ASTeX patents (the "Delaware Action"), including the three patents at issue in the Colorado Action. MKS sought injunctive relief and damages for Advanced Energy's infringement. On December 24, 2003, the Colorado court granted MKS' motion to transfer Advanced Energy's Colorado Action to Delaware. In connection with the jury trial, the parties agreed to present the jury with representative claims from three of the five ASTeX patents. On July 23, 2004, the jury found that Advanced Energy infringed all three patents. See Note 13 for additional information.

On November 3, 1999, On-Line Technologies, Inc. ("On-Line"), which was acquired by MKS in 2001, brought suit in federal district court in Connecticut against Perkin-Elmer, Inc. and certain other defendants (collectively, "Perkin-Elmer") for infringement of On-Line's patent related to its FTIR spectrometer product and related claims. The suit sought injunctive relief and damages for infringement. Perkin-Elmer, 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. MKS appealed this decision to the federal circuit court of appeals. On October 13, 2004, the federal circuit court of appeals reversed the lower court's dismissal of certain claims in the case. Accordingly, the case has been remanded to the United States District Court in Connecticut for further proceedings on the merits of the remaining claims. On March 11, 2005, Perkin-Elmer, submitted to the court a stipulation that it infringed a specified claim of On-Line's patent and filed a motion for summary judgment that such patent claim is invalid. On April 6, 2005, On-Line filed a reply to the summary judgment motion. The parties are awaiting the court's response to the motion.

The Company is subject to other 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.

(Tables in thousands, except per share data)

10) Restructuring, Asset Impairment and Other Charges

As a result of the Company's various acquisitions from 2000 through 2002 and the downturn in the semiconductor capital equipment market, which began in 2000, the Company had redundant activities and excess manufacturing capacity and office space. Therefore, in 2002 and continuing through the first quarter of 2004, the Company implemented restructuring activities to rationalize manufacturing operations and reduce operating expenses. As a result of these actions, the Company recorded restructuring, asset impairment charges and other charges of $2,726,000, $1,593,000 and $437,000 in 2002, 2003 and 2004, respectively. The charges consisted of $987,000 of severance costs related to workforce reductions, $2,810,000 related to consolidation of leased facilities, and asset impairment charges of $959,000 primarily related to the impairment of an intangible asset from the discontinuance of certain product development activities. The fair value of the impaired intangible asset was determined using the expected present value of future cash flows. The workforce reductions were across all functional groups.

During the three months ended March 31, 2005, the Company initiated a restructuring plan related to its Berlin, Germany location. This consolidation of activities included the reduction of 16 employees. The total restructuring charge related to this consolidation was $454,000, which consisted of $251,000 related to the repayment of a government grant and $203,000 in severance costs.

During the three months ended September 30, 2005, the Company terminated a lease related to a facility previously exited. At June 30, 2005, the Company had an accrual of approximately $784,000 related to this facility. After making the lease settlement payment and payments for other contractual obligations, the remaining balance of approximately $278,000 was reversed as there was no remaining obligation.

The following table sets forth the activity in the restructuring accruals from December 31, 2004 to September 30, 2005:

	Workforce Reductions	Facility Consolidations	Other	Total
Balance as of December 31, 2004	$ 89	$1,532	$ --	$1,621
Restructuring provision in first quarter	203	--	251	454
Charges utilized in first quarter	(9)	(110)	--	(119)
Balance as of March 31, 2005	283	1,422	251	1,956
Charges utilized in second quarter	(56)	(135)	--	(191)
Balance as of June 30, 2005	227	1,287	251	1,765
Reversal of restructuring in third quarter	--	(278)	--	(278)
Charges utilized in third quarter	(71)	(563)	--	(634)
Balance as of September 30, 2005	$156	$ 446	$251	$ 853

The remaining accruals for workforce reductions are expected to be paid by January of 2006. The facilities consolidation charges will be paid over the respective lease terms, the latest of which ends in 2007. The accruals for severance costs and lease payments are recorded in Other accrued expenses and Other liabilities in the Consolidated Balance Sheets.

11) 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's estimates, revisions to the estimated warranty liability would be required.

(Tables in thousands, except per share data)

Product warranty activities for the nine months ended September 30 were as follows:

	2005	2004
Balance at beginning of year	$ 7,601	$ 5,804
Provisions for product warranties during the period	5,139	6,473
Direct charges to the warranty liability during the period	(6,153)	(4,429)
Balance as of September 30	$ 6,587	$ 7,848

12) Other Income

During the second quarter of 2004, the Company received $5,042,000 related to the collection of a note receivable that had been written off in the third quarter of 2002. This amount was recorded as a gain and included in Other income in the Consolidated Statements of Operations for the nine months ended September 30, 2004.

13) Subsequent Event

On October 3, 2005, MKS and Advanced Energy entered into a settlement agreement (see Note 9), pursuant to which Advanced Energy paid MKS $3,000,000 in cash in October 2005. This settlement is not reflected in the MKS financial statements as of September 30, 2005. The settlement agreement also provided that Advanced Energy would not make, use, sell or offer to sell its Rapid, Rapid FE, Rapid OE, and Xstream products (or related products) in the United States or any other country in which MKS holds a relevant patent or patent application, during the life of any such patent (or resulting patent, in the case of patent applications). On October 6, 2005, the Court issued a final judgment of infringement and an injunction prohibiting Advanced Energy from making, using, selling, offering to sell, or importing into the United States such products.

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

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. We assume no obligation to update this information. Risks and uncertainties include, but are not limited to those discussed in the section in this Report entitled "Factors That May Affect Future Results."

OVERVIEW

We are a leading worldwide provider of instruments, components, subsystems and process control solutions that measure, control, power and monitor critical parameters of semiconductor and other advanced manufacturing processes.

We are managed as one operating segment which is organized around three product groups: Instruments and Control Systems, Power and Reactive Gas Products, and Vacuum Products. Our products are derived from our 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. Our products are used to manufacture semiconductors and thin film coatings for diverse markets such as flat panel displays, optical and magnetic storage media, architectural glass, and electro-optical products. We also provide technologies for other markets, including the medical imaging equipment market.

Our customers include semiconductor capital equipment manufacturers, semiconductor device manufacturers, industrial manufacturing companies, medical equipment manufacturers and university, government and industrial research laboratories. For the nine months ended September 30, 2005 and the year ended December 31, 2004, we estimate that approximately 70% and 74% of our net sales, respectively, were to semiconductor capital equipment manufacturers and semiconductor device manufacturers.

During the latter half of 2003 and continuing into the first half of 2004, the semiconductor capital equipment market experienced a market upturn after a downturn of almost three years. Starting in the fourth quarter of 2003, we experienced an increase in orders and shipments and as a result have returned to profitability. Beginning in the third quarter of 2004 and continuing through the third quarter of 2005, our orders and sales have declined from the level achieved in the second quarter of 2004. The semiconductor capital equipment industry is subject to rapid demand shifts which are difficult to predict.

A portion of our sales is to operations in international markets. International sales include sales by our foreign subsidiaries, but exclude direct export sales. For the nine months ended September 30, 2005 and the year ended December 31, 2004, international sales accounted for approximately 38% and 34% of net sales, respectively.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of our consolidated financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America requires management to make judgments, assumptions and estimates that affect the amounts reported. There have been no material changes in our critical accounting policies since December 31, 2004. See the discussion of critical accounting policies in our Annual Report on Form 10-K for the year ended December 31, 2004.

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 statements of operations data.

	Three Months Ended September 30, 2005	Three Months Ended September 30, 2004	Nine Months Ended September 30, 2005	Nine Months Ended September 30, 2004
Net sales	100.0%	100.0%	100.0%	100.0%
Cost of sales	61.1	60.2	60.9	59.6
Gross profit	38.9	39.8	39.1	40.4
Research and development	11.2	10.2	11.3	10.2
Selling, general and administrative	18.2	16.4	18.2	15.5
Amortization of acquired intangible assets	2.8	2.6	2.8	2.6
Restructuring	(0.2)	--	--	0.1
Income from operations	6.9	10.6	6.8	12.0
Interest income, net	1.5	0.3	1.1	0.2
Other income, net	--	--	--	1.3
Income before income taxes	8.4	10.9	7.9	13.5
Provision for income taxes	2.5	2.2	2.0	2.7
Net income	5.9%	8.7%	5.9%	10.8%

Net Sales (dollars in millions)

	Three Months Ended September 30, 2005	2004	% Change	Nine Months Ended September 30, 2005	2004	% Change
Net sales	$122.5	$139.7	(12.3)%	$380.1	$424.2	(10.4)%

Net sales decreased $17.2 million during the three month period ended September 30, 2005 mainly due to a decrease in worldwide demand from our semiconductor capital equipment manufacturer customers, which decreased $18.8 million or 21.0% compared to the same period for the prior year. Primarily offsetting this decrease was a net sales increase of $2.1 million or 8.1%, compared to the same period for the prior year, for other non-semiconductor manufacturing applications which include, but are not limited to, industrial manufacturing, magnetic resonance imaging (MRI) medical equipment, biopharmaceutical manufacturing, and university, government and industrial research laboratories. International net sales were $44.5 million for the three months ended September 30, 2005 or 36.3% of net sales compared to $46.6 million for the same period of 2004 or 33.4% of net sales.

Net sales decreased $44.1 million during the nine month period ended September 30, 2005 mainly due to a decrease in worldwide demand from our semiconductor capital equipment manufacturer customers, which decreased $55.4 million or 19.6% compared to the same period for the prior year. Primarily offsetting this decrease was a net sales increase of $11.0 million or 15.4%, compared to the same period for the prior year, for other non-semiconductor manufacturing applications. International net sales were $142.9 million for the nine months ended September 30, 2005 or 37.6% of net sales compared to $143.3 million for the same period of 2004 or 33.8% of net sales.

Gross Profit

	Three Months Ended September 30, 2005	2004	Percentage Points Change	Nine Months Ended September 30, 2005	2004	Percentage Points Change
Gross Profit as percentage of net sales	38.9%	39.8%	(0.9)	39.1%	40.4%	(1.3)

Gross profit as a percentage of net sales decreased during the three months ended September 30, 2005 mainly due to overhead costs representing a higher percentage of sales, partially offset by lower material and labor costs as a percentage of sales compared to the same period in 2004.

Gross profit as a percentage of net sales decreased during the nine months ended September 30, 2005 mainly due to overhead costs representing a higher percentage of sales, partially offset by lower material and labor costs as a percentage of sales compared to the same period in 2004. In the first nine months of 2004, gross profit reflected a favorable impact of overhead absorption compared to the first nine months of 2005. This was primarily due to a sequential increase in sales and inventory during the nine months ended September 30, 2004, related to a significant increase in demand in 2004. Inventory increased by $22.3 million from $82.0 million at December 31, 2003 to $104.3 million at September 30, 2004 and decreased by $1.9 million during the same period in 2005.

Research and Development (dollars in millions)

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2005	2004	% Change	2005	2004	% Change
Research and development expenses ...	$13.7	$14.2	(3.6)%	$42.9	$43.2	(0.5)%

Research and development expenses for the three months ended September 30, 2005 decreased $0.5 million primarily due to lower consulting and other costs as a result of projects being completed during the quarter. Research and development expenses for the nine months ended September 30, 2005 and 2004 were substantially consistent as we continued to primarily focus our efforts on developing and improving our instruments, components, subsystems and process control solutions to improve process performance and productivity.

We have hundreds of products and our research and development efforts primarily consist of a large number of projects related to these products, none of which is in and of itself material to us. Current projects typically have a duration of 12 to 30 months depending upon whether the product is an enhancement of existing technology or a new product. Our current initiatives include projects to enhance the performance characteristics of older products, to develop new products and to integrate various technologies into subsystems. These projects support in large part the transition in the semiconductor industry to larger wafer sizes and smaller integrated circuit geometries, which require more advanced process control technology. Research and development expenses consist primarily of salaries and related expenses for personnel engaged in research and development, fees paid to consultants, material costs for prototypes and other expenses related to the design, development, testing and enhancement of our products.

We believe that the continued investment in research and development and ongoing development of new products are essential to the expansion of our markets, and expect to continue to make significant investment in research and development activities. We are subject to risks if products are not developed in a timely manner, due to rapidly changing customer requirements and competitive threats from other companies and technologies. Our success primarily depends on our products being designed into new generations of equipment for the semiconductor industry. We develop products that are technologically advanced so that they are positioned to be chosen for use in each successive generation of semiconductor capital equipment. If our products are not chosen to be designed into our customers' products, our net sales may be reduced during the lifespan of those products.

Selling, General and Administrative (dollars in millions)

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2005	2004	% Change	2005	2004	% Change
Selling, general and administrative expenses ...	$22.3	$23.0	(2.7)%	$69.2	$65.8	5.2%

Selling, general and administrative expenses decreased $0.7 million during the three months ended September 30, 2005 mainly due to decreased legal fees of $1.4 million primarily related to litigation which had been subsequently resolved, partially offset by higher professional fees of $0.5 million principally related to the timing of fees for compliance with the Sarbanes-Oxley Act of 2002 ("Sarbanes Oxley").

Selling, general and administrative expenses increased $3.4 million during the nine months ended September 30, 2005 mainly due to higher consulting fees primarily for IT related services of $2.8 million, higher professional fees of $1.5 million principally related to the timing of fees for compliance with Sarbanes Oxley, higher compensation and benefit expenses of $0.9 million and higher insurance expenses of $0.7 million, partially offset by decreased legal fees of $2.5 million mainly related to litigation which had been subsequently resolved.

Amortization of Acquired Intangible Assets (dollars in millions)

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2005	2004	% Change	2005	2004	% Change
Amortization of acquired intangible assets....	$3.4	$3.7	(8.3)%	$10.8	$11.1	(2.8)%

Amortization expense for the three and nine months ended September 30, 2005 and 2004, respectively, represents amortization of identifiable intangible assets resulting from our completed acquisitions. The decreases during the three and nine months ended September 30, 2005 are due to certain identifiable intangible assets becoming fully amortized during the three months ended September 30, 2005.

Restructuring (dollars in millions)

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2005	2004	% Change	2005	2004	% Change
Restructuring..........	$(0.3)	--	--	$0.2	$0.4	(59.7)%

As a result of our various acquisitions from 2000 through 2002 and the downturn in the semiconductor capital equipment market, which began in 2000, we had redundant activities and excess manufacturing capacity and office space. Therefore, in 2002 and continuing through the first quarter of 2004, we implemented restructuring activities to rationalize manufacturing operations and reduce operating expenses. As a result of these actions, we recorded restructuring, asset impairment charges and other charges of $2.7 million, $1.6 million and $0.4 million in 2002, 2003 and 2004, respectively. The charges consisted of $1.0 million of severance costs related to workforce reductions, $2.8 million related to consolidation of leased facilities, and asset impairment charges of $0.9 million primarily related to the impairment of an intangible asset from the discontinuance of certain product development activities. The fair value of the impaired intangible asset was determined using the expected present value of future cash flows. The workforce reductions were across all functional groups.

During the three months ended March 31, 2004, we completed our restructuring activities initiated in 2002, when we exited a leased facility and recorded a restructuring charge of $0.4 million. We implemented these restructuring activities to rationalize manufacturing operations and to reduce operating expenses. There were no restructuring charges during the remainder of 2004.

During the three months ended March 31, 2005, we initiated a restructuring plan related to our Berlin, Germany location. This consolidation of activities included the reduction of 16 employees. The total restructuring charge related to this consolidation was $0.5 million, which consisted of $0.3 million related to the repayment of a government grant and $0.2 million in severance costs. There were no restructuring charges during the second quarter of 2005.

During the three months ended September 30, 2005, we terminated a lease related to a facility previously exited. At June 30, 2005, we had an accrual of approximately $0.8 million related to this facility. After making the lease settlement payment and payments for other contractual obligations, the remaining balance of approximately $0.3 million was reversed as there was no remaining obligation.

The following table sets forth the activity in the restructuring accruals from December 31, 2004 to September 30, 2005:

	Workforce Reductions	Facility Consolidations	Other	Total
Balance as of December 31, 2004..............	$ 89	$1,532	$ --	$1,621
Restructuring provision in first quarter.....	203	--	251	454
Charges utilized in first quarter............	(9)	(110)	--	(119)
Balance as of March 31, 2005.................	283	1,422	251	1,956
Charges utilized in second quarter...........	(56)	(135)	--	(191)
Balance as of June 30, 2005..................	227	1,287	251	1,765
Reversal of restructuring in third quarter...	--	(278)	--	(278)
Charges utilized in third quarter............	(71)	(563)	--	(634)
Balance as of September 30, 2005.............	$156	$ 446	$251	$ 853

The remaining accruals for workforce reductions are expected to be paid by January 2006. The facilities consolidation charges will be paid over the respective lease terms, the latest of which ends in 2007.

Interest Income, Net (dollars in millions)

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2005	2004	% Change	2005	2004	% Change
Interest income, net....	$1.8	$0.4	309.7%	$4.3	$1.0	309.3%

Net interest income increased $1.4 million and $3.3 million, respectively, for the three and nine month periods ended September 30, 2005, mainly related to higher interest rates on higher average investment balances in those periods.

Other Income

Other income of $5.4 million for the nine months ended September 30, 2004 consisted primarily of a gain of $5.0 million related to the collection of a note receivable in the second quarter of 2004 that was written off in 2002.

Provision for Income Taxes (dollars in millions)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2005	2004	2005	2004
Provision for income taxes...	$3.1	$3.0	$7.5	$11.5

As a result of incurring significant operating losses from 2001 through 2003, we had established a full valuation allowance against our net deferred tax assets. During the fourth quarter of 2004, after examining a number of factors, including historical results and near term earnings projections, we determined that it was more likely than not that we would realize all of our net deferred tax assets, except for those related to certain state tax credits, and reduced the valuation allowance accordingly. At September 30, 2005, we continued to maintain a valuation allowance for certain state tax credits for which it was more likely than not that they will not be realized.

Our effective tax rate for the three and nine month periods ended September 30, 2005 was 30% and 25%, respectively. The effective tax rate is less than the statutory tax rate primarily due to a tax benefit recorded as the result of the completion of the Internal Revenue Service ("IRS") examination (see below), the benefit from U.S. research and development credits and the profits of our international subsidiaries being taxed at rates lower than the U.S. statutory tax rate.

During the three and nine month periods ended September 30, 2004, the U.S. taxable income was offset by U.S. operating loss carryforwards and the tax provision was comprised of tax expense from foreign operations and state taxes.

In the normal course of business, our Company and our subsidiaries are examined by various tax authorities, including the IRS. Generally an unfavorable settlement of any issue under audit would require the use of cash. Favorable resolution would result in a reduction to our effective tax rate in the quarter of resolution. During the quarter ended June 30, 2005, the IRS completed its examination of our tax returns for the tax years 1999 through 2002. As a result of this examination, during the quarter ended June 30, 2005 we recorded a benefit to income tax expense of $1.9 million and a $0.6 million reduction of goodwill related to a previous acquisition.

LIQUIDITY AND CAPITAL RESOURCES

Cash, cash equivalents and short-term investments totaled $271.4 million at September 30, 2005 compared to $235.9 million at December 31, 2004. The primary source of funds for the first nine months of fiscal 2005 was cash provided by operating activities of $40.3 million.

Net cash provided by operating activities of $40.3 million for the nine months ended September 30, 2005, resulted mainly from net income of $22.5 million and non-cash charges of $19.8 million for depreciation and amortization offset by an increase in operating assets of $1.1 million and a decrease in operating liabilities of $0.7 million. The increase in operating assets is mainly caused by a $3.0 million increase in other currents assets primarily due to tax deposits and a $0.9 million increase in inventories, partially offset by a $2.9 million decrease in accounts receivable as a result of lower revenues. The decrease in operating liabilities is primarily the result of a $1.7 million decrease in accounts payable, partially offset by a $0.7 million increase in taxes payable. Net cash provided by operating activities of $43.1 million for the nine months ended September 30, 2004 resulted mainly from net income of $45.7 million, non-cash depreciation and amortization expenses of $20.5 million and an increase in operating liabilities of $30.3 million, partially offset by an increase in operating assets of $48.4 million and a $5.0 million gain related to the collection of a previously written off note receivable. The increase in operating assets consisted mainly of an increase in accounts receivable of $20.4 million due to the higher shipments in the third quarter of 2004 of $139.7 million as compared to the fourth quarter of 2003 of $101.8 million, partially offset by a decrease in our days sales outstanding from 63 days for the nine months ended September 30, 2003 to 55 days for the nine months ended September 30, 2004 as a result of improved cash collections, and an increase in inventory of $22.5 million as a result of higher production volumes in 2004 to support the higher revenues. The increase in operating liabilities consisted primarily of an increase in accrued expenses and other current liabilities of $15.2 million resulting mainly from increased accrued compensation, warranty reserves and non-income related tax accruals, as well as a $14.7 million increase in income tax payable.

Net cash used in investing activities of $17.2 million for the nine months ended September 30, 2005 resulted primarily from net purchases of available for sale investments of $10.5 million and from the purchases of property, plant and equipment of $7.6 million primarily for investment in manufacturing equipment and for the consolidation of our IT infrastructure. Net cash used in investing activities of $55.0 million for the nine months ended September 30, 2004 resulted from the net purchases of $48.4 million of available for sale investments mainly from the net proceeds received from our stock offering in the first quarter, and the purchase of property, plant and equipment of $14.0 million for investments in manufacturing equipment and for consolidation of our IT infrastructure, partially offset by proceeds of $5.0 million received from the collection of a note receivable that was previously written off.

Net cash provided by financing activities of $1.1 million for the nine months ended September 30, 2005 consisted primarily of $4.0 million in proceeds from the exercise of stock options and purchases under our employee stock purchase plan, partially offset by $2.0 million in principal payments on long-term debt and net payments of $0.9 million on short-term borrowings. Net cash provided by financing activities of $38.0 million for the nine months ended September 30, 2004 consisted primarily of $32.5 million in net proceeds received from our common stock offering in the first quarter, $4.0 million in proceeds from the exercise of stock options and purchases under the employee stock purchase plan, and net proceeds of $3.7 million from short-term borrowings, partially offset by $2.1 million of principal payments on long-term debt.

We believe that our working capital, together with the cash anticipated to be generated from operations, will be sufficient to satisfy our estimated working capital and planned capital expenditure requirements through at least the next 12 months.

On October 3, 2005, we and Advanced Energy Industries, Inc. ("Advanced Energy") executed a settlement agreement in connection with the patent infringement suit we had brought against Advanced Energy in federal district court in Delaware. Pursuant to the settlement agreement, Advanced Energy paid us $3 million in cash in October 2005.

To the extent permitted by Massachusetts law, our Restated Articles of Organization, as amended, require us to indemnify any of our current or former officers or directors or any person who has served or is serving in any capacity with respect to any of our employee benefit plans. Because no claim for indemnification has been pursued by any person covered by the relevant provisions of our Restated Articles of Organization, we believe that the estimated exposure for these indemnification obligations is currently minimal. Accordingly, we have no liabilities recorded for these requirements as of September 30, 2005.

We also enter into agreements in the ordinary course of business which include indemnification provisions. Pursuant to these agreements, we indemnify, hold harmless and agree to reimburse the indemnified party, generally our customers, for losses suffered or incurred by the indemnified party in connection with certain patent or other intellectual property infringement claims, and, in some instances, other claims, by any third party with respect to our products. The term of these indemnification obligations is generally perpetual after execution of the agreement. The maximum potential amount of future payments we could be required to make under these indemnification agreements is, in some instances, unlimited. We have never incurred costs to defend lawsuits or settle claims related to these indemnification obligations. As a result, we believe the estimated fair value of these obligations is minimal. Accordingly, we have no liabilities recorded for these obligations as of September 30, 2005.

When, as part of an acquisition, we acquire all of the stock or all of the assets and liabilities of another company, we assume liability for certain events or occurrences that took place prior to the date of acquisition. The maximum potential amount of future payments we could be required to make for such obligations is undeterminable at this time. Other than obligations recorded as liabilities at the time of the acquisitions, historically we have not made significant payments for these indemnifications. Accordingly, no liabilities have been recorded for these obligations.

In conjunction with certain asset sales, we may provide routine indemnifications whose terms range in duration and often are not explicitly defined. Where appropriate, an obligation for such indemnifications is recorded as a liability. Because the amounts of liability under these types of indemnifications are not explicitly stated, the overall maximum amount of the obligation under such indemnifications cannot be reasonably estimated. Other than obligations recorded as liabilities at the time of the asset sale, historically we have not made significant payments for these indemnifications.

OFF-BALANCE SHEET ARRANGEMENTS

We do not have any financial partnerships with unconsolidated entities, such as entities often referred to as structured finance, special purpose entities or variable interest entities which are often established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. Accordingly, we are not exposed to any financing, liquidity, market or credit risk that could arise if we had such relationships.

FACTORS THAT MAY AFFECT FUTURE RESULTS

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

We estimate that approximately 70% of our net sales for the nine months ended September 30, 2005 and 74%, 69%, and 70% of our net sales for the years ended December 31, 2004, 2003 and 2002, respectively, were to semiconductor capital equipment manufacturers and semiconductor device manufacturers, and we expect that sales to such customers will continue to account for a substantial majority of our sales. Our 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 our 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 2001 through the first half of 2003, we experienced a significant reduction in demand from OEM customers, and lower gross margins due to reduced absorption of manufacturing overhead. In addition, many semiconductor manufacturers have operations and customers in Asia, a region that in past years has experienced serious economic problems including currency devaluations, debt defaults, lack of liquidity and recessions. We cannot be certain that semiconductor downturns will not continue or recur. A decline in the level of orders as a result of any downturn or slowdown in the semiconductor capital equipment industry could have a material adverse effect on our business, financial condition and results of operations.

OUR QUARTERLY OPERATING RESULTS HAVE VARIED, AND ARE LIKELY TO CONTINUE TO VARY SIGNIFICANTLY. THIS MAY RESULT IN VOLATILITY IN THE MARKET PRICE OF OUR COMMON STOCK.

A substantial portion of our shipments occurs shortly after an order is received and therefore we operate with a low level of backlog. As a result, a decrease in demand for our products from one or more customers could occur with limited advance notice and could have a material adverse effect on our results of operations in any particular period. A significant percentage of our 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 our results of operations. Factors that could cause fluctuations in our 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.

In addition, our quarterly operating results may be adversely affected due to charges incurred in a particular quarter, for example, relating to inventory obsolescence, bad debt or asset impairments.

As a result of the factors discussed above, it is likely that we may in the future experience quarterly or annual fluctuations and that, in one or more future quarters, our operating results may fall below the expectations of public market analysts or investors. In any such event, the price of our common stock could decline significantly.

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

Our top ten customers accounted for approximately 48% of our net sales for the nine months ended September 30, 2005, and approximately 49%, 42%, and 49% of our net sales for the years ended December 31, 2004, 2003 and 2002, respectively. 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 our business, financial condition and results of operations. During the nine months ended September 30, 2005 and the years ended December 31, 2004, 2003 and 2002, one customer, Applied Materials, accounted for approximately 16%, 20%, 18%, and 23%, respectively, of our net sales. None of our significant customers, including Applied Materials, has entered into an agreement requiring it to purchase any minimum quantity of our products. The demand for our products from our 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 of net sales 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. Our future success will continue to depend upon:

- our ability to maintain relationships with existing key customers;
- our ability to attract new customers;
- our ability to introduce new products in a timely manner for existing and new customers; and
- the success of our customers in creating demand for their capital equipment products which incorporate our products.

AS PART OF OUR BUSINESS STRATEGY, WE HAVE ENTERED INTO AND MAY ENTER INTO OR SEEK TO ENTER INTO BUSINESS COMBINATIONS AND ACQUISITIONS THAT MAY BE DIFFICULT AND COSTLY TO INTEGRATE, DISRUPT OUR BUSINESS, DILUTE STOCKHOLDER VALUE OR DIVERT MANAGEMENT ATTENTION.

We made several acquisitions in the years 2000 through 2002. As a part of our business strategy, we may enter into additional business combinations and acquisitions. Acquisitions are typically accompanied by a number of risks, including the difficulty of integrating the operations, technology and personnel of the acquired companies, the potential disruption of our ongoing business and distraction of management, expenses related to the acquisition and potential unknown liabilities associated with acquired businesses. If we are not successful in completing acquisitions that we may pursue in the future, we may be required to reevaluate our growth strategy, and we may incur substantial expenses and devote significant management time and resources in seeking to complete proposed acquisitions that will not generate benefits for us.

In addition, with future acquisitions, we could use substantial portions of our available cash as all or a portion of the purchase price. We could also issue additional securities as consideration for these acquisitions, which could cause significant stockholder dilution. Our prior acquisitions and any future acquisitions may not ultimately help us achieve our strategic goals and may pose other risks to us.

As a result of our previous acquisitions, we have added several different decentralized operating and accounting systems, resulting in a complex reporting environment. We expect that we will need to continue to modify our accounting policies, internal controls, procedures and compliance programs to provide consistency across all our operations. In order to increase efficiency and operating effectiveness and improve corporate visibility into our decentralized operations, we are currently implementing a new worldwide Enterprise Resource Planning ("ERP") system. We expect to continue to implement the ERP system by converting our operations in phases over the next few years and completed the first site implementation in October 2005. Although we have a plan to accomplish the ERP implementation, we may risk potential disruption of our operations during the conversion periods, the implementation could require significantly more management time than currently estimated and we could incur significantly higher implementation costs than currently estimated.

AN INABILITY TO CONVINCE SEMICONDUCTOR DEVICE MANUFACTURERS TO SPECIFY THE USE OF OUR PRODUCTS TO OUR CUSTOMERS THAT ARE SEMICONDUCTOR CAPITAL EQUIPMENT MANUFACTURERS WOULD WEAKEN OUR COMPETITIVE POSITION.

The markets for our products are highly competitive. Our competitive success often depends upon factors outside of our 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, our success will depend in part on our ability to have semiconductor device manufacturers specify that our products be used at their semiconductor fabrication facilities. In addition, we may encounter difficulties in changing established relationships of competitors that already have a large installed base of products within such semiconductor fabrication facilities.

IF OUR PRODUCTS ARE NOT DESIGNED INTO SUCCESSIVE GENERATIONS OF OUR CUSTOMERS' PRODUCTS, WE 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. Our success depends on our products being designed into new generations of equipment for the semiconductor industry. We must develop products that are technologically advanced so that they are positioned to be chosen for use in each successive generation of semiconductor capital equipment. If customers do not choose our products, our net sales may be reduced during the lifespan of our customers' products. In addition, we must make a significant capital investment to develop products for our customers well before our products are introduced and before we can be sure that we will recover our capital investment through sales to the customers in significant volume. We are thus also at risk during the development phase that our products may fail to meet our customers' technical or cost requirements and may be replaced by a competitive product or alternative technology solution. If that happens, we may be unable to recover our development costs.

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

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

WE OPERATE IN A HIGHLY COMPETITIVE INDUSTRY.

The market for our products is highly competitive. Principal competitive factors include:

- historical customer relationships;

- product quality, performance and price;

- breadth of product line;

- manufacturing capabilities; and

- customer service and support.

Although we believe that we compete favorably with respect to these factors, we may not be able to continue to do so. We encounter substantial competition in most of our product lines. Certain of our competitors may have greater financial and other resources than we have. In some cases, competitors are smaller than we are, but well established in specific product niches. We may encounter difficulties in changing established relationships of competitors with a large installed base of products at such customers' fabrication facilities. In addition, our competitors can be expected to continue to improve the design and performance of their products. Competitors may develop products that offer price or performance features superior to those of our products.

SALES TO FOREIGN MARKETS CONSTITUTE A SUBSTANTIAL PORTION OF OUR NET SALES; THEREFORE, OUR 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 our foreign subsidiaries, but exclude direct export sales. International sales accounted for approximately 38% of net sales for the nine months ended September 30, 2005 and 34%, 41%, and 36% of net sales for the years ended December 31, 2004, 2003 and 2002, respectively, a significant portion of which were sales to Japan.

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

WE HAVE SIGNIFICANT FOREIGN OPERATIONS, AND OUTSOURCE CERTAIN MANUFACTURING OFFSHORE, WHICH POSE SIGNIFICANT RISKS.

We have significant international sales, service, engineering and manufacturing operations in Europe and Asia, and have outsourced a portion of our manufacturing to Mexico. We may expand the level of manufacturing and certain other operations that we do offshore in order to take advantage of cost efficiencies available to us in those countries. However, we may not achieve the significant cost savings or other benefits that we anticipate from this program. These foreign operations expose us to operational and political risks that may harm our business, including:

- political and economic instability;

- 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;

- reduced or less certain protection for intellectual property rights;

- 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, our operating results may be adversely affected.

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

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

KEY PERSONNEL MAY BE DIFFICULT TO ATTRACT AND RETAIN.

Our 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 our business, financial condition and results of operations. We believe that our future success will depend in part on our ability to attract and retain highly skilled technical, financial, managerial and marketing personnel. We cannot be certain that we will be successful in attracting and retaining such personnel.

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

As of December 31, 2004, we owned 221 U.S. patents, 156 foreign patents and had 91 pending U.S. patent applications. Although we seek to protect our intellectual property rights through patents, copyrights, trade secrets and other measures, we cannot be certain that:

- we will be able to protect our technology adequately;

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

- any of our pending patent applications will be issued;

- domestic and international intellectual property laws will protect our intellectual property rights; or

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

PROTECTION OF OUR INTELLECTUAL PROPERTY RIGHTS MAY RESULT IN COSTLY LITIGATION.

Litigation may be necessary in order to enforce our patents, copyrights or other intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others or to defend against claims of infringement. We have been in the past, and currently are, involved in lawsuits enforcing and defending our intellectual property rights 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 our business, financial condition and results of operations.

We may need to expend significant time and expense to protect our intellectual property regardless of the validity or successful outcome of such intellectual property claims. If we lose any litigation, we may be required to seek licenses from others or change, stop manufacturing or stop selling some of our products.

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

The stock market has from time to time experienced, and is likely to continue to experience, extreme price and volume fluctuations. 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 our common stock has fluctuated greatly since our 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 we were the object of securities class action litigation, it could result in substantial costs and a diversion of our management's attention and resources.

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

We rely on sole, limited source suppliers and international suppliers for a few of our components and subassemblies that are critical to the manufacturing of our 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 our suppliers to develop technologically advanced products to support our growth and development of new systems.

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

WE ARE SUBJECT TO GOVERNMENTAL REGULATIONS. IF WE FAIL TO COMPLY WITH THESE REGULATIONS, OUR BUSINESS COULD BE HARMED.

We are subject to federal, state, local and foreign regulations, including environmental regulations and regulations relating to the design and operation of our products. We must ensure that the affected products meet a variety of standards, many of which vary across the countries in which our systems are used. For example, the European Union has published directives specifically relating to power supplies. In addition, the European Union has issued directives relating to future regulation of recycling and hazardous substances, which may be applicable to our products, or which some customers may voluntarily elect to adhere to. We must comply with any applicable directive in order to ship affected products into countries that are members of the European Union. We believe we are in compliance with current applicable regulations, directives and standards and have obtained all necessary permits, approvals, and authorizations to conduct our business. However, compliance with future regulations, directives and standards could require us to modify or redesign certain systems, make capital expenditures or incur substantial costs. If we do not comply with current or future regulations, directives and standards:

- we could be subject to fines;

- our production could be suspended; or

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

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

As of September 30, 2005, John R. Bertucci, our Executive Chairman, and certain members of his family, in the aggregate, beneficially owned approximately 17% of our outstanding common stock. As a result, these stockholders, acting together, are able to exert substantial influence over our actions. Pursuant to the acquisition of the ENI Business of Emerson Electric Co. ("Emerson"), we issued approximately 12,000,000 shares of common stock to Emerson and its wholly owned subsidiary, Astec America, Inc. Emerson owned approximately 18% of our outstanding common stock as of September 30, 2005, and James G. Berges, a representative of Emerson, is a member of our board of directors. Accordingly, Emerson is able to exert substantial influence over our actions.

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

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 price 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 we have no present plans to issue any preferred stock, our 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 us. The issuance of preferred stock could adversely affect the voting power of the holders of our common stock, including the loss of voting control to others. In addition, our 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 us.

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 our Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 16, 2005. There were no material changes in our exposure to market risk from December 31, 2004.

ITEM 4. CONTROLS AND PROCEDURES.

a) Effectiveness of disclosure controls and procedures.

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2005. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), means controls and other procedures of a company that 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. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of September 30, 2005, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

b) Changes in internal control over financial reporting.

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the quarter ended September 30, 2005 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS.

On April 3, 2003, Advanced Energy Industries, Inc. ("Advanced Energy") filed suit against us in federal district court in Colorado (the "Colorado Action"), seeking a declaratory judgment that Advanced Energy's Xstream product does not infringe three patents held by our subsidiary, Applied Science and Technology, Inc. ("ASTeX"). On May 14, 2003, we brought suit in federal district court in Delaware (the "Court") against Advanced Energy for infringement of five ASTeX patents (the "Delaware Action"), including the three patents at issue in the Colorado Action. We sought injunctive relief and damages for Advanced Energy's infringement. On December 24, 2003, the Colorado court granted our motion to transfer Advanced Energy's Colorado Action to Delaware. In connection with the jury trial, the parties agreed to present the jury with representative claims from three of the five ASTeX patents. On July 23, 2004, the jury found that Advanced Energy infringed all three patents. On October 3, 2005, the parties entered into a settlement agreement, pursuant to which Advanced Energy paid us $3 million in cash in October 2005. This payment is not reflected in our financial statements as of September 30, 2005. The settlement agreement also provided that Advanced Energy would not make, use, sell or offer to sell its Rapid, Rapid FE, Rapid OE, and Xstream products (or related products) in the United States or any other country in which we hold a relevant patent or patent application, during the life of any such patent (or resulting patent, in the case of patent applications). On October 6, 2005, the Court issued a final judgment of infringement and an injunction prohibiting Advanced Energy from making, using, selling, offering to sell, or importing into the United States such products.

On November 3, 1999, On-Line Technologies, Inc. ("On-Line"), which we acquired in 2001, brought suit in federal district court in Connecticut against Perkin-Elmer, Inc. and certain other defendants (collectively, "Perkin-Elmer") for infringement of On-Line's patent related to its FTIR spectrometer product and related claims. The suit sought injunctive relief and damages for infringement. Perkin-Elmer, 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. We appealed this decision to the federal circuit court of appeals. On October 13, 2004, the federal circuit court of appeals reversed the lower court's dismissal of certain claims in the case. Accordingly, the case has been remanded to the United States District Court in Connecticut for further proceedings on the merits of the remaining claims. On March 11, 2005, Perkin-Elmer, submitted to the court a stipulation that it has infringed a specified claim of On-Line's patent and filed a motion for summary judgment that such patent claim is invalid. On April 6, 2005, On-Line filed a reply to the summary judgment motion. The parties are awaiting the court's response to the motion.

We are subject to other 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 our results of operations, financial condition or cash flows.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS.

On August 1, 2005, the Company issued a warrant to purchase 10,750 shares of common stock to a former employee of the Company (the "Employee"). The warrant was issued in exchange for the Employee entering into a settlement agreement to terminate outstanding litigation between the Company and the Employee. The warrant is exercisable at any time for ten years from the date of issuance, at an exercise price of $15.05 per share. The Company issued the warrant pursuant to Section 4(2) of the Securities Act of 1933, as amended, as the issuance was not in connection with a public offering.

ITEM 6. EXHIBITS.

Exhibit No.	Exhibit Description
+3.1(1)	Restated Articles of Organization
+3.2(2)	Articles of Amendment, as filed with the Secretary of State of Massachusetts on May 18, 2001
+3.3(3)	Articles of Amendment, as filed with the Secretary of State of Massachusetts on May 16, 2002
+3.4(4)	Amended and Restated By-Laws
+4.1(4)	Specimen certificate representing the common stock
+10.1(5)	Settlement Agreement, dated October 3, 2005, by and among MKS Instruments, Inc., Applied Science and Technology, Inc. and Advanced Energy Industries, Inc.
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended
32.1	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

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+ Previously filed

(1) Incorporated by reference to the Registration Statement on Form S-4 (File No. 333-49738) filed with the Securities and Exchange Commission on November 13, 2000.

(2) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2001.

(3) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2002.

(4) Incorporated by reference to the Registration Statement on Form S-1 (File No. 333-71363) filed with the Securities and Exchange Commission on January 28, 1999, as amended.

(5) Incorporated by reference to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on October 7, 2005.

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.

November 9, 2005

By: /s/ Ronald C. Weigner

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

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO RULE 13a-14(a)/RULE 15d-14(a) OF THE
SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Leo Berlinghieri, certify that:

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

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-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15(d)-15(f)) for the registrant and 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) 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; and

    d) Disclosed in this report any changes 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 and I have disclosed, based on our most recent evaluation of internal controls over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies 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 control and financial reporting.

Dated: November 9, 2005

/s/ Leo Berlinghieri

Leo Berlinghieri
President and Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO RULE 13a-14(a)/RULE 15d-14(a) OF THE
SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Ronald C. Weigner, certify that:

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

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-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15(d)-15(f)) for the registrant and 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) 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; and

    d) Disclosed in this report any changes 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 and I have disclosed, based on our most recent evaluation of internal controls over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies 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 control and financial reporting.

Dated: November 9, 2005

/s/ Ronald C. Weigner

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

EXHIBIT 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND 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 September 30, 2005 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Leo Berlinghieri, President and Chief Executive Officer of the Company, and Ronald C. Weigner, Vice President and Chief Financial Officer, each hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

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

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

Dated: November 9, 2005

/s/ Leo Berlinghieri

Leo Berlinghieri
President and Chief Executive Officer

Dated: November 9, 2005

/s/ Ronald C. Weigner

Ronald C. Weigner
Vice President and Chief Financial Officer