SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 8-K

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

Date of Report (Date of earliest event reported): April 20, 2004

MKS Instruments, Inc.

(Exact name of registrant as specified in charter)

Massachusetts

0-23621

04-2277512

(State or other jurisdiction of (Commission (IRS Employer incorporation) File Number) Identification No.)

90 Industrial Way, Wilmington, Massachusetts

01887

(Address of principal executive offices)

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

Six Shattuck Road, Andover, Massachusetts 01810

(Former name or former address, if changed since last report)

ITEM 12. RESULTS OF OPERATIONS AND FINANCIAL CONDITION

On April 20, 2004, MKS Instruments, Inc. announced its financial results for the quarter ended March 31, 2004. The full text of the press release issued in connection with the announcement is attached as Exhibit 99.1 to this Current Report on Form 8-K.

The information in this Form 8-K and the Exhibit attached hereto shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as expressly set forth by specific reference in such a filing.

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 hereunto duly authorized.

Date: April 20, 2004 MKS Instruments, Inc.

By: /s/ Ronald C. Weigner

Ronald C. Weigner,

Vice President & Chief Financial Officer

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press release dated April 20, 2004

Contact: Ron Weigner Vice President and Chief Financial Officer 978.975.2350

MKS INSTRUMENTS REPORTS FIRST QUARTER 2004 RESULTS

31% SEQUENTIAL QUARTERLY REVENUE GROWTH AND CONTINUED MARGIN IMPROVEMENT

Wilmington, Mass. -- April 20, 2004 -- MKS Instruments, Inc. (NASDAQ: MKSI), a leading worldwide provider of process control technologies for improving productivity in semiconductor and other advanced manufacturing processes, today reported first quarter 2004 financial results. Net sales were \$133.0 million, up 31 percent from \$101.8 million in the fourth quarter of 2003 and up 83 percent from \$72.8 million in the first quarter of 2003.

On a GAAP basis, net earnings were \$12.7 million, or \$0.23 per diluted share compared to net earnings of \$2.1 million, or \$0.04 per diluted share, in the fourth quarter of 2003 and up from a net loss of \$7.4 million, or \$0.14 per basic share, in the first quarter of 2003. On a non-GAAP basis, which excludes amortization of acquired intangible assets and other special items, net earnings were \$16.8 million or \$0.31 per diluted share compared to net earnings of \$5.9 million, or \$0.11 per diluted share, in the fourth quarter of 2003 and up from a net loss of \$3.7 million, or \$0.07 per basic share, in the first quarter of 2003.

"I am pleased to report another strong quarter, with 31 percent sequential quarterly revenue growth on top of 25 percent sequential growth in the fourth quarter, driven mainly by the semiconductor capital equipment ramp. Gross margin increased to 41 percent in the first quarter of 2004 from 37 percent in the fourth quarter of 2003. We gained share in key markets and posted strong results across all product areas. Our operations and supply chain management organization and our suppliers continued to execute, with on-time deliveries of advanced, reliable products that improve customers' productivity," said John R. Bertucci, Chairman, Chief Executive Officer and President.

"We see a lot of opportunity ahead, and MKS is in an excellent position to participate fully in this semiconductor capital equipment spending growth cycle. We expect our sequential quarterly growth to continue at a rate consistent with or higher than the growth of the semiconductor capital equipment industry. Based on current order patterns, we anticipate that second quarter revenues could increase sequentially by 10 to 15 percent and range from \$146 to \$153 million. GAAP net earnings could range from \$0.29 to \$0.36 per share. On a non-GAAP basis, excluding amortization of acquired intangible assets and special items, second quarter earnings could range from \$0.35 to \$0.43 per share."

The financial results that exclude certain charges and special items are not in accordance with Accounting Principles Generally Accepted in the United States of America (GAAP). MKS' management uses these non-GAAP measures internally to evaluate the Company's performance and manage its operations, and believes that these measures provide useful information for understanding operating results and comparing prior periods.

Management will discuss the first quarter financial results on a conference call today at 5:00 p.m. (Eastern Time). A webcast of the conference call will be available at www.mksinstruments.com in the "Investors" section. To hear a replay through April 27, 2004, dial 303-590-3000, passcode 574745#.

MKS Instruments, Inc. is a leading worldwide provider of process control solutions for advanced manufacturing processes such as semiconductor device manufacturing; thin-film manufacturing for flat panel displays, data storage media, architectural glass and electro-optical products; and technology for medical imaging equipment. Our instruments, components and subsystems incorporate sophisticated technologies to power, measure, control, and monitor increasingly complex gas-related semiconductor manufacturing processes, thereby enhancing our customers' uptime, yield and throughput, and improving their productivity and return on invested capital.

This release contains projections or other forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 regarding MKS' future growth and the future financial performance of MKS. These projections or statements are only predictions. Actual events or results may differ materially from those in the

projections or other forward-looking statements set forth herein. Among the important factors that could cause actual events to differ materially from those in the projections or other forward-looking statements are the fluctuations in capital spending in the semiconductor industry, fluctuations in net sales to MKS' major customers, potential fluctuations in quarterly results, the challenges, risks and costs involved with integrating the operations of MKS and any acquired companies, dependence on new product development, rapid technological and market change, acquisition strategy, manufacturing and sourcing risks, volatility of stock price, international operations, financial risk management, and future growth subject to risks. Readers are referred to MKS' filings with the Securities and Exchange Commission, including its most recent Annual Report on Form 10-K, for a discussion of these and other important risk factors concerning MKS and its operations. MKS is under no obligation to, and expressly disclaims any obligation to, update or alter its forward-looking statements, whether as a result of new information, future events or otherwise.

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MKS INSTRUMENTS, INC. UNAUDITED CONSOLIDATED STATEMENTS OF OPERATIONS (IN THOUSANDS, EXCEPT PER SHARE DATA)

	Three Months Ended March 31,	
		2003
Net sales Cost of sales	\$132,985 78,756	47,371
Gross profit	54, 229	
Research and development Selling, general and administrative Amortization of acquired intangible assets Restructuring charges	14,336 20,152 3,693 437	11,232 17,819 3,778
Income (loss) from operations	15,611	
Interest income, net	272	280
Income (loss) before income taxes Provision for income taxes		(7,143) 287
Net income (loss)	\$ 12,706 ======	
Net income (loss) per share: Basic Diluted	\$ 0.24 \$ 0.23	\$ (0.14) \$ (0.14)
Weighted average shares outstanding: Basic Diluted	53,255 55,085	
THE FOLLOWING SUPPLEMENTAL NON-GAAP EARNINGS INFORMATION IS PRESENTED TO AID IN UNDERSTANDING MKS'S OPERATING RESULTS:		
GAAP net income (loss)	\$ 12,706	\$(7,430)
Adjustments: Amortization of acquired intangible assets Restructuring charges	3,693 437	3,778
Non-GAAP net income (loss) (NOTE 1)	\$ 16,836 ======	\$(3,652) ======
Non-GAAP net income (loss) per share (NOTE 1) Weighted average shares outstanding (NOTE 2)	\$ 0.31 55,085	\$ (0.07) 51,380

NOTE 1: The Non-GAAP net income (loss) and non-GAAP net income (loss) per share amounts exclude amortization of acquired intangible assets, acquisition and disposition related charges and special items, net of applicable income taxes.

NOTE 2: Due to the net loss for the quarter ended March 31, 2003, non-GAAP net loss per share is based on the basic number of weighted average shares outstanding. For the quarter ended March 31, 2004, the Company reported non-GAAP net income and therefore, used the diluted weighted average shares outstanding.

MKS INSTRUMENTS, INC. UNAUDITED CONSOLIDATED BALANCE SHEET (IN THOUSANDS)

	March 31, 2004	
ASSETS		
Cash and short-term investments Trade accounts receivable Inventories Other current assets	87,991 94,878 8,151	\$129,178 65,454 82,013 5,631
Total current assets	359,088	282,276
Property, plant and equipment, net Long-term investments Goodwill Other acquired intangible assets Other assets	52,445 4 083	13,625 259,924 56,192
Total assets		\$692,862 ======
LIABILITIES AND STOCKHOLDERS' EQUITY		
Short-term debt Accounts payable Other accrued expenses	34 341	\$ 20,196 25,302 26,310
Total current liabilities	97,633	71,808
Long-term debt Other long-term liabilities	8,460 4,127	8,924 3,820
Stockholders' equity: Common stock Additional paid-in capital Retained earnings Other stockholders' equity	113 622,334 24,944 8,639	
Total stockholders' equity	656,030	608,310
Total liabilities and stockholders' equity	\$766,250 ======	\$692,862