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): July 20, 2004

MKS Instruments, Inc.

(Exact name of registrant as specified in charter)

Massachusetts	0-23621	04-2277512		
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)		

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

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

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

ITEM 12. RESULTS OF OPERATIONS AND FINANCIAL CONDITION

On July 20, 2004, MKS Instruments, Inc. announced its financial results for the quarter ended June 30, 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: July 20, 2004

MKS Instruments, Inc.

By: /s/ Ronald C. Weigner Ronald C. Weigner, Vice President & Chief Financial Officer

EXHIBIT INDEX

Exhibit No.Description99.1Press release dated July 20, 2004

FOR IMMEDIATE RELEASE

Contact: Ron Weigner Vice President and Chief Financial Officer 978.284.4446

MKS INSTRUMENTS REPORTS SECOND QUARTER 2004 RESULTS

Wilmington, Mass. -- July 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 second quarter 2004 financial results that were within the Company's guidance for the quarter. Net sales were \$151.6 million, up 87 percent from \$81.2 million in the second quarter of 2003 and up 14 percent from \$133.0 million in the first quarter of 2004.

GAAP net earnings were \$20.9 million, or \$0.38 per diluted share, compared to a net loss of \$5.5 million, or \$0.11 per basic share, in the second quarter of 2003, and net earnings of \$12.7 million, or \$0.23 per diluted share, in the first quarter of 2004. Second quarter 2004 net earnings included other income of \$5.4 million. On a non-GAAP basis, which excludes amortization of acquired intangible assets and special items, net earnings were \$20.3 million, or \$0.37 per diluted share, compared to a net loss of \$1.5 million, or \$0.03 per basic share, in the second quarter of 2003, and net earnings of \$16.8 million, or \$0.31 per diluted share, in the first quarter of 2004.

John Bertucci, Chairman and Chief Executive Officer, said, "I'm pleased to report ongoing penetration of higher growth semiconductor applications in the second quarter and 14 percent sequential sales growth. Our 86 percent sales growth from the third quarter of 2003 reflects the success of our strategy of leveraging a broad portfolio of process control solutions for semiconductor and thin-film processes. I want to thank the MKS team for continuing to deliver the technical solutions and service performance that our customers require.

"Looking ahead to the third quarter, I believe we are in what I have described as a 'third inning stretch', as shipments of 200mm tools are absorbed and prior to the anticipated ramp of equipment for strategic 300mm fabs. Therefore, we currently expect that our third quarter revenues could be flat and range from \$150 to \$155 million. GAAP net earnings could range from \$0.31 to \$0.34 per diluted share, which excludes \$.08 per share in other income, net of tax, recorded in the second quarter. Third quarter non-GAAP earnings, which exclude amortization of acquired intangible assets, could range from \$0.37 to \$0.40 per share.

"Looking beyond the third quarter, we see opportunity for growth -particularly at 300mm, where our product development and acquisition strategies have been focused. With greater breadth and depth in process control around the chamber, we are providing more solutions for improving our customers' manufacturing yields as their process steps increase. I believe we are in an excellent position to capture an increasing share of future semiconductor capital equipment spending."

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 second 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 July 27, 2004, dial 303-590-3000, passcode 11001249#.

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 Quarterly Report on Form 10-Q, 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		
	June 30, 2004	June 30, 2003	March 31, 2004
Net sales Cost of sales	\$ 151,585 90,192	\$ 81,168 53,723	\$ 132,985 78,756
Gross profit		27,445	
Research and development Selling, general and administrative Amortization of acquired intangible assets Restructuring, asset impairment and other charges	22,661 3,691	11,453 17,459 3,617 304	20,152 3,693
Income (loss) from operations	20,421	(5,388)	15,611
Interest income, net Other Income (NOTE 1)	326 5,402	282 	272
Income (loss) before income taxes Provision (benefit) for income taxes	26,149 5,281	364	
Net income (loss)	\$ 20,868	\$ (5,470) =======	\$ 12,706 =======
Net income (loss) per share:			
Basic Diluted		\$ (0.11) \$ (0.11)	
Weighted average shares outstanding:			
Basic Diluted	53,540 54,967	51,419 51,419	53,255 55,085
THE FOLLOWING SUPPLEMENTAL NON-GAAP EARNINGS INFORMATION IS PRESENTED TO AID IN UNDERSTANDING THE MKS OPERATING RESULTS:			
GAAP net Income (loss)	\$ 20,868	\$ (5,470)	\$ 12,706
Adjustments: Amortization of acquired intangible assets Restructuring, asset impairment and other charges	3,691	3,617 304	3,693 437
Other income, net of tax (NOTE 1)	(4,272)		
Non-GAAP net income (loss) (NOTE 2)	\$ 20,287 =======	\$ (1,549) =======	\$ 16,836 =======
Non-GAAP net income (loss) per share (NOTE 2)	\$0.37 =======	\$ (0.03) =======	\$ 0.31 =======
Weighted average shares outstanding (NOTE 3)	54,967	51,419	55,085

NOTE 1: The GAAP amount represents primarily the collection of a note receivable of \$5.0 million which had been written off in 2002 and the gain on the sale of an asset. The Non-GAAP adjustment is net of applicable income taxes.

NOTE 2: 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 3: Due to the net loss for the quarter ended June 30, 2003, net loss per share is based on the basic number of weighted average shares outstanding. For the quarters ended June 30, 2004 and March 31, 2004, respectively, the Company

reported net income and therefore, used the diluted weighted average shares outstanding.

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

	Six Months Ended June 30,	
	2004	2003
Net sales Cost of sales	\$ 284,570 168,948	\$ 153,945 101,094
Gross profit	115,622	
Research and development Selling, general and administrative Amortization of acquired intangible assets Restructuring, asset impairment and other charges	28,956 42,813 7,384 437	22,685 35,278 7,395 304
Income (loss) from operations	36,032	(12,811)
Interest income, net Other Income (NOTE 1)	598 5,402	562
Income (loss) before income taxes Provision (benefit) for income taxes	42,032 8,458	(12,249) 651
Net income (loss)	\$ 33,574 ======	\$ (12,900) =======
Net income (loss) per share:		
Basic Diluted	\$ 0.63 \$ 0.61	\$ (0.25) \$ (0.25)
Weighted average shares outstanding:		
Basic Diluted	53,398 55,026	51,399 51,399
THE FOLLOWING SUPPLEMENTAL NON-GAAP EARNINGS INFORMATION IS PRESENTED TO AID IN UNDERSTANDING THE MKS OPERATING RESULTS:		
GAAP net Income (loss)	\$ 33,574	\$ (12,900)
Adjustments: Amortization of acquired intangible assets Restructuring, asset impairment and other charges Other income, net of tax (NOTE 1)	7,384 437 (4,272)	7,395 304
Non-GAAP net income (loss) (NOTE 2)	\$ 37,123 ======	\$ (5,201) =======
Non-GAAP net income (loss) per share (NOTE 2)	\$ 0.67	\$ (0.10) =======
Weighted average shares outstanding (NOTE 3)	55,026	51,399

NOTE 1: The GAAP amount represents primarily the collection of a note receivable of \$5.0 million which had been written off in 2002 and the gain on the sale of an asset. The Non-GAAP adjustment is net of applicable income taxes.

NOTE 2: 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 3: Due to the net loss for the six months ended June 30, 2003, net loss per share is based on the basic number of weighted average shares outstanding. For the six months ended June 30, 2004, the Company reported net income and therefore, used the diluted weighted average shares outstanding.

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

	June 30, 2004	December 31, 2003
ASSETS		
Cash and short-term investments Trade accounts receivable Inventories Other current assets	\$190,113 89,251 105,681 9,286	\$129,178 65,454 82,013 5,631
Total current assets	394,331	282,276
Property, plant and equipment, net Long-term investments Goodwill Other acquired intangible assets Other assets	78,003 8,865 259,818 48,732 4,075	76,121 13,625 259,924 56,192 4,724
Total assets	\$793,824 ======	\$692,862 ======
LIABILITIES AND STOCKHOLDERS' EQUITY		
Short-term debt Accounts payable Other accrued expenses	\$ 24,066 31,003 48,327	\$ 20,196 25,302 26,310
Total current liabilities	103,396	71,808
Long-term debt Other long-term liabilities	7,477 4,047	8,924 3,820
Stockholders' equity: Common stock Additional paid-in capital Retained earnings Other stockholders' equity Total stockholders' equity	113 624,347 45,812 8,632 678,904	113 587,910 12,238 8,049
Total liabilities and stockholders' equity	\$793,824 =======	\$692,862 =======