
UNITED STATES
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): 07/30/2008

KLA-TENCOR CORPORATION

(Exact name of registrant as specified in its charter)

Commission File Number: 000-09992

Delaware
(State or other jurisdiction of
incorporation)

04-2564110
(IRS Employer
Identification No.)

One Technology Drive, Milpitas, California 95035
(Address of principal executive offices, including zip code)

(408) 875-3000
(Registrant's telephone number, including area code)

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

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 8.01. Other Events

On July 30, 2008, KLA-Tencor Corporation ("KLA-Tencor") issued a news release announcing that it has entered into an agreement to acquire the Microelectronic Inspection Equipment (MIE) business unit of Vistec Semiconductor Systems. The MIE business unit of Vistec is headquartered in Weilburg, Germany and provides advanced semiconductor mask and wafer manufacturing systems. Financial terms of the transaction were not disclosed. The transaction is subject to customary closing conditions, including regulatory approvals, and is expected to close before the end of calendar year 2008.

A copy of the news release issued by KLA-Tencor on July 30, 2008 is attached hereto as Exhibit 99.1 and is incorporated herein by reference. References to KLA-Tencor's website in the release do not incorporate by reference the information on such website into this Current Report on Form 8-K, and KLA-Tencor disclaims any such incorporation by reference.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits

The following exhibit is filed herewith:

Exhibit No.	Description
99.1	Text of news release issued by KLA-Tencor Corporation dated July 30, 2008

Signature(s)

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.

KLA-TENCOR CORPORATION

Date: July 30, 2008

By: /s/ Brian M. Martin

Brian M. Martin
Senior Vice President and General Counsel

Exhibit Index

<u>Exhibit No.</u>	<u>Description</u>
EX-99.1	Text of news release issued by KLA-Tencor Corporation dated July 30, 2008

FOR IMMEDIATE RELEASE

Investor Relations:

Ed Lockwood
Sr. Director, Investor Relations
408.875.6800
Ed.Lockwood@kla-tencor.com

Media:

Meggan Powers
Sr. Director, Corporate Communications
408.875.8733
Meggan.Powers@kla-tencor.com

KLA-TENCOR ANNOUNCES INTENT TO ACQUIRE THE MICROELECTRONIC INSPECTION EQUIPMENT BUSINESS UNIT OF VISTEC SEMICONDUCTOR SYSTEMS

SAN JOSE, Calif.-July 30, 2008-KLA-Tencor (NASDAQ: KLAC) today announced that it has entered into an agreement to acquire the Microelectronic Inspection Equipment (MIE) business unit of Vistec Semiconductor Systems, which is wholly owned by Golden Gate Capital, a San Francisco-based private equity firm. The MIE business unit of Vistec is headquartered in Weilburg, Germany and provides advanced semiconductor mask and wafer manufacturing systems. Financial terms of the transaction were not disclosed.

Vistec's MIE business unit is one of three internationally active business units of Vistec Semiconductor Systems, which was formerly a part of Leica Microsystems and took on its current name in March 2006.

"The Microelectronic Inspection Equipment division of Vistec not only complements KLA-Tencor's product portfolio, it will give us an opportunity for growth into new segments of the mask and wafer markets. Vistec's mask registration measurement systems will enable us to offer an expanded range of products that provide increased operational benefits to our customers," said Rick Wallace, CEO of KLA-Tencor. "With its heritage as part of the Leica group, Vistec has a deep technology foundation that will be a good fit with KLA-Tencor's culture of innovation in optics and other advanced technologies."

Gerhard Ruppik, General Manager of Vistec's MIE business unit, said, "Becoming part of KLA-Tencor, the world leader in inspection and metrology, is a unique opportunity for us to accelerate our advanced technology development."

Vistec's advanced mask metrology tools for registration metrology (pattern placement) are among the leading tools in this area. In addition, the company's latest pattern placement metrology tool, which is already being used by customers to measure prototype EUV masks, offers state-of-the-art repeatability and accuracy in 2-dimensional coordinate measurement. The MIE business unit of Vistec is also a leading provider of SEM-based tools for mask critical dimension (CD) measurement, with products designed to meet the requirements of 45nm photomask production and 32nm development. Other MIE technologies include macro defect-inspection systems, overlay-measurement systems for MEMS applications, and software packages for defect classification and data analysis.

The transaction is subject to customary closing conditions, including regulatory approvals, and is expected to close before the end of calendar year 2008.

About KLA-Tencor: KLA-Tencor is the world leader in yield management and process control solutions for semiconductor manufacturing and related industries. Headquartered in Milpitas, California, the Company has sales and service offices around the world. An S&P 500 company, KLA-Tencor is traded on the NASDAQ Global Select Market under the symbol KLAC. Additional information about the Company is available at <http://www.kla-tencor.com>.

Forward Looking Statements: Statements in this press release other than historical facts, such as statements regarding the anticipated timing of the closing of the transaction and the potential benefits that may result from the transaction, are forward-looking statements and are subject to the Safe Harbor provisions created by the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on current information and expectations, and involve a number of risks and uncertainties. Actual results may differ materially from those projected in such statements due to various factors, including but not limited to those associated with demand for the companies' respective product lines; the results of product development efforts; the success of product offerings to meet customer needs within the timeframes required by customers in these markets; disruption from the proposed acquisition making it more difficult to maintain relationships with customers, vendors and employees; the failure to obtain and retain expected benefits from the proposed acquisition; delays in obtaining, or adverse conditions contained in, any required regulatory approvals; failure to consummate or delay in consummating the proposed acquisition for other reasons, changes in laws or regulations; and other similar factors. For other factors that may cause actual results to differ materially from those projected and anticipated in forward-looking statements in this release, please refer to the Company's Annual Report on Form 10-K for the year ended June 30, 2007, subsequently filed Quarterly Reports on Form 10-Q and other filings with the Securities and Exchange Commission (including, but not limited to, the risk factors described therein).

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