



Applied Materials Takes the Lead in Helping Boost Fab Efficiency with Breakthrough Metrology and Inspection Systems

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SANTA CLARA, Calif.--(BUSINESS WIRE)--June 19, 2000--

Line of Process Diagnostics and Control Products

Sets Industry Benchmark for Technology Innovation

Applied Materials, Inc. (Nasdaq:AMAT) is taking the lead in developing breakthrough products to increase the efficiency and productivity of customers' fabs. In less than four years, Applied Materials has brought leading-edge metrology and inspection systems to the market with innovative technologies that set a benchmark for other systems. These systems, all technology firsts, include the VeraSEM(TM) 3D metrology system, the SEMVision(TM) defect review system and the new Compass(TM) and Excite(TM) inspection systems being announced today.

"As chip geometries get tighter and the smallest defects become more critical, the importance of process analysis and feedback in the fab is increasing," said Dr. Dan Maydan, president of Applied Materials. "Our latest automated metrology and inspection systems go far beyond standard monitoring tools to offer new capabilities that can significantly expand the role of process diagnostics in contributing to a fab's profitability. We are seeing a major change in this market as many customers adopt our innovative technologies to improve yields and equipment productivity."

Applied Materials has introduced several technology firsts to help customers realize higher yields on their most advanced chip designs. These breakthroughs include the SEMVision, the first automated defect review SEM (scanning electron microscope) system for production line use. The SEMVision system is used in all 20 of the world's leading fabs to provide real-time feedback on the source of wafer defects. Another milestone innovation is in-line three dimensional imaging technology provided by the VeraSEM 3D for critical dimension (CD) measurement and slope control. This capability enables the system to surpass traditional CD-SEM solutions to offer additional profile information of advanced structures.

The new Compass system introduces high speed and high sensitivity to wafer inspection for increased fab production efficiency. The new Excite process tool monitor delivers the earliest detection of process tool excursions for significant cost savings in yield and productivity.

"Applied Materials has constantly pushed the limits of new inspection and metrology technology to support the continually increasing complex process requirements and advanced structures of future devices," said Gino Addiego, president of Applied Materials' Process Diagnostics and Control Group. "Leveraging our diagnostics capabilities with our process expertise gives us the unique advantage of being able to optimize process tool efficiency. The next step in our strategy to provide continuous improvement and innovation will be to integrate some of these technologies directly with our process equipment to enable even greater tool efficiency and productivity."

Applied Materials, Inc. is a Fortune 500 global growth company and the world's largest supplier of wafer fabrication systems and services to the global semiconductor industry. Applied Materials is traded on the Nasdaq National Market System under the symbol "AMAT." Applied Materials' web site is <http://www.appliedmaterials.com>.

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