



## **Applied Materials Cooperates with Leica to Offer Total Solutions for Defect Reduction**

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**SANTA CLARA, Calif.--(BUSINESS WIRE)--July 30, 1998--**

Collaboration Provides Customers with Complete Demonstration Set  
of Defect Detection and Characterization Tools

Applied Materials, Inc. and Leica Microsystems will cooperate to provide customers with a full set of systems for defect detection, classification and source analysis. As part of this collaboration, Leica will place its most advanced optical defect review station, the INS 3000, at Applied Materials' Process Diagnostics and Control (PDC) facilities in Santa Clara, California and Narita, Japan, to enable combined system demonstrations for customers.

"Leica's optical defect review system is an excellent complement to our wafer inspection and defect review SEM (scanning electron microscope) products," said Dr. Israel Niv, vice president of marketing for Applied Materials' PDC group. "The combination of systems provides customers with the most efficient and comprehensive defect reduction capability possible for their most advanced device designs. Linking Leica's high-speed optical review system with our new SEMVision(tm) defect review SEM and WF736 DUO(tm) systems at these demonstration facilities will enable our customers to immediately review results for more rapid product evaluation."

Applied Materials and Leica have worked together for several years, with Leica providing the microscope technology used on several of Applied Materials' products. For example, Leica's optical technology is used in Applied Materials' WF-736 DUO defect inspection system and in the company's SEMVision system where it provides an optical data channel to augment the SEM image.

At the demonstration facilities, the INS 3000 will be combined with Applied Materials' inspection and review systems, including the WF-736 DUO defect detection system, SEMVision Defect Review SEM and Oasis(tm) data analysis, to provide a comprehensive solution to defect reduction. Once the WF-736 DUO has inspected the wafer and provided on-the-fly classification of detected defects, the larger-sized defects can automatically be reviewed and classified on Leica's INS 3000 system, and smaller defects can automatically be reviewed and classified on the SEMVision system. Since optical review systems are approximately one-third the cost of an SEM system, the INS 3000 and SEMVision complement each other in providing customers with an economically efficient and comprehensive method of reviewing all types of defects.

Dr. Fritz Hohn, general manager of Leica Microsystems, Microtechnology SBU, said, "We are pleased to expand our relationship with Applied Materials to this new level of cooperation. By working together on defect detection and classification, we can offer our customers a high-productivity, efficient solution that works with all kinds of defect types and spans several device generations."

The international technology group, Leica Microsystems, is a leading provider of equipment used for microscopy, the preparation of microscopic specimens and image analysis in semiconductor processing and medical applications. Leica Microsystems' web site is <http://www.leica.com>.

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>.