Applied Materials Releases Industry's Fastest, Most Powerful Defect Review Systems with New SEMVision G2 Family

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Applied Materials, Inc. today unveiled the Applied SEMVision G2 family, the industry's fastest, most sensitive line of defect review and analysis tools for 65nm manufacturing and beyond. The new line of three systems sets the industry benchmark with 30nm sensitivity and throughputs of up to 1,800 defects per hour. Used in an optimized defect review strategy, these systems can accelerate customers' production ramp by rapidly identifying the root cause of systematic and yield-limiting defects.

The SEMVision G2 product line includes the new Applied SEMVision G2 HP (high productivity) tool, the most productive system available for performing routine defect review and production process monitoring. The G2 HP provides a significant reduction in cost of ownership over previous tools, achieving world-class efficiency and lowest cost per defect. The new Applied SEMVision G2 Plus is the production workhorse system for volume defect review and material analysis, offering tilt and EDX(1) capabilities. As the ultimate system for inline root cause analysis, the recently introduced Applied SEMVision G2 FIB(1) system, with integrated focused ion beam technology, provides complete capability for embedded defect and electrical failure analysis.

"The Applied SEMVision G2 system has become an indispensable tool for root cause analysis in advanced fabs worldwide. Our new SEMVision G2 family is a direct response to customers' need for a set of next-

generation tools optimized for different applications, enabling flexible system utilization during all stages of production ramp at the lowest overall cost," said Dr. Gilad Almogy, vice president and general manager of Applied Materials' Process Diagnostics and Control group. "All three systems share the same proven platform, including the capability to share recipes, a common user interface and algorithms. This unique commonality shortens set-up time through extensive recipe sharing and provides high availability."

Applied's SEMVision technology, which features industry innovations such as multi-perspective imaging, materials analysis and inline FIB, has rapidly expanded the use of SEMs(1) for defect analysis in manufacturing. The need for defect review has greatly increased and is now the third largest segment in the defect reduction market. Applied, with an installed base of nearly 400 SEMVision systems, is the leading supplier of this technology.

The new SEMVision family addresses the trend to achieve faster time to Resolution by harnessing the combined power of process and inspection expertise to dramatically cut the time and cost of resolving yield-limiting defects.

(1) EDX: energy dispersive x-ray
SEM: scanning electron microscopes
FIB: focused ion beam

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