



Applied Materials Expands Into Emerging Wafer Edge Cleaning Market With Innovative Inflexion System

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SANTA CLARA, Calif.--(BUSINESS WIRE)--May 7, 2008--Applied Materials, Inc. today launched its Applied Inflexion(TM) edge polishing system, a unique, high-precision defect removal system that polishes and cleans the critical wafer edge region. Since defects on the wafer edge can be transferred to the active device area during processing, eliminating them can potentially increase overall yield by up to 10%.(1) The Applied Inflexion is the only system that polishes the entire wafer edge, removing film stack residues and shallow surface defects in a single pass while minimizing the exclusion area in order to maximize the number of good die. In addition, the system precisely controls the edge profile, enabling customers to tailor the film-to-wafer interface to meet a wide range of integration requirements.

"Defectivity at the wafer edge represents a new frontier for yield improvement and will become even more critical with the introduction of immersion lithography for the 45nm node," said Lakshmanan Karupiah, general manager of Applied Materials' CMP division. "The Inflexion system leverages our ten years of leadership in planarization technology and process control to deliver the industry's fastest, most effective edge polishing system. Applied Inflexion systems are already in production at customer sites where they have demonstrated significant yield gains in both logic and memory devices. We expect the innovative performance and flexibility of this system to drive new front and back end-of-line applications."

The Applied Inflexion system's high productivity platform can be configured with up to three processing modules to deliver twice the throughput of competing edge polishing systems. The system integrates Applied's production-proven Desica(R) single wafer wet cleaner to assure excellent defect performance on all surfaces. Using abrasive tape with proprietary head technology, the Inflexion system delivers a non-selective process that efficiently removes all materials, including metal/dielectric stack residues not easily removed by other cleaning methods, from the entire edge region that comprises the notch, bevel, apex, and front and back exclusion zones. For more information, please visit www.appliedmaterials.com/products/edge_polishing_4.html.

When the Applied Inflexion system is used in conjunction with the Applied SEMVision(TM) G4 defect review tool, these systems provide a comprehensive wafer edge defect removal, review and analysis solution, enabling customers to successfully characterize and control edge defect issues, especially in immersion lithography.

Applied Materials, Inc. (Nasdaq:AMAT) is the global leader in Nanomanufacturing Technology(TM) solutions with a broad portfolio of innovative equipment, service and software products for the fabrication of semiconductor chips, flat panel displays, solar photovoltaic cells, flexible electronics and energy efficient glass. At Applied Materials, we apply Nanomanufacturing Technology to improve the way people live. Learn more at www.appliedmaterials.com.

(1) J.D. Morillo et al., Edge and Bevel Automated Defect Inspection for 300mm Production Wafers in Manufacturing, Semiconductor Manufacturing Magazine, June 2005

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