



Applied Materials Unveils 300mm Etch Product Line

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SANTA CLARA, Calif.--(BUSINESS WIRE)--July 10, 2000--

Dielectric Etch eMax(TM) Centura(R) 300 -Dielectric Etch IPS(TM) Centura 300 - Metal Etch DPS(TM) Centura 300 -

Silicon Etch DPS Centura 300 -

Systems Provide Factory Efficient Total Solutions for Etch

Applied Materials, Inc. today announces its line of 300mm etch systems supporting all dielectric, silicon and metal etch applications. These advanced systems offer proven etch process technologies that address current manufacturing requirements and provide extendibility to 0.10 micron chip geometries. Innovative automation capabilities featured on these systems enable increased factory efficiency and productivity.

"Our 300mm etch solutions cover the complete range of industry applications, from advanced copper interconnect and low k dielectrics to high-topography features and advanced gate and contact etches," said Dr. Gerald Yin, vice president and general manager of the Etch Products Business Group of Applied Materials. "By extending our proven 200mm etch processes, we've provided customers with low-risk solutions that deliver uniform results across the entire wafer. In addition, all systems include a factory interface unit that can host options for integrated particle monitoring and metrology to enhance fab efficiency."

Each 300mm etch chamber is matched to the Centura 300 platform which is derived from Applied Materials' production-proven Centura 200mm design. This platform utilizes a simplified modular format for easy access and serviceability. New surface-mount technology has been designed into the gas delivery system and integrated onto the mainframe, reducing overall system footprint. Exceptional reliability and high throughput combine with compact, modular flexibility to maximize 300mm wafer output.

Applied Materials' 300mm dielectric etch systems, the Dielectric Etch eMax 300 and Dielectric Etch IPS 300, offer the industry's broadest range of high-productivity applications for sub-0.13 micron designs, including critical self-aligned contacts and bi-level contacts, small-geometry via, spacer and hardmask etches, as well as new low k materials and damascene structures. Modular chambers, advanced wafer chuck technology, superior temperature control and low consumables enable excellent process capability and ensure the repeatability needed for high volume production.

The Metal Etch DPS 300 and Silicon Etch DPS 300 systems utilize the company's patented decoupled plasma source (DPS) technology. This innovative source technology, with its exceptional critical dimension control, process flexibility, damage-free performance and consistently high productivity, has enabled Applied Materials' success in conductor etch. Using 200mm-proven chamber materials and surface coatings, the DPS 300mm chamber minimizes corrosion and defects, while its modular design enables ease of servicing. The Metal Etch 300mm system contains an integrated strip chamber, based on its 200mm ASP technology that rapidly removes photoresist and performs a passivation process that extends post-etch corrosion resistance.

More than 14 Applied Materials' 300mm etch chambers have already been installed at customer facilities worldwide and the company has commitments to deliver over 50 additional dielectric, silicon and metal etch chambers by the year end.

Applied Materials (Nasdaq:AMAT) is a leader of the Information Age and the world's largest supplier of products and services to the global semiconductor and flat panel display industries. Applied Materials' web site is <http://www.appliedmaterials.com>.

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