



Applied Materials Launches Breakthrough PVD System for Gen 8.5 Flat Panel Display Manufacturing

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TOKYO--(BUSINESS WIRE)--Oct. 23, 2007--Applied Materials, Inc. today expanded its solutions for TFT-LCD(1) flat panel display (FPD) manufacturing, with the launch of its breakthrough AKT-PiVot(TM) 55KV PVD(1) system for depositing metal and TCO(1) materials on Gen 8.5 (5.5m²) glass substrates. The new system combines key innovations with Applied's field-proven components to provide customers with a unique, high-reliability PVD tool specifically designed to increase the productivity and reduce the cost of manufacturing large-sized LCD TV panels.

The AKT-PiVot system's module architecture delivers significantly faster cycle time and nearly 3x higher target utilization than any competitive system, and enables a large variety of configurations to maximize production efficiency. Unlike traditional in-line systems, the AKT-PiVot's parallel processing capability eliminates bottlenecks caused by different process times for each film layer. The system's cluster-like arrangement also allows continuous operation during individual module maintenance.

"The growth of the large-size LCD TV market depends on continuous cost reductions in panel manufacturing, especially in the cost of materials and equipment cost-of-ownership," said In Doo Kang, general manager of Applied's Display Business Group. "Our AKT-PiVot system answers this critical need, providing an unmatched, low cost-of-ownership solution to large-area PVD manufacturing. The system's novel design integrates proven components, including the company's proprietary rotary target technology, to create a unique, high-throughput, low-risk PVD system. The PiVot system is a powerful addition to our strong portfolio of FPD systems, covering PECVD(1), PVD for the color filter ITO(1) layer, and electron beam array test technologies, designed to help customers achieve high-productivity, cost-effective manufacturing."

Each deposition module of the PiVot system features an array of large-volume, rotary targets that have greater than 4x longer lifetime than conventional planar targets. The PiVot system's deposition modules feature an innovative pre-sputter unit that enables target conditioning using only one substrate, rather than up to 50 substrates that are needed with other systems to achieve the same results. For more information, visit: www.appliedmaterials.com/products/akt_pivot_1.html.

The AKT-PiVot 55KV PVD system will be showcased at Applied's booth at FPD International 2007 in Yokohama, Japan, on October 24-26, 2007, as part of Applied's portfolio of advanced flat panel manufacturing solutions.

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) TFT-LCD = thin film transistor liquid crystal display; PVD = physical vapor deposition; TCO = transparent conductive oxide; PECVD = plasma-enhanced chemical vapor deposition; ITO = indium tin oxide

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