

AKT Launches New `Generation 5' CVD System for Manufacturing Flat Panel Displays

October 24, 2000

SANTA CLARA, Calif .-- (BUSINESS WIRE)--October 24, 2000--

New AKT 10K CVD System Leverages Company's Leadership to Enable

Square Meter Substrates

AKT, an Applied Materials company and the world's leading supplier of chemical vapor deposition (CVD) systems to the flat panel display (FPD) industry, announces its newest system, the AKT 10K CVD, for emerging "Generation 5" TFT-LCD (thin film transistor liquid crystal display) substrate applications. The new high-productivity 10K system deposits a variety of silicon and silicon dioxide films on glass substrates approximately 1m x 1m in size. AKT expects to begin shipping the new system early in the second half of 2001.

"The strong demand for flat panel displays has encouraged some customers to forge ahead using larger square meter substrates that provide additional economies of scale for making 15 in. and 18 in. computer monitors and potentially TVs," noted Dr. Kam Law, president of AKT. "The new AKT 10K CVD system is based on the innovative architecture, core components and process technology of the very successful AKT 4300 and 5500 systems, which is expected to enable customers to rapidly install and qualify the new system for production, as well as easily extend their operational experience with those systems to this new substrate size."

With its square meter substrate capability (exact size depends on customer specification), the AKT 10K CVD system can process approximately 100 percent more 15-inch flat panel displays and over 50 percent more 17 to 21-inch displays than the previous generation of systems, which used substrates approximately 700mm x 900mm in size.

The AKT 10K CVD system provides customers a high degree of system layout flexibility, supporting up to six process chambers. To conserve overall footprint, the system's transfer chamber size is minimized with a new robot design. The system also offers an optional automated cassette loading station and is compatible with substrate transfer link concepts. Throughput of the 10K system is comparable to that of the AKT 5500 systems at 30 to 50 substrates per hour, for increased productivity and cost control.

Innovative new heating components in the pre-heat and process chambers of the 10K system provide enhanced temperature uniformity across the large substrate area, while modifications to the process chamber lid offer improved deposition uniformity over previous systems. A second-generation Remote Plasma Source Clean technology for in situ chamber cleans enables highly repeatable deposition for over a month before wet cleaning is required.

According to DisplaySearch, a market research firm, AKT was the global market leader in supplying CVD equipment for FPD manufacturing in 1999. Recent fab capacity expansions and new fabs, particularly in Taiwan, have created increased demand for AKT's high-productivity CVD equipment.

According to DisplaySearch, the TFT LCD market is forecast to grow to \$33.4 billion by 2003, from \$14.9 billion in 1999. The equipment market for producing TFT-LCD displays was estimated by DisplaySearch to be \$2.3 billion in 1999, and is expected to reach \$3.2 billion by 2003.

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 industry. Applied Materials' web site is http://www.appliedmaterials.com.

--30--crd/sf*

CONTACT: Applied Materials

Betty Newboe (editorial/media) 408/563-0647

or

Carolyn Schwartz (financial community)

408/748-5227