

Applied Materials Announces IEC Certification of World's Largest Solar Panels

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SANTA CLARA, Calif., May 29, 2009 (BUSINESS WIRE) -- Applied Materials, Inc. announced today that the 5.7m2 solar photovoltaic (PV) modules produced by its SunFab Thin Film Line(TM), using both single and more advanced tandem junction technologies, were awarded International Electrotechnical Commission (IEC) certification, validating their exceptional performance under extended outdoor exposure. Certification of these SunFab(TM) modules, which are the world's largest available solar PV panels, unleashes an opportunity for the widespread incorporation of SunFab panels in utility-scale, thin film solar farms to further drive down the price of clean electricity.

"We expect 5.7m² modules to become the standard for utility-scale PV power," said Dr. Randhir Thakur, senior vice president and general manager of Applied Materials' Display and SunFab Solar Business Group. "Applying SunFab technology to ultra-large modules creates an unprecedented opportunity to reduce both manufacturing and installation costs, transforming solar PV into a long-term solution to provide the world with affordable energy from a renewable source."

Certification was awarded by TÜV InterCert, confirming that the SunFab modules meet IEC standards 61646 and 61730. "Applied's 5.7m² modules are four times bigger than anything we've ever tested," said Mr. Sergizzarea, president and CEO of TÜV InterCert. "We made modifications to the laboratory and added equipment to enable us to test modules this large. Creating a PV product of this size that can pass all of the IEC tests while maintaining mechanical and electrical integrity is an impressive feat of engineering."

The quarter-sized 1.4m² modules produced on the Applied SunFab Thin Film Line received IEC certification earlier this year. However, a full-size 5.7m² panel designed to maintain high power output while subjected to years of exposure to sunlight, extreme temperatures, wind and precipitation was a new challenge. Applied's technology and engineering expertise in flat-panel display and architectural glass systems enabled it to deliver the critical uniform conversion properties required across large areas. An innovative, integrated bonded rail support structure strengthens the module, allowing it to withstand wind and seismic loads while enabling the reduction of installation costs by greatly simplifying the mounting structure.

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.

SOURCE: Applied Materials, Inc.

Applied Materials, Inc. Betty Newboe, 408-563-0647 (editorial/media) Michael Sullivan, 408-986-7977 (financial community)