Oerlikon Solar proudly announces the new ThinFab which reduces the manufacturing cost of thin film silicon modules to a record breaking €0.50/Wp, with 10 percent stabilized efficiency and 143 Wp module performance. Beyond that we introduce our new world record breaking cell efficiency of stabilized 11.9 percent on Micromorph® technology, confirmed by NREL.

**Features & Benefits**

**Next Generation PECVD KAI MT**
- 100% higher productivity (throughput) since launch of Micromorph® to significant reduction of capex/Wp
- Best in class in facility consumption: up to 30% less gas and electricity usage
- Integrated Micromorph® process (no vacuum breakage between both absorber films) using 40 MHz technology
- Optimized temperature cycles during deposition (less heat & cooling steps)
- Contamination free processing enabled by the differential pressures in the Plasma Box® and the new gate valve isolation between the process chambers

**Next Generation TCO**
- 60% higher throughput and 40% lower cost of ownership compared to the previous generation
- Best-in-class transmittance and light trapping enables a high efficiency thin absorber layer
- In-house front contact TCO enables cost-efficient local bare glass sourcing
- Extended maintenance cycles allow higher system availability

**Next Generation KAI MT**
- Fastest process through 50% tact-time reduction
- Reduced scribe separation leading to increased active area i.e. higher module power
- Improved process stability leading to even higher reproducibility

**Next Generation BackEnd**
- Enabling best-in-class module reliability
- 40% higher productivity compared to previous backend generation
- Fully automated
- Flexibility to produce high and low voltage modules
- Compliant to Oerlikon Solar’s next generation module design and materials
- Cleantech: reduced carbon footprint by 1500 tons of CO₂ per year
- Short time-to-market: Transfer of EDE1646/61730 and UL1703 master certificates at start of production

**New Low Voltage Module**
- Up to €0.80 cost saving on electrical BOS per module
- Operating voltage (Vmp) in the regime of crystalline silicon
- Attractive homogenous black appearance across the entire module
- Excellent Micromorph® temperature coefficient of 0.26%/°C power maximum power point (Pmpp)
- Best in class TCO corrosion resistance even by applying transformer less inverters, leading to up to 3% higher energy yield

**New Low Voltage Module**
- Low energy Payback-Time compared to c-Si
- Output capacity of 120 MW, approx. 850,000 Modules/Year
- Non-toxic and Environmentally Friendly Micromorph® Technology
- Unlimited Resources for Thin Film Silicon

**ThinFab Featurring**
1. Lowest Module Production Costs of €0.50/Wp with Module Efficiency of 10% Stabilized at 143 Wp
2. …and a New Champion Cell with 11.9% Stabilized Efficiency

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In combination with Oerlikon Solar MMU Module Mounting Interfaces
Except substrate loading (front and back glass)
European reference energy mix leading to 0.48 kg CO₂ per kWh