Specifications:

• Web width: 330/500/550 mm (13”/20”/22”). Custom size possible
• Speed from 0.01 m – 32 m/min. Up to 120 m/min on request
• Individual printing stations: Flexographic, flatbed or rotary screen printing and multiple slot-die coating
• DTU OPV Slot-die coating head 330 mm with Knauer & Kreutzberg high pressure ink pump system
• Corona treater from Vetaphone
• Double sided ECO Web cleaning from Teknek Ltd
• Pneumatic unwind/rewind spindles 3 or 6” (other sizes on request)
• Splice table with pneumatic clamps and ultra-sonic web guidance
• Based on industry quality components Servo driven for smooth web transport with closed loop tension control
• 2 meters drying tunnel through a double pass hot-air/IR oven (can be extended through multiple ovens)
• Semi-cantilevered design for high stability and high-res accuracy. Easy web access and maintenance
• Build-in remote access via internet with self-diagnostics

The **Solar** is the result of years of experience with OPV solar coating machinery. It is an R&D machine with industrial output capacity. With this machine your research team can get the best of two worlds and experiment with future coatings.

The machine is designed to work with organic, perovskite and other related PV technologies, OLED, LEC and many more.
COST EFFECTIVE
The SOLAR coater is cost-effective because the entire design is based on modified versions of components from our high volume R2R finishing series of machines.

DESIGNED FOR RESEARCH AND START-UP PRODUCTION
The SOLAR addresses the challenges associated with roll-to-roll equipment in R&D environments. It can be made with enclosures limiting safety-issues and support option in machine atmosphere control.

USABILITY
A large color touch screen provides the operator with an easy machine overview. The use of graphical symbols and animations makes the machine easy to learn and use. A remote internet hook up can be used for remote support.

PLAN FOR THE FUTURE
The modular built SOLAR makes future addition of print / treatment stations simple and fast. A fully digital servo drive line eliminates traditional drive shafts. An extra station can be added by connecting wires – not mechanics. The software platform is modular as well. Interface to existing or future data collection system is foreseen.

STORE YOUR DATA
The coater is based on a digitally controlled platform. The optional data logger can store and print important data like speed, temperature, active printing stations. The web can also be time stamped with the addition of an inkjet-head.

BROAD RANGE OF COATING STATION
The SOLAR supports multiple coating and printing methods. Slot-die is mandatory on most OPV equipment; but also SCREEN and FLEXO is supported as standard modules.

CONFIGURATION
Unwind with 3" shaft, ultra-sonic edge guide, Web cleaning, Corona treater, Slot-die head, Flexographic printing station with register, Screen printing with register, Lamination unit, Hot air and IR ovens, Servo loop tension control, Rewind with 3" shaft. Many special options like; Laser die cutter, Rotary die cutter, Video Inspection, VUV or UV curing, cold foiling, hot foiling and start-stop robot web manipulation.