

J. v. G. 3622 BIPV - SPECIAL, by Spaleck Fullyautomatic Solar Panel Laminator



J.v.G. Thoma GmbH
SolarNology
J. v. G. 3622 BIPV - Special, by Spaleck



- 1 PLC control:** Using high-powered European PLC from Siemens and touch screen control, multi- level protection
- 2 Unique process and design:**
Our new laminator is unique and the first on market with the following features:

 - for modules with 3,6 x 2,2 meters maximum size
 - with fully automated loading and unloading conveyors
 - shuttles to combine special modules lines with standard module lines
 - special cooling facility after lamination area (with PLC and pyrometer) controlled cooling, variation in cooling profile
 - interface to J.v.G. software (PPS and process control datas, SQL data base etc.)
 - Inverse lamination process, especially designed for J.v.G. PV modules, oil heated
 - instead of pin lifts we have lift of the bottom heating plate
 - heating plate on top and bottom, mixed processe possible – up to 10
 - stable possible, up to total 5 laminators on same base
- 3 High-efficiency energy saving:** Unique oil pipeline design and manufacturing process, heating plate flatness of $\pm 0.2\text{mm}$ to meet the packaging requirements of ultra-thin silicon, only 20 minutes preheating system
- 4 Temperature uniformity:** Several measurement and control, temperature between $135\text{ }^{\circ}\text{C}$ to $200\text{ }^{\circ}\text{C}$ degrees arbitrary regulation, Uniformity of temperature: $\pm 1\text{ }^{\circ}\text{C}$
- 5 System stability:** vacuum unique anti-dust system design, equipment operation guarantee the stability limit 70Pa vacuum, vacuum pump rate: 30L/S, German vacuum pump
- 6 Rapid instead rubber:** unique installation of plastic sheets, each replacement takes only 20 minutes
- 7 Power Supply Voltage:** power: 400V/3 phase
Maximum power: 24KW,
Average power: 12KW
- 8 Air supply requirement:** 0.5~1.2Mpa, Compressed air rate: 0.4~0.8 m³ /min
- 9 Module size:**
laminating area: up to 3.600 x 2.200 mm – bigger areas possible ask for your size !
- 10 Weight of equipment:** 6 tons
- 11 Dimensions:** 2550mm*4000mm*1230mm in one layer
2550mm*4000mm*4000mm in five layers