

Laser Machine for cSi-Solar Cell Processing



PHOTOVOLTAIC

LUMION

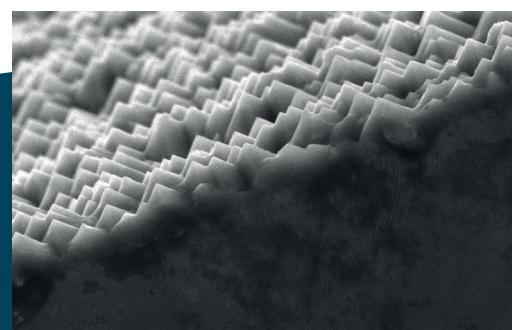
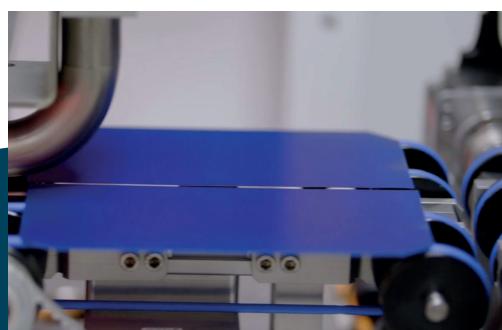
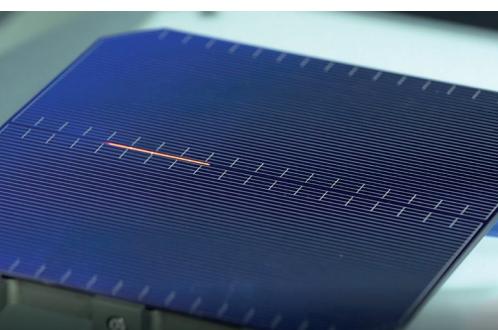
LUMION

Benefits

- ◆ Simple and easy to maintain design
- ◆ Dedicated solution for cSi solar cell processing
- ◆ Throughput: Up to 7500 wafer per hour
- ◆ Industry 4.0 ready
- ◆ Automatic camera calibration
- ◆ Automated routines for reference runs
- ◆ Automated vision system for precision alignment and scaling, offset, trapezoidal and rotation compensation

Options

- ◆ InnoLas Postprocessor for CAD file transfer
- ◆ Exhaust system
- ◆ MES Interface
- ◆ Auto focus
- ◆ Integrated process metrology



Technical Data

Optic	High Speed Scanner
Accuracy	$< \pm 25 \mu\text{m}$ (± 0.984 Mils)
Repeatability	$< \pm 20 \mu\text{m}$ (± 0.787 Mils)
Substrate Size	M2 up to M12 (210 x 210 mm)
Thickness/Material	0.1 mm – 0.25 mm /cSi wafer, mono or poly crystalline silicon square / pseudo square
Image System	InnoLas µVision
Software	Windows 10; IoT

Automation

- ◆ Fully automated Stand Alone System
- ◆ Fully integrated module in printer line

Laser processes

- ◆ Cell Cutting (LDC)
- ◆ Laser Ablation
- ◆ Local Doping