



**INNOLAS**  
solutions



MEMBER OF  
**PHOTONICS  
SYSTEMS  
GROUP**

INNOVATION FOR THE  
NEXT GENERATION



# **ULTAGO** *TURNTABLE MACHINE*

*POWERFUL **LASER SYSTEM**  
FOR MICRO MATERIAL PROCESSING*

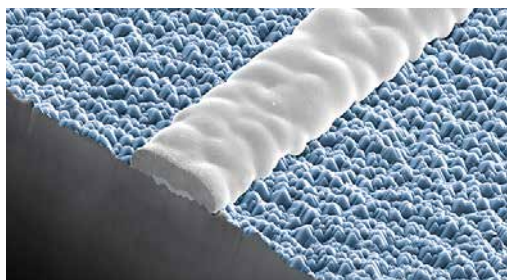
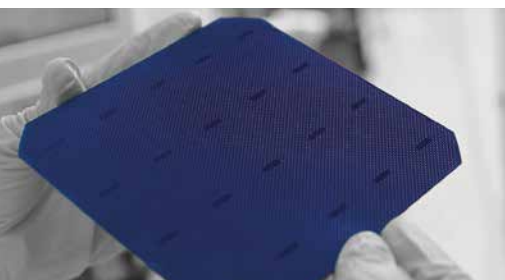


### FEATURES

- ◆ Single or dual scanner setup
- ◆ Automatic calibration routines
- ◆ Automated process control
- ◆ Stand alone and production line integrated systems
- ◆ 3-, 5- or even 8-Point alignment methods available (wafer edges or fiducials)

### OPTIONS

- ◆ CAD file import
- ◆ SQL data base for process and event tracking
- ◆ MES interface (SECS GEM PV2)
- ◆ Integrated process metrology
- ◆ Fully-automatic handling (production)



### APPLICATIONS

Laser Contact Opening for PERC, Laser Doped Selective Emitter, Front side LCO, various applications in electronics processing

### ACCURACY

< +/-35  $\mu\text{m}$  (1 sigma)  
 < +/-10  $\mu\text{m}$  optionally  
 < +/-2  $\mu\text{m}$  repeatability

### SUBSTRATE

Dimension up to 161 x 161 mm  
 Thickness > 100  $\mu\text{m}$   
 mono or poly crystalline silicon square/ pseudo square, ceramic, PCB

### AVAILABLE LASER SOURCES

Wavelength: 1064, 1030, 532, 515, 355 nm  
 Pulse:  $\mu\text{s}$ , ns, ps, fs

### THROUGHPUT

4000 wafer per hour

