## **AUREL LASER SYSTEMS**



#### **APPLICATIONS**

- Functional & Ohmical trimming of Thick film and Thin film
- Trimming of SMD chip resistors, chip capacitor, polymeric pastes.
- Scribing, Grooving and Edge Isolation for Solar Cell
- Marking and Writing on metal, plastics and other materials.
- Cutting, Scribing, Drilling of ceramic substrates

#### LASER TYPE

- ND-Yag, lamp or diode pumped
- CO<sub>2</sub>

#### BEAM DEFLECTION

- Precision X-Y for axis for areas up to 300 x 200 mm
- Galvo System area 100 x 100 mm, 150 x 150 mm or more
- Fix Laser beam with axis on the substrates
- X-Y Resolution 1 μm Positioning speed up to 500 mm/sec
- Laser speed up to 100 mm/sec

#### **OPTICS**

- Focus 25 ÷ 250 mm
- Kerf width  $15 \div 100 \,\mu\text{m}$
- Dept of focus 1 ÷ 3 mm
- Vision with digital camera, electronic crossed hair, Pattern Recognition
- He-Ne Laser for beam alignment
- Focus programming, z-axis

#### **ELECTRONICS**

- PC control
- Software Windows
- I/O for Handling System
- Automatic Vision System
- Interfacing Software for external instruments with Bus, IEEE488, USB2, etc...

#### **HANDLINGS**

- Automatic Loading Systems
- Step & Repeat X-Y table
- Magazine to Magazine handlings
- Special automation and integrations



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# AUREL LASER SYSTEMS



With the ALS Aurel we provide versatile lasers for many different applications. The systems can be used for active and passive trimming of hybrid circuits as well as for functional trimming of SMD circuits.

We are really specialized in this field and have a lot of experience with trimming Thick Film and SMD circuits under functional conditions.

Most systems have to be custom tailored for handling and providing the physical conditions for the sensors, like proximity, pressure, optical, temperature, or other while trimmed with the laser beam. Other applications of the Aurel Laser systems are Marking, Cutting, Solar Cell.



### ALS300MM LINE

Automatic Line for Testing and Calibration. Transport system for the devices. Heating and cooling zones, testing areas under pressure, gas, humidity or other custom requirements.



### **ALS200**

CO<sub>2</sub> Laser System for scribing, drilling and cutting ceramic substrates for Thick and Thin Film hybrid circuits.



### ALS6100 MARKING LASER

Laser Marking for plastics, PCB, Stainless steel, aluminium. Flat, round surfaces or continuous tape roll to roll.



### ALS300GM

Laser with galvo head for ohmical trimming step&repeat table, automatic loading and unloading with magazines.



### ALS300G

Galvo head step & repeat table. Flying probes. Functional and ohmical trimming of Thick and Thin Film resistors.



Laser with rotating table for calibration, marking.



#### ALS300L

Laser with X – Y table for functional trimming of sensors, electronic circuits.



#### ALS300PV

Laser for grooving, marking, scribing and edge isolation of Solar Cells