

## LWS 080-RT - Flexible manufacturing with standard production cell

Autonomous production cell  
with rotary table

Custom specific axis  
modules in portal or  
flatbed design. Up to 5 NC  
axes with step motors &  
ball screws

Alu profile  
construction  
Laser safety  
housing

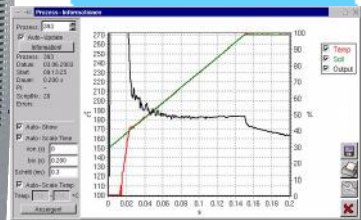
Rotary indexing  
unit with two  
segments, optional  
with additional  
drives for tool  
handling

Ethernet connection  
and remote access  
via internet

Laser soldering with process times down to 1s  
Laser plastic welding

Powerful software tools for quality  
assurance during production:

- LASCON® Quality control for the laser process
- Video monitoring with LASCON® Camera Manager
- Flexible CNC Programming Soft-PLC



**LWS080-RT**

## Specifications LWS080-RT:

- Structure is free-standing
- Access from the front
- Construction with alumina profiles
- Turn table in combination with lifting door
- Forced shutdown of laser system when opening lifting door by safety switch
- Stable base frame as option
- Internal cabinet is illuminated
- Working height of mounting plate about 76cm
- ESD sensitive parts with potential compensation
- Integrated Safety PLC for secure process management
- Diode laser up to 200 watt light output
- Laser heads with integrated camera and pyrometer
- Unique laser process controller
- With integrated LASCON ® Quality control
- Video surveillance of the laser process
- Flexible CNC Programming with Soft-PLC
- Weight approx 250kg
- Foot print only 1,4 m x 0,9 m
- Power supply: 230VAC, 50/60Hz, fuse with 16A

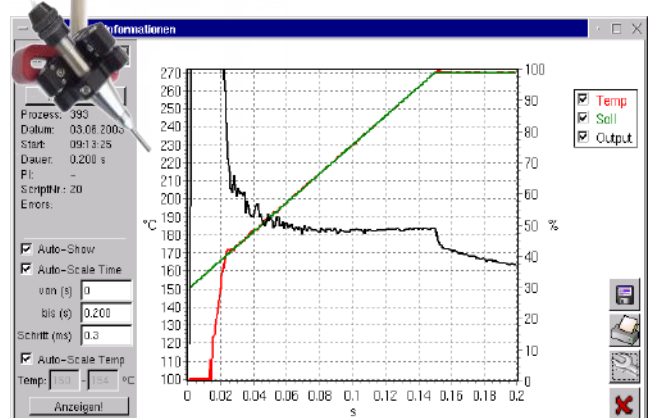
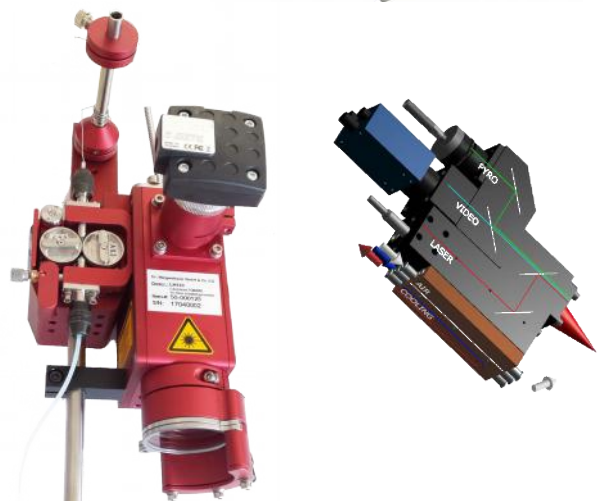


## Diode lasers:

For laser soldering and laser welding plastic we offer fiber-coupled diode lasers with up to 200W light output. The typical lifetime of the laser diode is 20.000 hours.

## Laser heads and laser control unit:

At the end of the optical fiber is a laser processing head. There a pyrometer and a video camera are projected into the beam path of the laser. The pyrometer measures 10,000 times per second the temperature in the laser focus. The unique LASCON controller steers the diode laser within milliseconds to the desired temperature. It stores up to 500,000 laser processes and monitors all processes in real time based on pre-defined parameters. The parameters can be stored with a simple programming language in a process script. The LASCON controller can store up to 255 scripts and activate within milliseconds. Differs the laser process from desired parameters, the LASCON controller generates an error control signal that can be interpreted by a PLC.



## Examples of gantry systems:

Laser Plastic Welding  
Circular welding seam on a  
cartridge



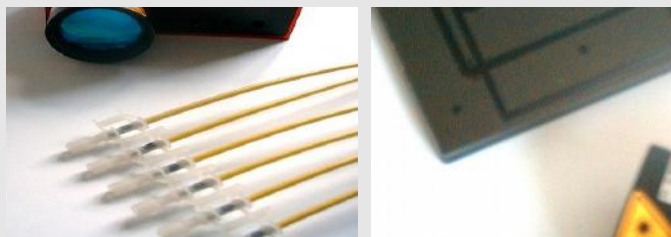
Laser soldering  
Various soldering jigs are placed  
for different products in the flatbed  
Laser soldering for cable assembly  
Selective laser soldering of metal  
blanks  
Approximately 40 000 units are  
soldered per month



Laser soldering of microelectronic  
parts  
Tool carrier with 15 parts is placed  
on rotary table  
The soldering station executes 60  
joints within two minutes

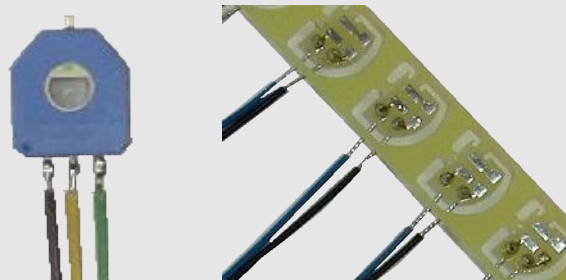
**Applications :**

Laser plastic welding



Laser soldering

PCB, electronic parts



Laser soldering  
Flex foil

