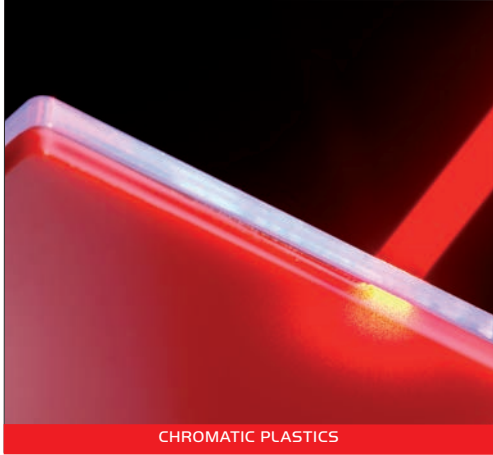




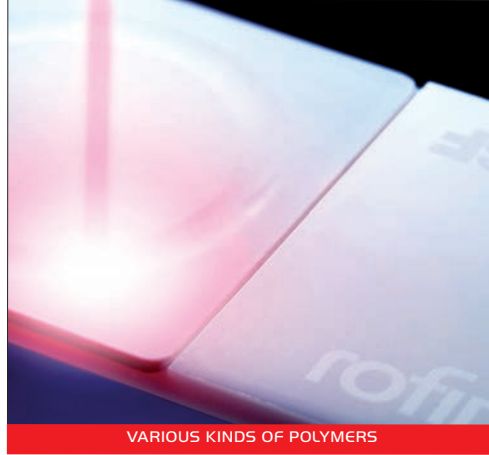
LASER WELDING OF PLASTIC

SOLUTIONS FOR INDUSTRY

Complete Solutions - One Supplier



CHROMATIC PLASTICS



VARIOUS KINDS OF POLYMERS



AUTOMOTIVE COMPONENTS

ELECTRONIC
SOFTWARE
FIXTURE
SET-UP ENGINEERING
MEASUREMENT
ENGINEERING
APPLICATION
AUTOMATION



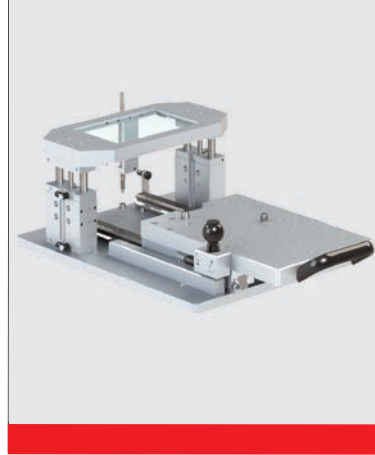
MODULAR PROCESSING SYSTEM



MPS Compact

- Small footprint
- Integrated laser source
- Pneumatic sliding door
- Available for seated or standing work position
- CNC controller (Beckhoff)

MPS COMPACT



Clamping Device Standard

- Accuracy clamping
- Fixed base plate with glass plate or welding mask
- Movable carrier plate for mounting the work piece fixture
- Guides for stabilization at pneumatic cylinder
- Sensor technology for measuring the collapsing height



MPS Flexible

- Large working chamber
- Integrated laser source
- Pneumatic sliding door
- CNC controller (Beckhoff)

MPS FLEXIBLE



Clamping Device Advanced

- Stable frame
- Servo motor (spindle axis) or pneumatically driven cylinder
- Work piece fixture
- Collapse height measurement
- Torque control (force control)



MPS Rotary

- Rotary indexing table
ø 800 mm
- Integrated laser source
- Partition heights
(150 mm, 300 mm)
- Safety light barrier
- CNC controller (Beckhoff)

MPS ROTARY



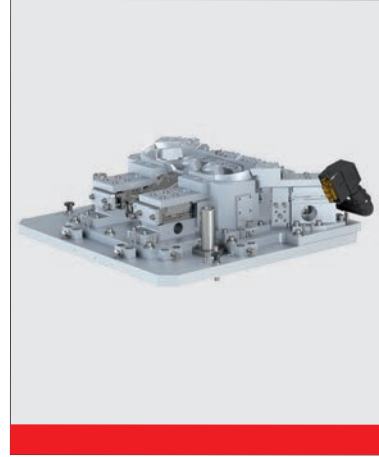
Double Clamping Device

- Stable frame
- Servo motor (spindle axis) or pneumatically driven cylinder
- Work piece fixture for two parts
- Collapse height measurement
- Torque control (force control)



Integration Package Compact

- Movable base plate with glass plate or welding mask
- Fixed carrier plate for mounting the work piece fixture
- Sensor technology for measuring the collapsing height



Fixture Know-how

- ROFIN has extensive laser and system know-how, and a wealth of application experience
- Complete solutions with customer specific workpiece fixtures



Integration Package Standard

- High accuracy clamping
- Fixed base plate with glass plate or welding mask
- Movable carrier plate for mounting the work piece fixture
- Two additional guides for stabilization at pneumatic cylinder
- Sensor technology for measuring the collapsing height



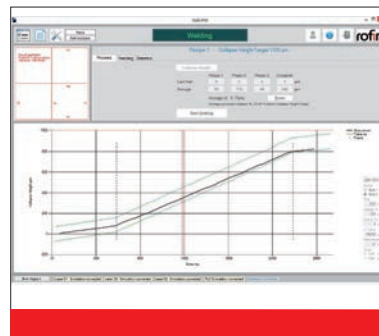
Human Machine Interface (HMI)

- Different user levels
- Maintenance menu
- Welding recipe
- Process diagrams
- Process data
- Manual movement via jog (touch screen) for teaching



Integration Package Advanced

- High accuracy clamping
- Fixed base plate with glass plate or welding mask
- Movable carrier plate for mounting the work piece fixture
- Servo-driven spindle axis



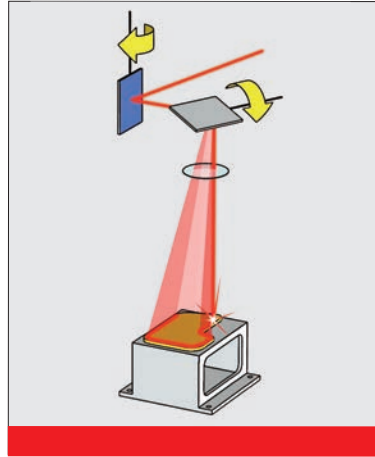
Collapsing Height

- Process control
- Time resolved collapse height monitoring
- Part-specific tolerance band
- User-definable error handling
- Complete process data logging



Compact Evolution with Galvo

- Easy-to-integrate fiber-coupled system
- Compact 19-inch rack-mountable (3HU)
- High beam quality of 22mm mrad
- Diode laser control unit (DLC)



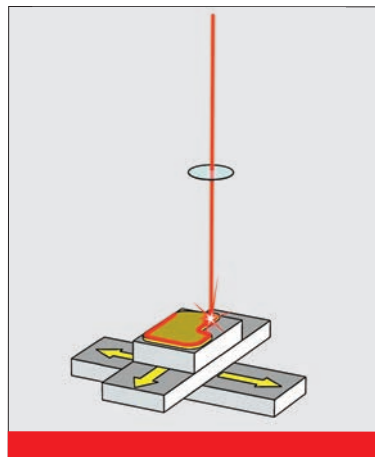
Quasi-simultaneous Welding

- Online process control by collapse measuring and/or pyrometer
- No handling necessary
- Compact space
- Simultaneous heating and melting of the complete contour



Compact Evolution with fixed optics

- Easy-to-integrate fiber-coupled system
- Compact 19-inch rack-mountable (3HU)
- High beam quality of 22mm mrad
- Diode laser control unit (DLC)



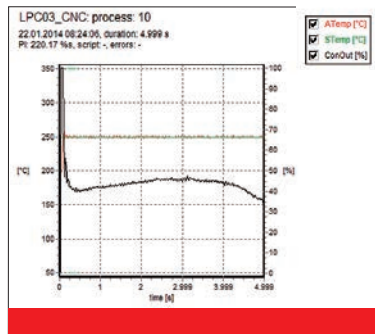
Contour Welding

- Also suitable for 3D contour and large parts
- Low requirements on beam quality
- Online process control via pyrometer



Pyrometer

- Real-time temperature measurement
- Coaxial to laser beam



Software Pyrometer

- Closed loop process control possible
- Programmable temperature profile

ROFIN-BAASEL Lasertech
 GmbH & Co. KG
 Zeppelinstraße 10 - 12
 82205 Gilching
 Germany
 Phone +49 8105-3965-0
 Fax: +49 8105-3965-4159
 E-mail: sales-micro@rofin.de

ROFIN-SINAR Laser GmbH
 Berzeliusstraße 87
 22113 Hamburg
 Germany
 Phone +49 40 733 63 0
 Fax: +49 40 733 63 4100
 E-mail: sales-macro@rofin.de

ROFIN-SINAR Laser GmbH
 Dieselstraße 15
 85232 Bergkirchen-Günding
 Germany
 Phone +49 8131 704 0
 Fax: +49 8131 704 4100
 E-mail: sales-marking@rofin.de

WWW.ROFIN.COM

Benelux: Phone +31 78 69310 37
 E-mail: info@rofin-baasel.nl

CA: Phone +1 905 607 0400
 E-mail: info-canada@rofin-inc.com

CH: Phone +41 32 322 1010
 E-mail: info@rofin-baasel.ch

CN: Phone +86 21 68552216
 E-mail: info@rofin-baasel.com.cn

ES/PT: Phone +34 93 4770 644
 E-mail: info@rofin-es.com

F: Phone +33 1 6911 3636
 E-mail: info@rofin.fr

IN: Phone +91 22 276125 1
 E-mail: sales.micro@rofin.in

IT: Phone +39 039 27291
 E-mail: info@rofin.it

JP: Phone +81 46 229 8655
 E-mail: info@rofin-baasel.co.jp

KR: Phone +82 2 837 1750
 E-mail: info@rofin.co.kr

SG: Phone +65 6482 1091
 E-mail: reception@rofin-baasel.com.sg

TW: Phone +886 2 2790 1300
 E-mail: sales@rofin-baasel.com.tw

UK: Phone +44 1327 701 100
 E-mail: sales@rofin-baasel.co.uk

US: Phone +1 734 455 5400
 E-mail: info@rofin-inc.com

Find further representatives and
 partners on www.rofin.com/worldwide

