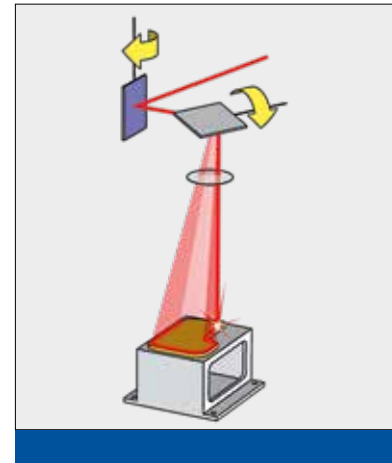




Compact-Evolution

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



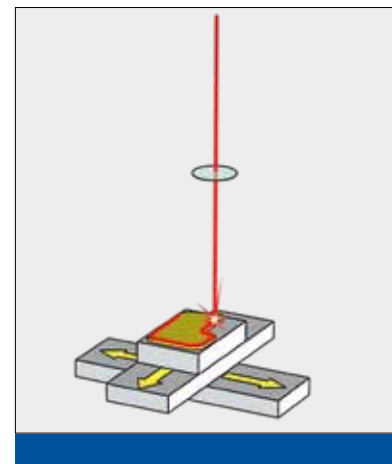
Quasi-simultaneous Welding

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



Accessories: Galvo

- to be used with Compact-Evolution series
- fiber-coupled collimating unit
- fast positioning of the laser focus in the working field
- Commonly used in industrial applications such as laser plastics welding
- Simultaneous heating and melting of the complete contour



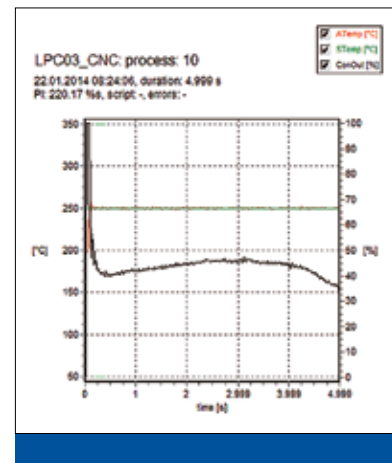
Contour Welding

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



Accessories: Fixed Optics

- to be used with Compact-Evolution series
- easy to integrate
- suitable for 3D contour welding and large parts
- Optional coaxial camera for positioning
- Optional online process control via pyrometer



Software Pyrometer

- Closed loop process control possible
- Programmable temperature profile



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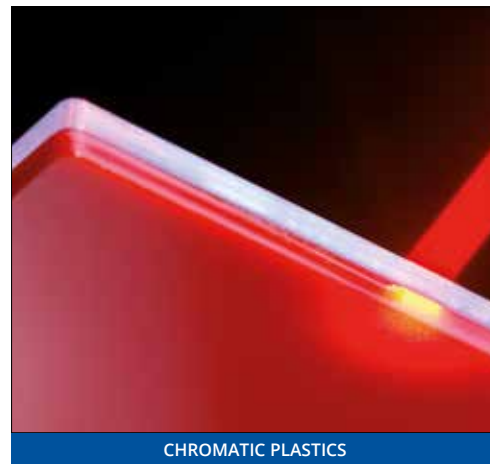


Laser Welding Of Plastic

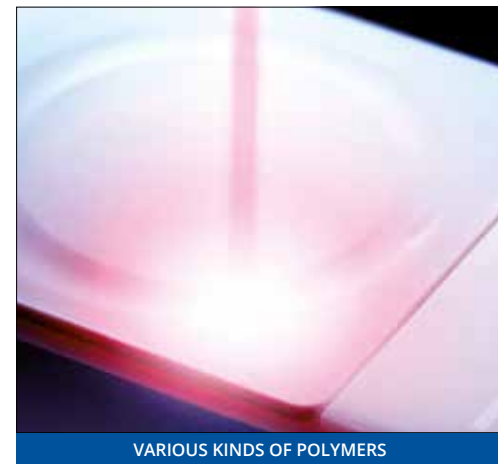
Solutions For Industry



Complete Solutions – One Supplier



CHROMATIC PLASTICS



VARIOUS KINDS OF POLYMERS



AUTOMOTIVE COMPONENTS



MPS COMPACT

MPS Compact

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



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



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

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

ELECTRONIC
SOFTWARE
FIXTURE
SET-UP ENGINEERING
MEASUREMENT
ENGINEERING
APPLICATION
AUTOMATION

MODULAR PROCESSING SYSTEM



MPS FLEXIBLE

MPS Flexible

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



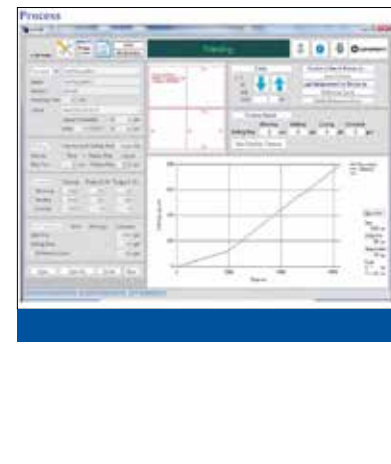
Clamping Device Advanced

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



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



MPS ROTARY

MPS Rotary

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



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 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