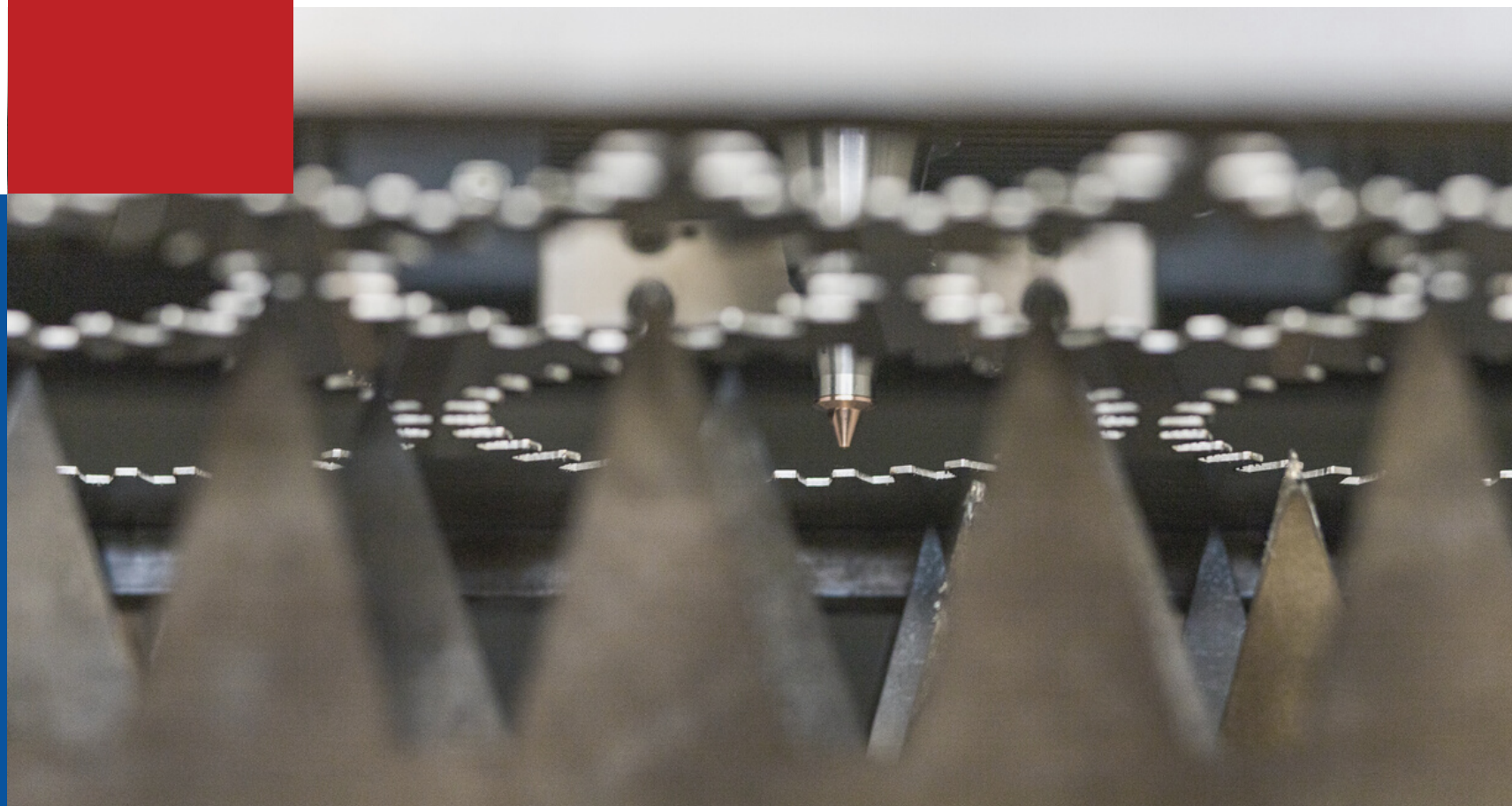


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**LAC**

LASER APPLICATION CENTER



# LAC EQUIPMENT



# LASER STATION LM05

- Laser source IPG YLS-1000-CT
- Max. power 1 kW
- Welding head HIGHYAG PSK
- Wavelength  $1060 \pm 10$  nm
- Fiber  $\text{\O}100$   $\mu\text{m}$
- CNC control system - Siemens SINUMERIK 840D
- Connection option of working gas CO<sub>2</sub>, O<sub>2</sub>, N<sub>2</sub>, Ar, He
- Maximum table load 50 kg
- Max. dimension of the welded part 500 x 500 mm

## LASER WELDING



# LASER STATION LM108

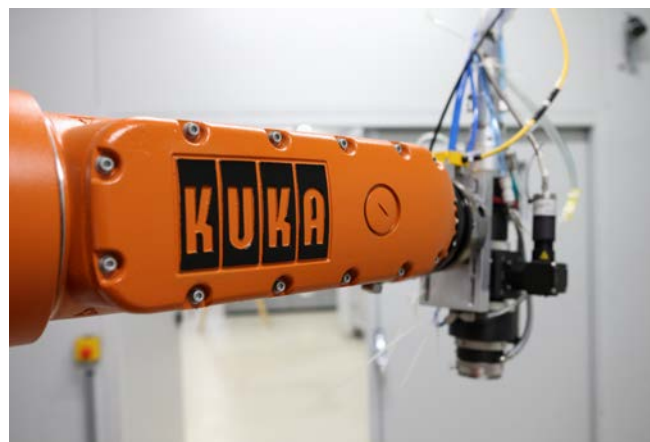
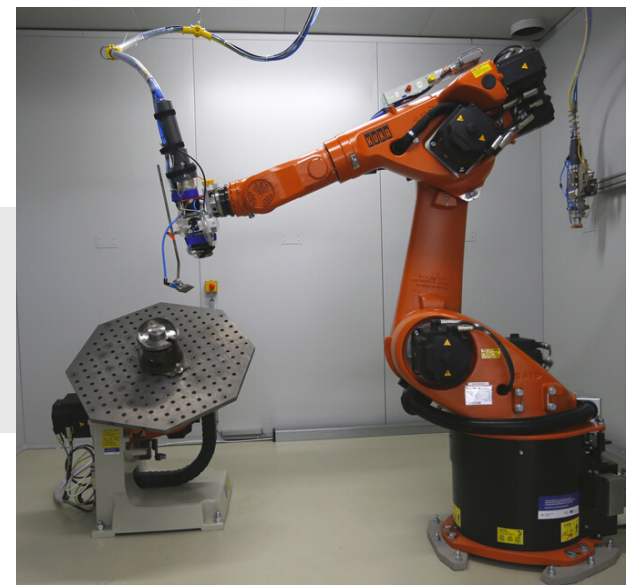
- Laser source IPG YLS-2000-S2T
- Max. power 2 kW
- Cutting head YK52
- Fiber  $\text{\O}200$   $\mu\text{m}$
- Wavelength  $1060 \pm 10$  nm
- CNC control system - Siemens SINUMERIK 840D
- Connection option of working gas O<sub>2</sub>, N<sub>2</sub>
- Max. table load 150 kg
- Max. dimension of the plate 800 x 600 mm
- Cutting of steel and non-ferrous metal sheets up to a thickness of 4 mm

## 2D LASER CUTTING



# LASER CENTRE WITH 6AXIS ROBOT

- Robot KUKA KR60 HA
- Control system KR C4
- Positioner KUKA DKP400 (max. load 400 kg)
- Programming system SprutCAM
- Process temperature control using IR pyrometer
- Diode laser source Laserline LDF 4000
- Max. power 4 kW
- Expandability 10 kW
- Wavelength 1030-1060 nm
- Fiber Ø1000 µm
- Laserline hardening optics with spot modification
- Spots:
  - Ø 0,2-30 mm
  - 4x4 mm
  - 4x8 mm
  - 4x16mm
- Laser welding head Precitec YW52 with cutting adapter Yk52
- Laser powder cladding - powder feeder GTV PF2/1
- Possibility to use the working gas of CO<sub>2</sub>, O<sub>2</sub>, N<sub>2</sub>, Ar, He

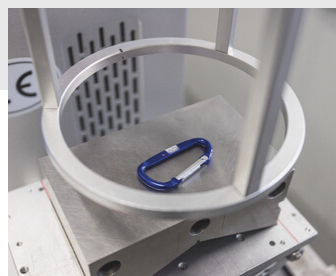
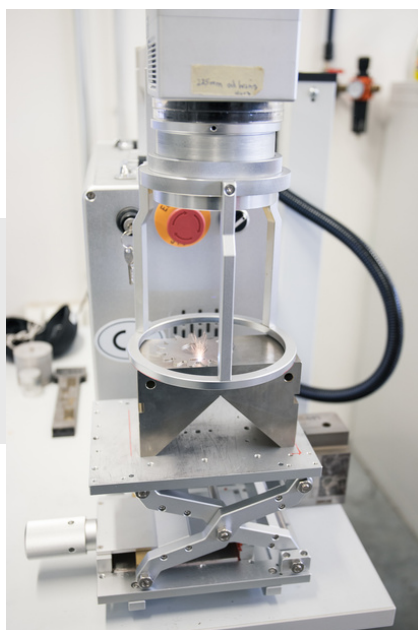


# STAND – LASER PLASTICS WELDING

- Diode laser source IPG DLM-200
- Max power 200 W
- Wavelength 970 nm
- Spot Ø2 mm
- SW LaserDESK SCANLAB
- Laser scanning head intelliSCAN 30
- Workspace 300 x 300 mm



# LASER MARKING MACHINE VELES F



- Diode laser source
- Power 20 W
- Wavelength 1060 - 1080 nm
- Frequency 2 - 200 kHz
- Scanning galvo head
- Workspace 110 x 110 mm
- Removable head for marking of larger objects
- Marking of metallic materials



# METALLOGRAPHIC LABORATORY

## LABORATORY EQUIPMENT

- Saw Delta AbrasiMET
- Electrohydraulic press SimpliMet 1000
- Grinding machine / polisher EcoMet 250 with automatic head AutoMet 250
- Inverted microscope Im7520
- Stereomicroscope EMZ - 13TDR
- Hardness tester MicroMet 6000 with SW OmniMet MHT-F



- checking of the hardening depth
- hardness and microhardness measurement
- evaluation of the welded joints quality

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