

## 2D & 3D LASER WELDING

Laser seam welding and  
laser spot welding –  
joins that hold!



## 2D & 3D LASER WELDING

Laser welding is increasingly becoming a key option in terms of technical possibilities and cost-effectiveness. With our TruLaser Cell 3000, we have the perfect tool. We can use it to weld assemblies for numerous sectors such as medical technology, defence technology, apparatus construction, mechanical engineering, chemical industry, sanitary installations, etc.

### Key advantages of laser welding

- from heat conduction welding to deep penetration welding and spot welding
- very high processing speed
- lowest area affected by the heat, meaning little distortion
- non-contact processing, no electrode impressions
- no post processing required due to the use of inert gases
- High process reliability

- reproducible geometry of weld seams and weld points

### Seam shape

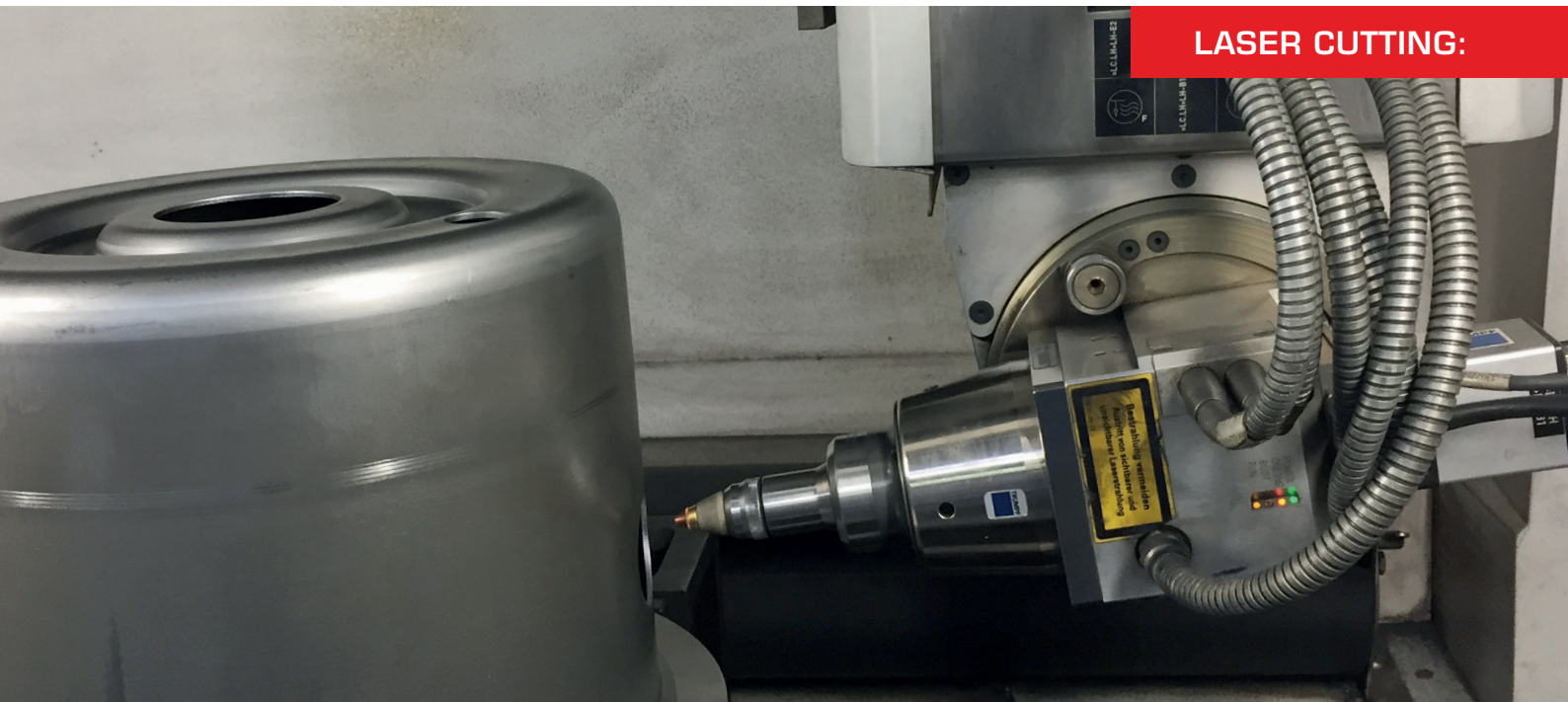
- clean, narrow and deep seam shape
- depth of penetration 0.5 to 6.0 mm
- weld seam geometry determined by a variation in the parameters
- No tempering colouration
- hardly any distortion due to minimal transfer of heat

### Range of materials

- All weldable metal materials, steel, stainless steel, aluminium and non-ferrous metals.
- Different materials can also be joined, e.g. Alu and Cu

### Maximum processing sizes

- X=800, Y=600, Z=400 mm



## LASER CUTTING

### 3D LASER CUTTING

**Semi-finished products, deep-drawn parts, tubes, profiles**

We can cut 3D contours in a single setting on our 5-axis laser cutting plants. The fibre laser we use is especially suitable for thin materials as well. We can complete highly demanding jobs in terms of geometry and the quality of the cut. Post-processing is reduced to a minimum as the cut is free from burrs. We will gladly test the feasibility of your proposal with this procedure.

#### Range of materials

- All weldable metal materials, steel, stainless steel, aluminium and non-ferrous metals.

#### Maximum processing sizes

- X=800, Y=600, Z=400 mm

### PRECISION CUTTING

We cut very precise laser parts / micro-components in our laser processing centre. In addition to precise holes and accurate contours, there are numerous other possibilities. We can process film thicknesses from just 0.05 mm.

#### Laser cutting with the highest standards in quality

- Greatest dimensional accuracy +/- 0.02 mm.
- Right-angled cutting edges.
- High surface finish up to N7.
- Material thickness from 0.05 to 3 mm
- High process reliability

#### Range of materials

- All weldable metal materials, steel, stainless steel, aluminium and non-ferrous metals.

#### Maximum processing sizes

- X=800, Y=600 mm