



**YOUR PARTNER FOR
LASER SYSTEM TECHNOLOGY**

GANTRY 3 D-LASER CENTRE

SYSTEM PRINCIPLE

Our Gantry series comprises a 3-D laser processing centre for large-volume components.

- Due to the completely flying optics, the stationary workpiece can be machined in all three dimensions.
- All of the supporting components are designed as welded structures. Sturdy side supports with synchronised servo axes (gantry principle) move the bridge structure. Tool movements are guided on 5 axes (5-axis tool paths).
- Automatic changeover tables and flexible partitions allow flexible material flows.

- The laser cell can be supplied either with CO_2 or solid-state lasers.

Due to different safety requirements and beam guiding components, the two variants differ and are independent series.

- Vertical lift gates or sliding doors at the front and rear allow components to be fed in from both sides.



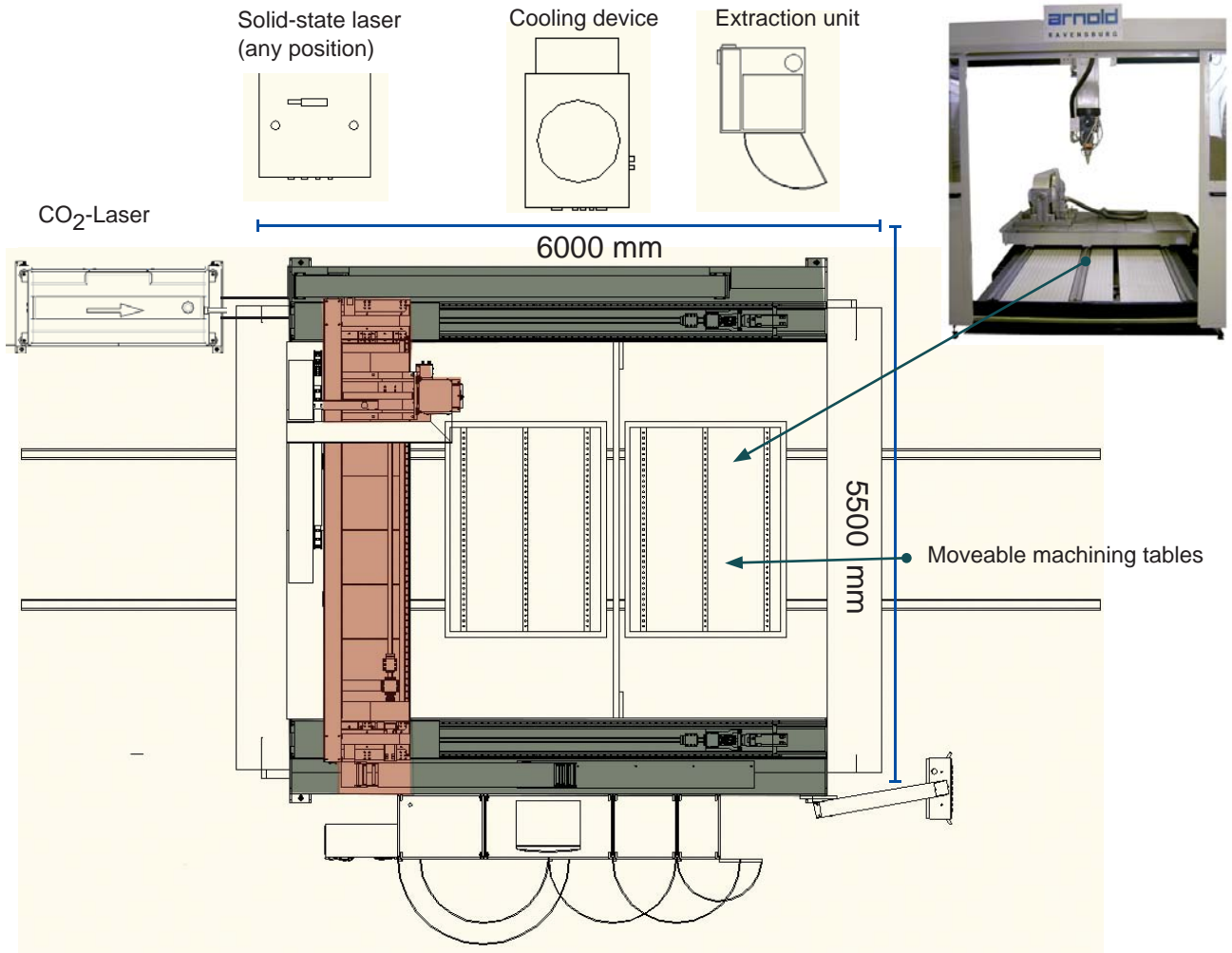
Contour mapping with teach unit

Z-axis

Cutting head with B-axis



3-D GANTRY WITH COMPLETELY FLYING OPTICS

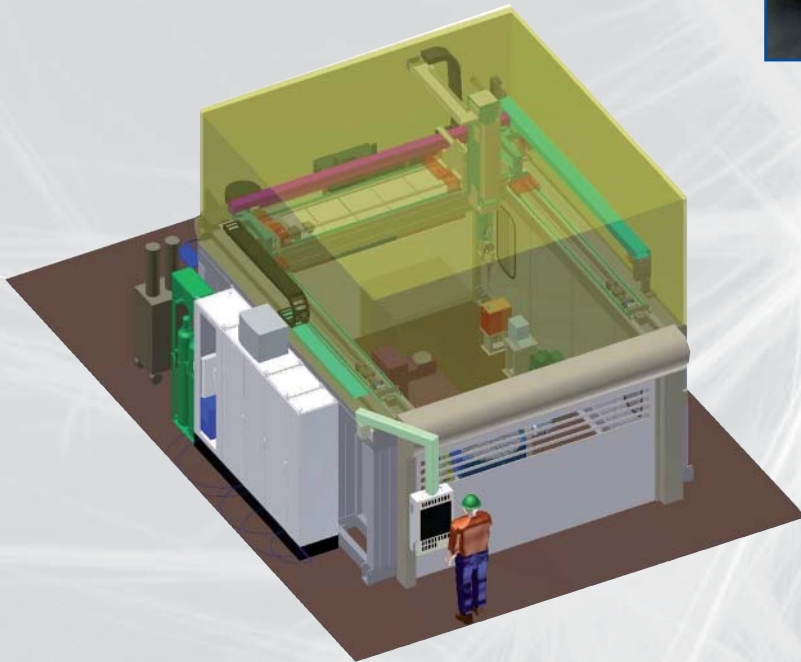


Add-on components:

Additional components: e.g.: powder conveyor, wire feed unit, machining heads, machining nozzles.
 Quality control elements: measuring sensor, camera, laser beam control monitor, precision scale.

<p>Pipe and tube machining</p>	<p>$A = n \times 360^\circ$</p>	<p>Inert gas chamber</p>	<p>Powder conveyor</p>	<p>Wire feed unit</p>
<p>Rotary/swivel unit</p>	<p>$C2 = n \times 360^\circ$ $A = \pm 90^\circ$</p>	<p>Machining heads</p>		
<p>Measuring sensor</p>	<p>Camera</p>	<p>Laser beam control monitor</p>	<p>Precision scale</p>	

Due to easy retooling of the processing optics, the 3D laser processing cell enables a wide range of processing and machining options, such as welding, cutting, powder coating welding, and tempering.



Technical data:

Traversing X = 2500 30 m/min.
 paths Z = 1000 30 m/min.
 Y1/Y2 = 3000 30 m/min.
 B (optics) +/-100° 300°/s

C1 (optics):
 Welding +/-100° 300°/s
 Cutting n x 360°

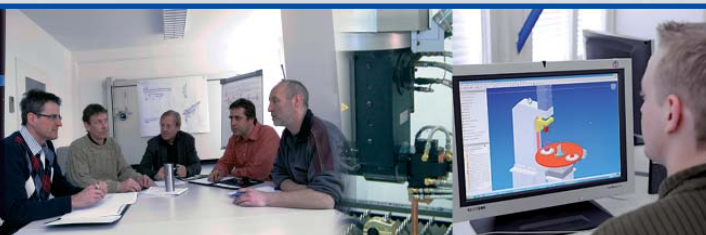
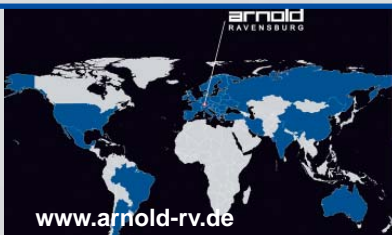
Control unit Sinumerik 840 D

Set-up dimensions without additional components approx. 6000 x 5500 x 4200 mm

Accessories depending on application

Colour in accordance with customer specifications

Positioning accuracy: XYZ +/- 0,03



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