The universal laser solution

The Class 1 laser for industrial and highly frequented production environments
Safe and ergonomic

The LASER CAB system is a class 1 laser, whose enclosed construction allows laser-welding work to be undertaken safely, even in non specially designed areas. It also allows larger components to be positioned into the unit using a crane, because the cabinet opens upwards.

Whether you want to apply the metallurgical alloys typically used in tool and mold making or also use aluminum, copper or titanium, the laser power of the LASER CAB series is best suited to do the job. The easy to open flap of the LASER CAB system’s safety covers and the use of a swivel crane allow you to position heavy components.

The universal laser solution

- x/y and two z-axes
- Touch display for parameter settings
- Ergonomic design
- The table’s z-axis has a load capacity of up to 250 kg
- Up to 5 axes control
- Crane loading possible
- Large selection of accessories and upgrades
- Integrated fume extraction
- Autoweld for automated laser welding tasks

It also allows larger components to be positioned into the unit using a crane, because the cabinet opens upwards.
## Technical data

### POWER

<table>
<thead>
<tr>
<th></th>
<th>Typ: 120 W</th>
<th>Typ: 160 W</th>
<th>Typ: 200 W</th>
<th>Typ: 300 W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. mean power</td>
<td>120 W</td>
<td>160 W</td>
<td>200 W</td>
<td>300 W</td>
</tr>
<tr>
<td>Pulse peak power</td>
<td>6 kW</td>
<td>7.5 kW</td>
<td>9 kW</td>
<td>13 kW</td>
</tr>
<tr>
<td>Max. pulse energy</td>
<td>60 J</td>
<td>80 J</td>
<td>100 J</td>
<td>150 J</td>
</tr>
<tr>
<td>Pulse duration</td>
<td>0.4 - 20 ms</td>
<td>0.4 - 20 ms</td>
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</tr>
<tr>
<td>Pulse frequency</td>
<td>1 - 20 Hz (100 Hz)</td>
<td>1 - 20 Hz (100 Hz)</td>
<td>1 - 20 Hz (100 Hz)</td>
<td>1 - 20 Hz (100 Hz)</td>
</tr>
<tr>
<td>Focus diameter</td>
<td>0.2 - 2.0 mm</td>
<td>0.2 - 2.0 mm</td>
<td>0.2 - 2.0 mm</td>
<td>0.2 - 2.0 mm</td>
</tr>
<tr>
<td>Line voltage (V/Ph/Hz)</td>
<td>400/3/50</td>
<td>400/3/50</td>
<td>400/3/50</td>
<td>400/3/50</td>
</tr>
</tbody>
</table>

### SYSTEM EQUIPMENT

**Laser system**
- Laser resonator inclusive resonator mechanics
- Laser rod
- Cavity
- Resonator mirror
- Safety shutter
- Beam expansion
- Mains supply including mains fuse
- Mains isolator
- Emergency stop
- Motor circuit breaker
- Low voltage power supply 24 VDC
- Interface with hardware monitoring function
- Lamp switch
- Industry controller for setting and display of power, pulse duration, pulse repetition frequency with external trigger via footswitch
- C-bank
- Cooling systems according to performance class: water/air, compressor cooling, water/water

**Processing optics**
- Variable beam expansion
- Beam deflection
- Safety glass
- LCD anti-glare
- Binoculars 10x
- Focussing lens

**Linear system**
- z-axis for lifting of processing table, motor controlled, 300 mm rise
- x-y processing table manual/motorized adjustment
- 400 x 250 mm T-slot bed 250 kg load capacity
- Operation via manual controller
- Laser z-axis rise: 350 mm
- LED illumination
- Inert gas supply directly controlled via magnetic valve
- Stable welded frame construction for holding components
- Powder-coated sheet steel casing

### Dimensions and weight

Dimensions: width 910 mm x height 1115-1415 mm x length 1150 mm
Weight: 250 kg net