SELECT, SELECT FIBER

LASER WELDING AND MUCH MORE

NOW AVAILABLE WITH
FIBER LASER

NEW AXIS SYSTEM
NEW CONTROL
SELECT, SELECT FIBER
- tailored to your needs

Flexible configuration for all welding tasks

The Select is a fully integrated system: ergonomically optimized manual welding laser, joystick controlled deposit welding system or high-precision CNC system – a unique welding concept with four high-precision axes, short setup times and easy CNC programming.

As much automation as you want, with the minimal complexity you need. All parameters can easily be adjusted without any special know-how via a multi-functional joystick and large color touch-screen.

Joystick
- Direct axes-control
- Easy semi-automatic laser welding
- Single pieces, small batch series and repair welding
- Process and prototype development

CNC
- Programming via touch screen, teach-in or data import
- Semi or full automation
- Joystick programming of CNC process

Select SweetSpot™
- Lamp-pumped Nd:YAG with patented SweetSpot laser resonator
- High pulse-to-pulse stability
- Very wide power range for very small and strong welds as well as for highly-reflective material

Select Fiber
- Fiber laser for high process stability
- No maintenance
- Fine welds with extremely high quality requirements
**MicroWeld™ and SweetSpot Resonator®**
Smallest weld spot diameters of < 0.1 mm for very fine applications showing a constantly high weld quality

**Teach-Functions**
Extensive library of teaching functions optimized for laser processing

**SynchroWeld™ and Look ahead**
Consistent pulse overlap on seam welds independent of path contour and welding speed

**V-Track**
Various optimized teach modes for semi-automatic laser welding of single workpieces or small batch series.

**Intelligent Pulse Management™**
High pulse-to-pulse-stability for fine micro welds

**Axes system**
Servo motor-driven linear axes with positioning control for high dynamics and high precision

**Multi-touch Display**
Easy and intuitive parameter setting, ideal even for beginners

**Joystick Box**
Can be configured individually with 4 axes and parameter display

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**Robust All-in-one solution**
- Doors completely hidden inside the machine when open
- Large working chamber accessed by manual ports with leather cuffs
- Flow-controlled exhaust system with HEPA filters
- Closed-loop cooling circuit for 24/7 operation
- Generously dimensioned linear axes and additional rotary axis
- Ready to use after delivery
# SELECT, SELECT FIBER

## Specifications

<table>
<thead>
<tr>
<th>Laser</th>
<th>Select</th>
<th>with SweetSpot®</th>
<th>Select Fiber</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>pulsed Nd: YAG</td>
<td>pulsed Nd: YAG</td>
<td>fiber laser</td>
</tr>
<tr>
<td>Nominal power (W)</td>
<td>100</td>
<td>80</td>
<td>1,5</td>
</tr>
<tr>
<td>Pulse peak power (kW)</td>
<td>12</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Pulse energy (J)</td>
<td>120</td>
<td>100</td>
<td>0,2 - 50</td>
</tr>
<tr>
<td>Pulse duration (msec)</td>
<td>0,3 - 50</td>
<td>0,3 - 50</td>
<td>single pulse up to 500</td>
</tr>
<tr>
<td>Pulse frequency (Hz)</td>
<td>single pulse up to 50</td>
<td>single pulse up to 50</td>
<td>0,1 - 0,5</td>
</tr>
<tr>
<td>Focal diameter (mm)</td>
<td>0,3 - 2,5</td>
<td>0,1 - 2</td>
<td>0,05 - 2</td>
</tr>
</tbody>
</table>

### Positioning axes

| | Travel | Loading | Resolution | Repeatability | Speed |
| | x-y-z (mm) | (kg) | (µm) | per axis | (µm/sec) |
| | | | | | 60 |
| | | | | ± 30 |
| | | | | 50 |
| | | | | 1,0 |

### Utilities

| | Electrical | Power consumption with nominal power (kW) | Cooling | Shielding gas | Compressed air (cooling of workpiece) | Measures |
| | V, Hz, A | internal water-air-heat exchange | quick coupling | quick coupling | kg | Dimensions W x H x D (mm) | max. °C |
| | 230, 50/60, 16 | internal water-air-heat exchange | quick coupling | quick coupling | 250 | 790 x 1.262 x 1.258 | 35 |
| | | air cooling | | | | | |