

## Laser Station for Welding Biocompatible Plastic Materials



### Applications:

- Suitable for accurately welding circular parts
- Welding of biocompatible plastic components but not only
- Producing multiple circular welds along the Z (vertical) axis

<b>System</b>	- Fixed beam with adjustable focus length and spot size	<ul style="list-style-type: none"> <li>• 10mm &lt; F &lt; 200mm</li> <li>• 20um &lt; spot size &lt; 2mm</li> </ul>
<b>Specifications</b>	- Real time imaging during the welding process	<ul style="list-style-type: none"> <li>• CCD Camera</li> <li>• Local data logging or to network</li> </ul>
	- High resolution motorised linear stage along the Z axis	<ul style="list-style-type: none"> <li>• Controlled by a microcontroller</li> </ul>
	- Rotation stage around the Z axis	<ul style="list-style-type: none"> <li>• Variable programmable speed</li> </ul>
	- Solid state fiber coupled laser	<ul style="list-style-type: none"> <li>• Output power based on application; max 50W</li> <li>• CW or Pulsed Mode of operation</li> <li>• Red aiming beam</li> </ul>
	- Computer controlled system	<ul style="list-style-type: none"> <li>• Incorporated in the system</li> </ul>
	- GUI via touch screen or keyboard and mouse	
	- Warning tower light	<ul style="list-style-type: none"> <li>• System status</li> </ul>
- Integrated laser powermeter	<ul style="list-style-type: none"> <li>• For laser power callibraion and validation</li> </ul>	

<b>Utility and Requirements</b>	Operating Voltage	<ul style="list-style-type: none"> <li>• 110V - 240V, AC</li> </ul>
	Electrical Interface	<ul style="list-style-type: none"> <li>•</li> </ul>
	Maximum Power Consumption	<ul style="list-style-type: none"> <li>• 200W</li> </ul>
	Operating Temperature	<ul style="list-style-type: none"> <li>• 10C to 40C</li> </ul>
	Storage Temperature	<ul style="list-style-type: none"> <li>• 5C to + 70C</li> </ul>
	Laser Safety Class	<ul style="list-style-type: none"> <li>• 4</li> </ul>
	Safety	<ul style="list-style-type: none"> <li>• Interlock on front door</li> <li>• Laser warning labels</li> <li>• Emergency Stop</li> </ul>
Dimensions (L x W x H), (mm)	<ul style="list-style-type: none"> <li>• 650mm x 450mm x 600mm</li> </ul>	