

ExactWeld 230

High Precision Laser Welding

Our new line of laser welding machines provides a cost-effective solution for high-precision welding applications. It is an ideal tool for scanner welding of small to medium sized metal parts. Typical applications are in automotive production, electronics, and medical device manufacturing. This new line of laser machines features a wide assortment of scanner heads for the most challenging, precision-welding applications, and motorized X/Y/Z axes. The systems are powered by our latest fiber laser technology and provide low cost of ownership through high productivity and enhanced ease-of-use. They are backed by our outstanding applications and global service support infrastructure.

Features and Benefits

- High-productivity precision welding system with patented SmartWeld™ technology
- Powered by latest fiber laser technology
- Class 1 laser housing meets the newest ergonomic guidelines
- Welded steel construction base frame
- High process consistency
- Industry 4.0 ready
- Servo motor with X/Y/Z axis travel
- Large working chamber
- Pneumatic lifting door available

Applications

- Welding of Metals



SPECIFICATIONS

ExactWeld 230	
Interface	
Display and Operation	24" screen + keyboard
Data Interfaces	USB device, RJ45 connection
INSTALLATION	
Dimensions (L x W x H)	1700 x 1000 x 2050 mm (66.9 x 39.4 x 80.7 in.)
Weight	1100 kg (2425.5 lbs.)
Maximum Payload	100 kg (220.5 lbs.)
ELECTRIC	
Energy (VAC)	400
Frequency (Hz)	50/60
Current (A)	16
POWER CONSUMPTION	
Effective Power (kW)	1.4
Standby (kW)	0.8
PNEUMATIC	
Compressed Air	6 bar
INSTALLATION CONDITIONS	
Laser Safety Class (according to EN60825-1:2015)	Laser Class 1
Description	As seated and standing workplace available (worktable or rotary table)



PRECISION MODULE

X/Y-Axis Travel (mm)	400 x 400 x 300 mm (15.75 x 15.75 x 11.8 in.)
Drive	Servo motor with ballscrew
Positioning Accuracy (mm)	0.06 0.06 0.1
Repeatability Accuracy (mm)	0.01 0.01 0.01

Several Axis variants available, starting from single Z-Axis up to X/Y/Z-Axis



INTEGRATED StarFiber

- CW fiber laser
- 400 W
- Analog power control
- High efficiency
- Safety features (industrial standard)
- Innovative control unit

Wide Range of Optics for Challenging Laser Fine-Welding Applications

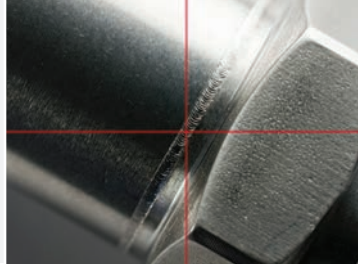


OPTIONS



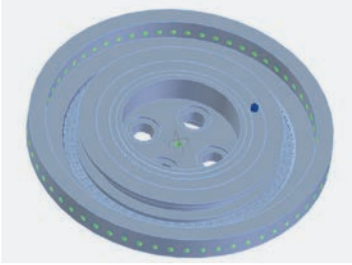
Rotary Axis

Direct drive rotary axis with a maximum rotating speed of 500 r/minute and a rated rotation speed of 1000 r/minute.



CCD Camera

CCD camera with integrated crosshair generator for easy positioning.



Fixtures

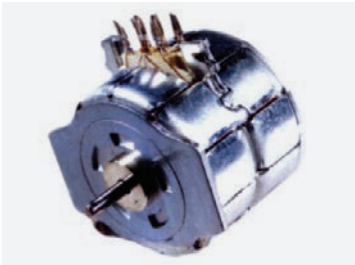
Extensive know-how in part-specific workpiece holders



Foot Switch

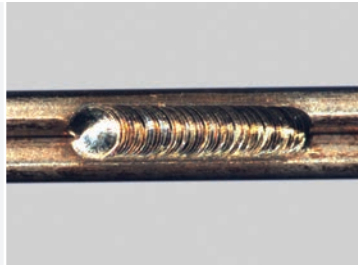
For a comfortable start of the CNC routine

APPLICATIONS



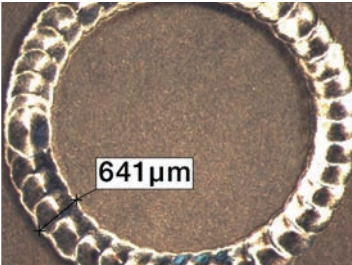
Contact Welding

Minimum welding spots with diameters far below 0.1 mm.



Seam Welding

Small seam geometries at high welding speeds. The results are welds of maximal strength at minimal thermal input for the workpiece.



Freeform Welding

From simple to very complex geometries. Individual designs, prototypes and single production.



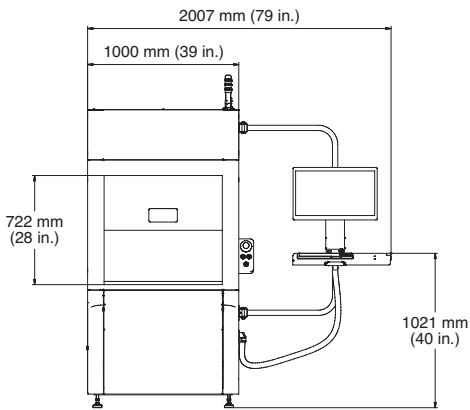
Seal Welding

No porosities and crack free seams provide for leakproof weldings.

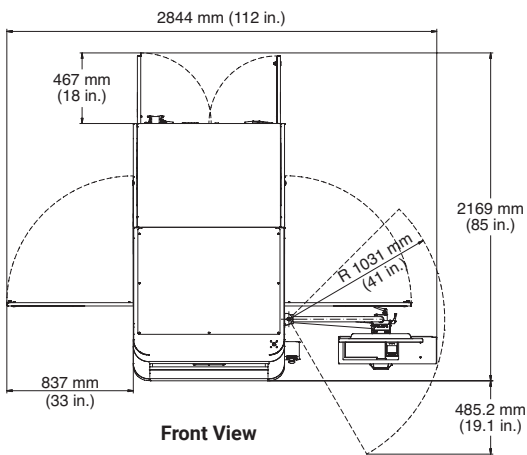
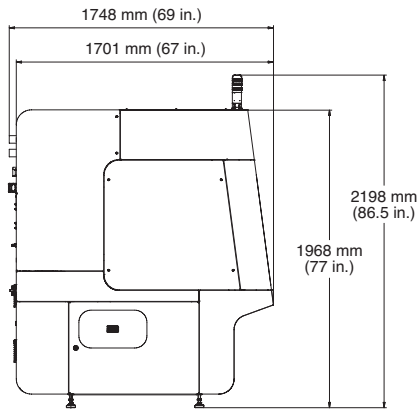
MECHANICAL SPECIFICATIONS

ExactWeld 230

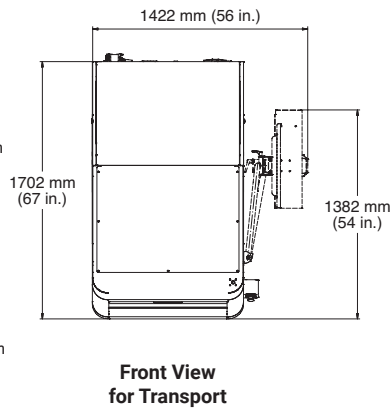
Front View



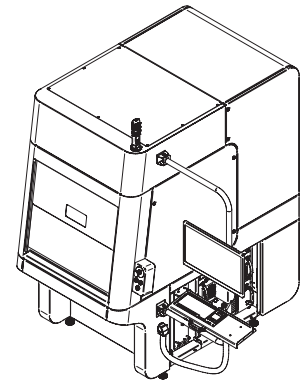
Side View



Front View



Front View
for Transport



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Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice. Coherent's scientific and industrial lasers are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health on all systems ordered for shipment after August 2, 1976.

Coherent offers a limited warranty for all ExactWeld 230 Laser Welding Machines. For full details of this warranty coverage, please refer to the Service section at www.Coherent.com or contact your local Sales or Service Representative.

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