



COBRA FLR

FIBER LASER ROBOTIC CUTTING & WELDING SYSTEM

The Fiber Laser Cutting & Welding Robotic System is a state of the art robot designed for high precision specifications and is particularly suitable for laser applications and the welding of components. It is a six-axis industrial robot with articulated kinematics for all continuous-path controlled tasks. The Fiber Laser Cutting & Welding Robotic System specializes in MIG/MAG welding. They have a high path accuracy and very good positioning behavior due to a special calibration procedure carried out by the manufacturer. The robot consists of a fixed base frame, on which the rotating column turns about a vertical axis together with the link, arm and wrist.

OFFERING A FULL RANGE
OF LASER MARKING AND
CUTTING SOLUTIONS



Standard Features

- Cost-effective lightweight construction of main body (cast light alloy)
- Specifically designed for laser welding
- High torsional and flexural rigidity
- Joints and gears are virtually free of backlash
- Lifetime lubricated main axes (oil change is necessary after 20,000 operating hours)
- Components are intentionally simple and straightforward configuration
- Overhead motion is possible
- Minimal maintenance requirements
- Occupies very little floor space
- Average service life of 10 to 15 years
- User-friendly and compact controller
- Conforms to all safety standards (EU and EN 775)
- All moving parts are covered

Payloads	Payload: 66 lbs. Supplementary Load: 77 lbs. Total Distributed Load: 143.3 lbs.
Arm Length	32 in.
Maximum Reach	80 in.
Number of Axes	6 axes
Wrist Variant	Inline wrist
Mounting Flange	A 6: DIN ISO 9409-1-A100
Mounting Positions	Floor or ceiling
Repeatability	+/- 0.003937 in.
Weight (excluding controller)	1340 lbs.

Axis Data	Range	Speed
Axis 1 (A1)	+/- 185°	140°/s
Axis 2 (A2)	+ 35°/-135°	140°/s
Axis 3 (A3)	+ 158°/-120°	140°/s
Axis 4 (A4)	+/- 350°	260°/s
Axis 5 (A5)	+/- 119°	245°/s
Axis 6 (A6)	+/- 350°	322°/s

Applications & Materials

- Cutting, Marking & Deep Engraving
- High-speed sheet metal cutting
- Automotive frames cutting/welding
- Coated & Plated Metals
- Anodized Aluminum
- Stainless Steel
- Blank cutting
- Plate cutting
- Alloy Metals
- Composites
- Aluminum
- Mild Steel
- Titanium
- Graphite
- Copper
- And More



Safety Considerations During Operation

1064 nm wavelength laser light emitted from this laser system is invisible and may be harmful to the human eye. Proper laser safety eye wear must be worn during operation.

21 CFR 1040.10 Compliance

This product is designed for OEM integration into other equipment. The product is a Class 4 laser as designated by the CDRH and it does NOT MEET the full requirements for a stand-alone laser system as defined by 21 CFR 1040.10 under the Radiation Control for Health and Safety Act of 1968. It is the responsibility of the equipment manufacturer to meet all of the regulatory requirements for the final system.



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