

ROBOTIC LASER WELDING MACHINE

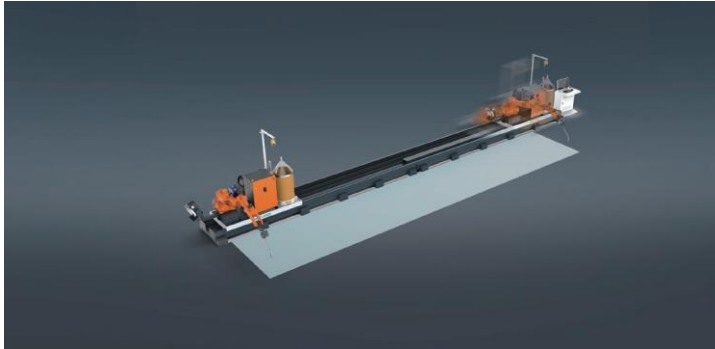
MODEL NO.: A-W7



MACHINE DESCRIPTION:

The A-W7 Robotic Laser Welding Machine (also referred to as the A-W7 Intelligent Welding Workstation) is an industrial robotic laser welding system designed for automated welding of large steel structures and high-volume manufacturing. It combines robotics, laser welding, AI-based seam detection, and 3D vision to improve welding accuracy, productivity, and consistency.

MACHINE ADVANTAGES:



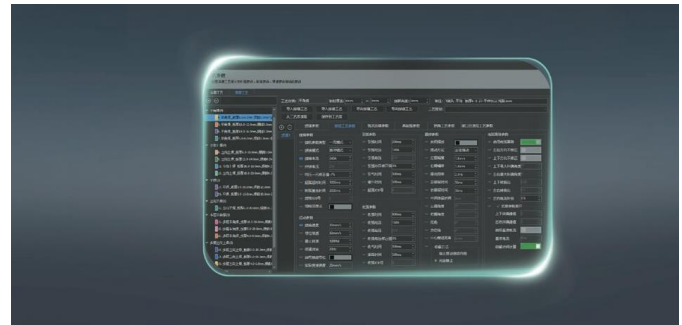
▪ Rapid Installation, Fast

Production Start-Up

Modular design supports multi-station processing and various box-structure sizes. Installation time is significantly reduced compared to conventional systems, enabling faster production start-up.

▪ Extensive Process Library with Automatic Matching

Built-in process library covering flat welding, flat fillet welding, vertical-up welding, corner welding, vertical-up wrap-around welding, overhead welding, and multi-pass / multi-layer welding, ensuring consistent weld quality across all workpiece types.



▪ Offline Programming, Reduce Labor Dependency

Supports 3D model import and offline programming. The system auto-generates toolpaths, extracts weld seams, and matches all process parameters in one click. Real-time arc tracking ensures weld consistency with flexible staffing...

- **AI Vision Recognition, Fully Traceable Welding**

Equipped with a 3D vision system and AI seam-finding algorithm, the A-W7 automatically identifies weld positions and angles, reducing setup and teach-in time.



- **Digital Twin + 3D Model, Precision Data Interpretation**

Digital twin technology builds a virtual replica of the workstation. With automatic seam extraction and real-time sync between the digital and physical environments, production status is always visible for better quality control.

MACHNE CONFIGURATIONS:

No.	Item	Model
1	Welder	Dex2 500MPR BC Megmeet
2	Wire feeding machine	Megmeet
3	Cold water machine	Megmeet
4	Welding Gun	TRM602wHD-45L anti- collision welding gun
5	Welding gun cleaning station	SC230A SE
6	External axis servo motor	China HCFA
7	Robot body driver	Tsino-Dynatron
8	System	Cypweld2800 teachless system Cypweld3800 teachless system + reverse modeling Optional
9	Linear guides	Aore
10	Rack and pinion	Aore
11	Gear reducers	KOFON
12	Electrical components	Aore
13	Drag chains	LONGO

TECHNICAL PARAMETERS:

ROBOTIC LASER WELDING	
MODEL NO.	: A-W7
Working Envelope	: 12000x1200mm (outer side of welded component). Variations may occur depending on the type of workpiece.
Effective Stroke	: 10,000mm
Max. running speed	: 40m/min
Programming-Free	: Standard
One-Click Weld Seam Extraction	: Standard
Automatic Calibration	: Standard
Intelligent Arc Tracking	: Standard
Drawingless Reverse Engineering	: 2800 system no 3800 system yes
Full-Circumference Water Cooling	: Standard
Follow up anti-collision sensing function	: Standard
Automatic lubrication function	: Standard
Positioning accuracy	: ± 0.05 mm
Axles	: 7 axis
Working Radius	: 2010mm
Robotic arm load capacity	: 6kg
Dimension	: 13300 x 4050 x 3050 mm
Overall weight	: 2700kg
Brand New	: China

Applicable Industries

