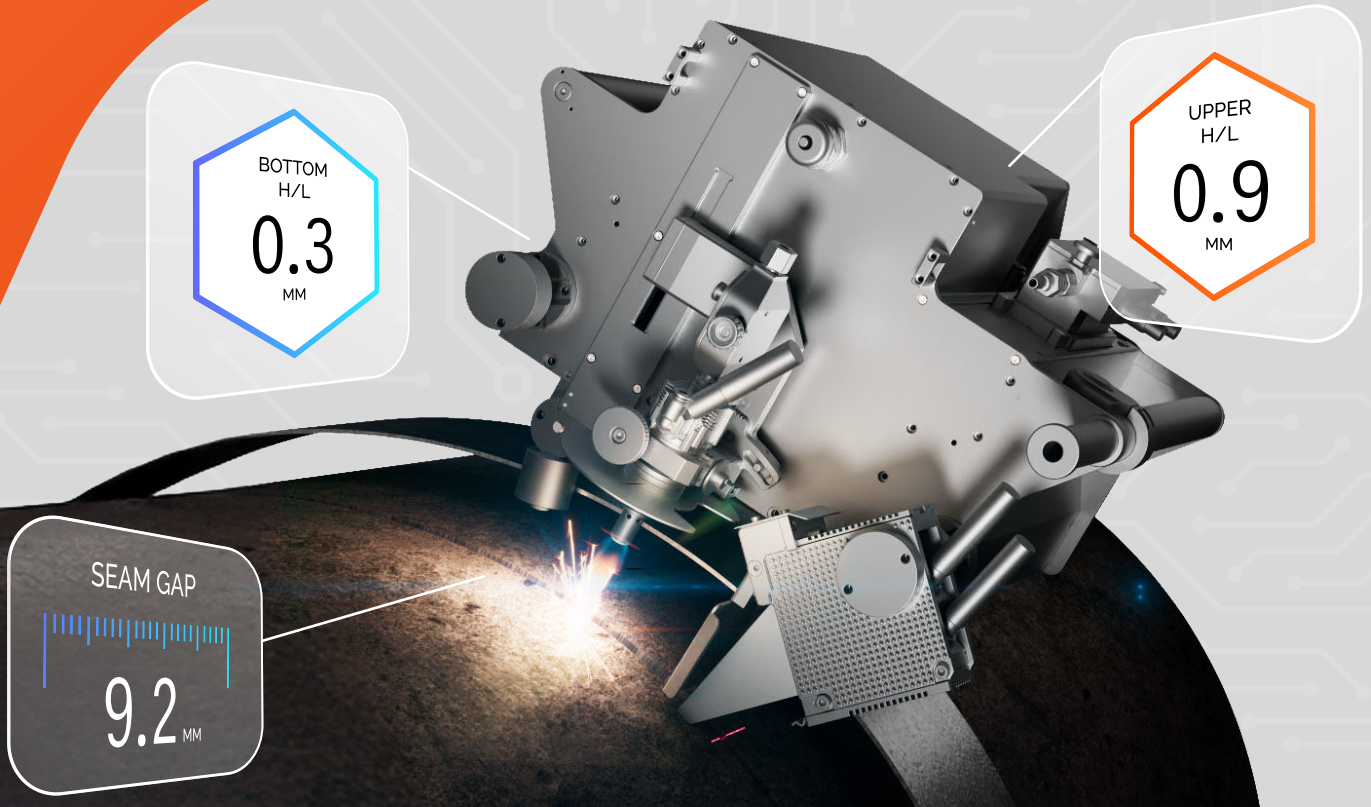


AROW

 **WELDOBOT**



Autonomous Robot for Orbital Welding

Presenting Welding 5.0:

Fusing Metal with Ingenuity

Industry First AI Powered Orbital Welding Technology



An innovative autonomous pipe welding robot equipped with AI-driven and laser sensing technology to revolutionize precision, efficiency, and quality in industrial welding.

AROW Highlights

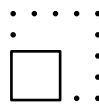
Redefining Industrial Welding with AI
and automation into the era of Welding 5.0

AI-DRIVEN PRECISION & EFFICIENCY



Real-Time Laser Tracking

±0.2 mm accuracy with 40 mm range for flawless welds.



AI-Powered Adaptive Welding

Adjusts welding parameters and welding TIP position. Operational in both uphill/downhill welding.



Multi-Groove Mastery

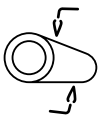
Flawless J & V groove tracking at ±0.2mm accuracy.



3-Axis Servo Control

Torch elevation Z axis (64 mm), Y axis motion (64 mm), and programmable oscillation (0-4 Hz, 0-18 mm amplitude).

UNMATCHED PRODUCTIVITY



Dual-Robot Synchronization

Two AROW units can work simultaneously on the same pipe, doubling productivity.



High-Speed Welding

2-20 mm/sec speed (configurable) with GMAW (MIG) technology.



Toothed Band Mobility

Ensures stable movement on pipes of any diameter (12" and up).

BUILT FOR REAL-WORLD REQUIREMENTS



Engineered for tough Outdoor environment

Operates in -20°C to 55°C environments with minimal maintenance.



Plug-and-Play Setup

Easy installation, advanced UX, user-friendly HMI for quick deployment.



Integrated Human-Machine Collaboration

Reduced labor dependency. Maintaining top-tier weld quality with less skilled welders.



Bridging the Labor Gap

Deals with the global welder shortage by augmenting existing teams. AROW enables precision execution while welders focus on planning and supervision.

COMPLETE SYSTEM INTEGRATION

- Includes control cabinet, gas mixer (optional), and customizable work cabinets for indoor/outdoor use.
- Can work with any GMAW power supply.

WELDING EQUIPMENT AGNOSTIC

AROW integrates seamlessly with most popular welding equipment, regardless of vendors, protecting your past investments.

TECHNICAL SPECIFICATIONS

ROBOT	Pipe Diameter	300 mm (12") and up
	Thickness welded pipe	5 — 32 mm (other optional)
	Pipe material	Carbon Steel (other optional)
	Welding Technology	GMAW (MIG)
	Ambient temperature	-20–55°C
	Welding speed	2–20 mm/sec (other optional)
	Travel speed	2–100 mm/sec (other optional)
	Weight	22 kg
	Dimensions	H-35 cm / W-47 cm / L-45 cm
TRACKING SYSTEM	Laser line tracker	40 mm
	Positioning accuracy	+/- 0.2 mm
	Grove profile	J & V groves
WELDING TORCH	Elevation (Z axis)	64 mm
	Motion perpendicular to seam (Y axis)	64 mm
	Welding oscillation	0–4 Hz (parameter setting)
	Amplitude – welding oscillation	0–18 mm (parameter setting)
SYSTEM INCLUDES	AROW system	In protective box
	Welder Teach pendant	Including
	Operator HMI screen	Including
	Control cabinet	Including
	Toothed band	Including (According to pipe dia.)
	GMAW PS	Optional
	Gas Mixer	Optional
	Working cabinet	Optional (indoor or outdoor)
WELDING WIRE	Wire feeder speed	1-18 m/min
	Welding wire type	Solid / FluxCored
	Welding wire size	1–1.2 mm
POWER CONSUMPTION	Operation Voltage	100–240 VAC / 50/60 Hz
	Max Power consumption (2 robot system)	750 AV

The Future of Welding is Here

Redefining Industrial Welding with AI and automation
into the era of Welding 5.0 - AROW sets a new benchmark
for precision, efficiency, and safety in industrial pipe welding.

GLOBAL PARTNERSHIP NETWORK

Experience Welding 5.0 with AROW technology.

Contact our regional partners for tailored solutions and support.

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Experience the Future of Welding



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AROW Product Page

