



Robotic Automation

Intelligent systems for small business.



Robotic Solutions for MIG/MAG Welding



It's getting much Simpler. **ESAB Welding Robots.**

Since 1904, ESAB has been a pioneer in the welding and cutting business. By continuously improving and developing our products and methods, we meet the challenges of technological advance in every sector we supply.

Almost 40 years ago (1974), ESAB and ASEA (today's ABB) parented the world's first electric welding robot. Since then, the industry has been transformed by radical developments in robotic welding technology - many pioneered by or in collaboration with ESAB. Dual stations and robot travel tracks (1976), hanging robots and travelling gantries (1978), free-programmable positioners (1981), fully flexible manufacturing systems for arc welding (1984) - this relentless pace of development has made us a world leader.

ESAB not only designs and manufactures welding and cutting equipment for robotized systems - it manufactures a complete range of consumables too. From covered

electrodes, cored wires and solid wires to TIG rods, strips and fluxes. For mild steels, stainless, aluminum and copper, this comprehensive range is available as spools or in ultra efficient MarathonPac™ bulk packages.

World leadership brings worldwide applications experience and expertise, to the mutual benefit of all. As an ESAB customer, you gain full and personal access to an unrivalled source of technical and applications expertise, service and support. Our worldwide local representation and network of independent distributors offer practical expertise and technical solutions, whatever the challenge: material properties, welding, cutting or general productivity enhancement.



Reliable, Versatile and User-Friendly

MIG Welding Robots Solutions for Maximum Efficiency

ESAB Welding Robots are designed with simplified set-up for new users eliminating the need for complex operating procedures. The 6-axis motion delivers versatility for a wide range of applications without constraints of limited floor space. The routing of all cables & hoses for power, shielding gas, compressed air, wire is optimized to ensure maximum performance and energy efficiency. The excellent path accuracy with short cycle times helps improve productivity in complex applications. The choice of reliable components ensure minimal maintenance needs.

ESAB WR 2001



ESAB WR 1410



- Easy to use, Easy to program
- Minimum footprint with maximum working envelope
- Lightweight teach pendant
- Independent emergency safety stop function
- Improved performance of EMC and EMI

Technical Data

		ESAB WR 1410	ESAB WR 2001
Axis Number		6	6
Payload		4kg	6kg
Repeat Positioning		±0.03mm	±0.05mm
Max Armspan		1410.5mm	2001mm
Motion Range	Axis 1	±168°	±172°
	Axis 2	+ 150°, -89°	+166°, -100°
	Axis 3	+ 85°, -111°	+ 83°, -92°
	Axis 4	±167°	±170°
	Axis 5	+ 58°, -217°	±125°
	Axis 6	±360°	±360°
Max Speed	Axis 1	201°/s	172°/s
	Axis 2	201°/s	172°/s
	Axis 3	235°/s	201°/s
	Axis 4	350°/s	430°/s
	Axis 5	355°/s	447°/s
	Axis 6	481°/s	573°/s
Allowable Torque	Axis 4	10.51N.m	8.81N.m
	Axis 5	10.51N.m	8.81N.m
	Axis 6	2.94N.m	3.14N.m
Inertia Moment	Axis 4	0.38kg.m ²	0.2kg.m ²
	Axis 5	0.38kg.m ²	0.2kg.m ²
	Axis 6	0.03kg.m ²	0.03kg.m ²
Robot Body Weight		150kg	255kg
Power Capacity		2.7VA	3.8kVA
Cabinet Size		580x600x960mm	580x600x960mm
Cabinet Weight		130kg	130kg
Source		Three-phase four-wire	Three-phase four-wire
Installing Form		Ground, Ceiling	Ground, Ceiling