

ROBOTICS

# IRB 2400 Industrial Robot



IRB 2400 comprises a complete family of application optimized robots that maximize the efficiency of your arc welding, process and tending applications.

IRB 2400 is a dedicated high performance robot for process applications where the required accuracies are very demanding.

All models offer you inverted mounting capability. The compact design of the IRB 2400 ensures ease of installation.

The robust construction and use of minimum parts contribute to high reliability and long intervals between maintenance.

The Foundry Plus version is washable with high pressure steam and it's supplied with increased environment protection meeting IP 67 standard.

Global service and support

For worry-free operation, ABB also offers Remote Service, which gives remote access to equipment for monitoring and support. Moreover, ABB customers can take advantage of the company's service organization; with more than 35 years of experience in the arc welding sector, ABB provides service support in over 100 locations in 53 countries.

Main applications

- Arc Welding
- Cutting/Deburring
- Grinding/Polishing

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Specification

Robot version	Reach (m)	Payload (kg)
IRB 2400/10	1.55	10
IRB 2400/16	1.55	16
Number of axes	6	
Protection	FoundryPlus IP67, IP54	
Mounting	Floor mounted and inverted mounted for all versions. Wall mounted for IRB 2400/10.	
Controller	IRC5 Single Cabinet/ IRC5 PMC Panel Mounted	

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**Performance (according to ISO 9283)**

	Position repeatability	Path repeatability
IRB 2400/10	0.03 mm	0.11 mm
IRB 2400/16	0.03 mm	0.15 mm

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Technical information

Electrical Connections	
Supply voltage	200-600 V, 50/60 Hz
Power consumption	ISO-Cube at max speed 0.67 kW
Physical	
Robot base	723 x 600 mm
Robot height	1564 mm
Robot weight	380 kg
Environment	
Ambient temperature for mechanical unit	
During operation	+5°C (41°F) to +45°C (113°F)
Relative humidity	Max. 95 %
Noise level	Max. 70 dB (A)
Emission	EMC/EMI-shielded

Data and dimensions may be changed without notice.

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Movement\*

Axis movement	Working range	Axis max. speed
Axis 1 rotation	+ 180° to - 180°	150°/s
Axis 2 arm	+ 110° to - 100°	150°/s
Axis 3 arm	+ 65° to - 60°	150°/s
Axis 4 rotation	+ 200° to - 200° Optional: Unlimited	360°/s
Axis 5 bend	+ 120° to - 120°	360°/s
Axis 6 turn	+ 400° to - 400° Max. rev: +250 to -250	450°/s

\*The working area is the same for both floor and inverted mounting.  
For wall mounted 10 kg version axis 1 is limited to ±30°.

Working range

