

IRB 2400 Industrial Robot

Main Applications

Arc welding
Cutting/Deburring
Glueing/Sealing
Grinding/Polishing
Machine tending
Material handling



Most popular industrial robot

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

The IRB 2400 is a real hard worker. It can take additionally 35 kg load on axis 1 and up to 12 kg additional load on the upper arm - still keeping 100 % duty cycle.

Other models offer handling capacity of up to 20 kg, excellent motion control, large load offset and unlimited motion in axis 6.

This means there's an IRB 2400 robot to give you excellent

performance in your material handling, tending and process applications. 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 2 version is washable with high pressure steam and it's supplied with increased environment protection meeting IP 67 standard.

IRB 2400

Main applications

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Specification

Variants	Reach	Payload	Protection
IRB 2400-10	1.55 m	12 kg	FoundryPlus
IRB 2400-16	1.55 m	20 kg	FoundryPlus

Number of axes	6
Mounting	Floor and inverted all versions. Wall IRB 2400-10

Supplementary load	IRB 2400-10	IRB 2400-16
Upper arm		
-wrist end	2 kg	2 kg
-rear end	10 kg	10 kg
Base unit	35 kg	35 kg

Physical

Dimensions	IRB 2400-10	IRB 2400-16
Total height	1564 mm	1564 mm
Robot base	723x600 mm	723x600 mm
Robot weight	380 kg	380 kg

Performance (according to ISO 9283)

Position repeatability (RP)	0.03 mm
Path repeatability	0.11-0.15 mm depending on variant

Movements

Axis	IRB 2400-10	IRB 2400-16
Working range		
Axis 1	360**	360°
Axis 2	210°	210°
Axis 3	125°	125°
Axis 4	400°	400°
Axis 4, Option	Unlimited	Unlimited
Axis 5	240°	240°
Axis 6	800°	800°
Axis 6, Option	Unlimited	Unlimited

Max. speed

Axis 1	150°/s	150°/s
	90° **	
Axis 2	150°/s	150°/s
	90° **	
Axis 3	150°/s	150°/s
	90° **	
Axis 4	360°/s	360°/s
Axis 5	360°/s	360°/s
Axis 6	450°/s	450°/s

**) For wall mounted version

*) ± 30° for wall mounted robot

Electrical Connections

Supply voltage	200–600 V, 50/60 Hz
Power consumption	ISO-Cube at max speed 0.67 kW

Environment

Ambient temperature for mechanical unit:

During operation	+5°C (41°F) to + 45°C (113°F)
Relative humidity	Max. 95%

Degree of protection	IRB 2400-10	IRB 2400-16
Standard	IP54	IP54
Foundry Plus 2 version	IP67	IP67

Noise level	Max. 70 dB (A)
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Emission	EMC/EMI-shielded
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Data and dimensions may be changed without notice

Working range

IRB 2400-10, IRB 2400-16

