

IRB 6620

Industrial Robot



The IRB 6620 is a flexible and agile robot with a large working envelope. The robot combines four robots in one: floor-standing, tilted or inverted mounted and shelf capability. This compact robot opens up opportunities for new flexible and improved line concepts. Functions that all help saving floor space, creating higher robot density and shorter lines.

The agile large robot

This relatively small and compact robot is easy to install thanks to its low weight. In spite of its small size neither the handling capacity nor the reachability are affected. The robot's compactness and shelf capability also make it ideally suited for applications where robots are placed on different levels. The shelf mounted robot may in this case be tilted to increase space between the two levels.

With the IRB 6620 you get a flexible and cost efficient solution that generates high uptime and lower production costs.

Machine tending

IRB 6620 is suited for machine tending applications such as Die Casting and Injection Molding, that requires minimised extraction time. The main benefit is the huge working range downwards making the robot ideal to mount on top of a machine working downward to save costly floor space. Another benefit in different material handling also saving floor space applications is the IRB 6620 ability to work inverted mounted. In all these configuration the installation will benefit from the very low weight of the robot.

Main Applications

- Machine Tending
- Material Handling
- Spot Welding

Specification

Robot version	Reach (m)	Payload (kg)*
IRB 6620	2.2	150
Number of axes	6	
Protection	IP 54, IP 67 with Foundry Plus 2 option	
Mounting	Floor, titled, inverted	
Controller	IRC5 Single Cabinet	

* Extra loads can be 50 kg on to the upper and 100 kg mounted on to the robot base.

Performance (according to ISO 9283)

	Position repeatability	Path repeatability
IRB 6620	0.05 mm	1.00 mm

Actual values are equal or below the given values.

Technical information

Electrical Connections

Supply voltage	200 - 600 V, 50/60 Hz
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Physical

Robot base	1007 x 760 mm
Robot weight	900 kg

Environment

Ambient temperature for mechanical unit

During operation	+5° C (41° F) to + 45° C (113° F)
During transportation and storage	-25° C (-13° F) to +55° C (131° F)
During short periods (max. 24 h)	up to +70° C (158° F)

Relative humidity	Max. 95%
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Safety	Double circuits with supervisions, emergency stops and safety functions. 3-position enable device
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Emission	EMC/EMI shielded
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Option	Foundry Plus
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- UL approved
- Rigid design with collision resistance
- Prolonged wrist with smooth surfaces for dress pack life time
- Large centre hole for welding cables in the foot
- Easy change of dress pack
- Weld spatter protection on gear sealing
- 50 kg load capacity on rear upper arm for dress pack

Data and dimensions may be changed without notice.

Movement

Axis movement	Working range	Axis max. speed
Axis 1 Rotation	+170° to -170°	100°/s
Axis 2 Arm	+140° to -65°	90°/s
Axis 3 Arm	+70° to -180°	90°/s
Axis 4 Wrist	+300° to -300°	150°/s
Axis 5 Bend	+130° to -130°*	120°/s
Axis 6 * Turn	Default: +300° to -300° Max. rev: ± 96	190°/s

A supervision function prevents overheating in applications with intensive and frequent movements. *Limitations with DressPack.

Working range

