Robotics

# IRB 2600ID Industrial Robot

The IRB 2600ID robot range features a unique combination of high payload capacity, large working range and Integrated Dressing (ID), which routes all cables and hoses inside the robot's upper arm and wrist. These robots can reduce cycle times by up to 15%, significantly increasing production output in applications like arc welding, materials handling and machine tending.



#### Shorter cycle times

Because all process cables and hoses are routed inside the robot arm, the IRB 2600ID robots dramatically decrease downtime caused by interference and wear. This integration also ensures that the maximum achievable acceleration is available at all times without restriction. These features help to significantly reduce total cycle times and increase reliability.

There are two models in the range. The 2.00 m reach, 8 kg version is designed to be integrated with arc welding process equipment. The 1.85 m reach, 15 kg model comes with a flexible conduit designed to optimise materials handling and machine tending applications.

#### **Faster programming**

The ease with which off-line programs can be created is enhanced with Integrated Dressing (ID). The controlled movements of the hoses and cables are easily predicted, so programming and simulations are perfect representations of the actual robot system. This minimizes the time required for fine-tuning programs and enables a faster start of production. Total programming time is reduced by up to 90%.

#### Reduced cost of ownership

With all hoses and cables firmly secured and protected, they swing less during operation, and with less exposure to weld spatter or cutting fluids, the lifetime increases significantly. Costs are reduced in terms of purchasing and exchange by up to 75% and up to three production stops per year can be eliminated.

#### Higher output from a smaller footprint

With its compact design and without loose hoses and cables, the IRB 2600ID has a very small footprint with a swing base radius of only 337 mm and a base width of only 511 mm. In material handling and machine tending, this means that the robot can be placed closer to the machines being served. In arc welding the reduced risk of interference with other robots allows for productive, high-density installations with 50% more robots, and up to 50% higher output from a production cell. That's how the IRB 2600ID helps you make the most out of your production space; higher output from a smaller area.

#### Increased agility in smaller spaces

The wrist is very slim, only 227 x 130 mm. With all hoses and cables integrated through the process wrist the robot can easily access narrow openings and perform complex movements. For example, in arc welding this means that the IRB 2600ID can do circular welds without interruption and without compromising quality – and in a much shorter cycle time thereby increasing production output.



### IRB 2600ID

Main applications			
Machine tending, material h	nandling, arc v	velding	
Specification			
Variants:	Reach	Payload	Armload
IRB 2600ID-15/1.85	1.85 m	15 kg	10 kg
IRB 2600ID-8/2.00	2.00 m	8 kg	15 kg
Number of axes	6		
Protection	Standard IP67 for base and lower arm. IP54 for upper arm.		
Mounting	Floor, wall, shelf, tilted, inverted		
IRC5 controller variants	Single cabinet, Dual cabinet		
Physical			
Dimensions robot base	676 x 511 mm		
Robot height:	1600 mm		
Robot weight	273 to 276 kg		
Performance (according t	o ISO 9283)		
Position repeatability (RP)	0.023 - 0.026 mm		
Path repeatability (RT)	0.27 - 0.30 mm		
Movement			
Axis movements	Working ra	nge N	/laximum speed
Axis 1	+180° to -1	80° 1	75°/s
Axis 2	+155° to - 9	95° 1	75°/s
Axis 3	+75° to - 18	30° 1	75°/s
Axis 4	+175° to -	175° 3	60°/s
Axis 5	+120° to -1	20° 3	60°/s
Axis 6	+400° to - 4	100° 5	500°/s
Electrical connections			

## Environment Ambient temperature for mechanical unit:

Supply voltage

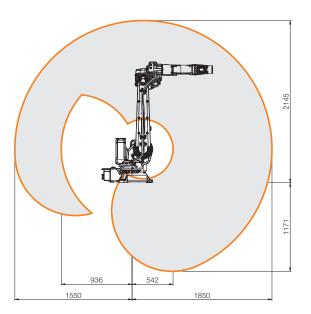
During operation	+ 5°C (41°F) to + 45°C (113°F)		
During transportation and storage	- 25°C (- 13°F) to + 55°C (131°F)		
For short periods (max 24h)	up to + 70°C (158°F)		
Relative humidity	Max. 95%		
Safety	Double circuits with supervisions,		
	emergency stops and safety functions,		
	3-position enable device		
Emission	EMC/EMI shielded		

200-600 V, 50-60 Hz

Data and dimensions may be changed without notice

#### Working range

IRB 2600ID-15/1.85



IRB 2600ID-8/2.00

