

# IRB 2600ID

## Industrial robot



Featuring 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 a variety of applications

### 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 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 optimize material handling and machine tending.

### Faster programming

The ease with which off-line programs can be created with Integrated Dressing (ID). The controlled movements of the hoses and cables are easily predicted which 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 and the lifetime increases significantly. Costs are reduced in terms of purchasing and welding torch 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.

### Main applications

- Machine tending
- Material handling
- Arc welding

## Specification

| Robot version      | Reach (m)                                                  | Handling capacity (kg) | Center of gravity (mm) | Wrist torque (Nm)                |
|--------------------|------------------------------------------------------------|------------------------|------------------------|----------------------------------|
| IRB 2600ID-15/1.85 | 1.85                                                       | 15                     | 10                     | Axis 4 & 5: 34.6<br>Axis 6: 11   |
| IRB 2600ID-8/2.00  | 2                                                          | 8                      | 15                     | Axis 4 & 5: 31.4<br>Axis 6: 10.2 |
| Number of axes     | 6                                                          |                        |                        |                                  |
| Protection         | Standard IP67 for base and lower arm<br>IP54 for upper arm |                        |                        |                                  |
| Mounting           | Floor, wall, shelf, tilted, inverted                       |                        |                        |                                  |
| Controller         |                                                            |                        |                        |                                  |

## Performance (according to ISO 9283)

|                    | Position repeatability | Path repeatability |
|--------------------|------------------------|--------------------|
| IRB 2600ID-15/1.85 | 0.026 mm               | 0.30 mm            |
| IRB 2600ID-8/2.00  | 0.023 mm               | 0.27 mm            |

## Technical information

### Electrical Connections

|                |                     |
|----------------|---------------------|
| Supply voltage | 200-600 V, 50-60 Hz |
|----------------|---------------------|

### Physical

|                    |              |
|--------------------|--------------|
| Robot base         | 676 x 511 mm |
| Robot height       | 1600 mm      |
| Robot weight       |              |
| IRB 2600ID-15/1.85 | 273 kg       |
| IRB 2600ID-8/2.00  | 276 kg       |

### Environment

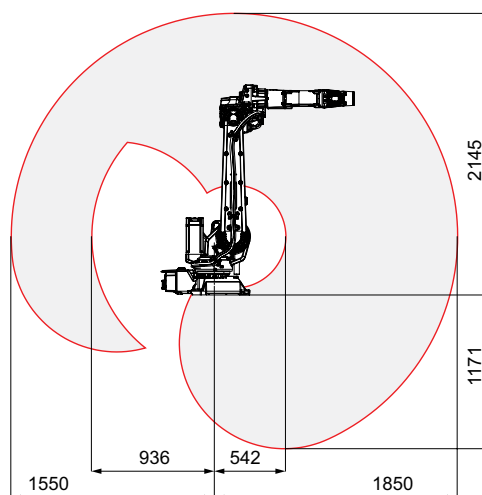
|                                                                |                                                                                                  |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Ambient temperature for mechanical unit                        |                                                                                                  |
| During operation                                               | +5°C (41°F) up to +50°C (122°F)                                                                  |
| During transportation and storage for short periods (max. 24h) | -25°C (13°F) up to +55°C (131°F)                                                                 |
| For short periods (max. 24 h) up to +70°C (158°F)              |                                                                                                  |
| Relative humidity                                              | Max. 95 %                                                                                        |
| Noise level                                                    | Max. 69 dB (A)                                                                                   |
| Safety                                                         | Double circuits with supervision, emergency stops & safety functions, 3 position enabling device |
| Emission                                                       | EMC/EMI shielded                                                                                 |
| Options                                                        | Foundry Plus 2                                                                                   |

Data and dimensions may be changed without notice.

## Movement

| Axis movement   | Working range                              | Axis max speed |
|-----------------|--------------------------------------------|----------------|
| Axis 1 rotation | +180° to -180°                             | 175°/s         |
| Axis 2 arm      | +155° to -95°                              | 175°/s         |
| Axis 3 arm      | +75° to -180°                              | 175°/s         |
| Axis 4 rotation | +175° to -175°                             | 360°/s         |
| Axis 5 band     | +120° to -120°                             | 360°/s         |
| Axis 6 turn     | +400° to -400°<br>Max rev:<br>+191 to -191 | 500°/s         |

### Working range, IRB 2600ID-15/1.85



### Working range, IRB 2600ID-8/2.00

