Per Lowgren, Product Manager, Medium robots

IRB 2600ID-15/1.85
Simple integration, high performance
Overview of main features

- General purpose robot for integrated dressing solutions.
- Agile, compact and high performing
- Tailored for material handling and machine tending.
- Longest reach in its class.
- Outstanding wall mounting capabilities.
- Optimized bending radius of hose package for long life expectancy and easy access inside machines.
- Optional flexible conduit
General purpose robot to suit many applications

- Machine tending
- Material handling
- Assembly
- Inspection
- Arc welding
- Laser welding
- Dispensing
Key data

- Payload: 15 kg
- Reach: 1850 mm (to center of axis 5)
- Height: 1600 mm
- Foot print: 676 mm x 511 mm
- Weight: 273 kg
Load diagram with additional armloads (1 + 10 kg) 
Up to 15 kg
Load diagram with additional armloads (1 + 10 kg)
Up to 17 kg with wrist vertical

Load diagram permits +/- 10 degrees on axis 5.
Check RobotLoad for your specific load case.
Working range at center of 5th axis

- Reach forward: 1850 mm
- Reach below the base: 1171 mm
- Reach above the base: 2145 mm
- Horizontal stroke: 3400 mm

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### Working range and max speed per axis

<table>
<thead>
<tr>
<th>Axis</th>
<th>Range</th>
<th>Max speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axis 1</td>
<td>+180° to -180 °</td>
<td>175 °/s</td>
</tr>
<tr>
<td>Axis 2</td>
<td>+155° to -95 °</td>
<td>175 °/s</td>
</tr>
<tr>
<td>Axis 3</td>
<td>+75° to -180 °</td>
<td>175 °/s</td>
</tr>
<tr>
<td>Axis 4</td>
<td>+175° to -175 °</td>
<td>360 °/s</td>
</tr>
<tr>
<td>Axis 5</td>
<td>+120° to -120 °</td>
<td>360 °/s</td>
</tr>
<tr>
<td>Axis 6</td>
<td>+400° to -400 °</td>
<td>500 °/s</td>
</tr>
<tr>
<td></td>
<td>± 191 rev. max</td>
<td></td>
</tr>
</tbody>
</table>
Performance & accuracy

- Pose repeatability, RP: 0.03 mm
- Pose accuracy, AP: 0.01 mm
- Linear path repeatability, RT: 0.30 mm
- Linear path accuracy, AT: 0.80 mm
- Pose stabilization time, PSt: 0.05 s (to within 0.2 mm of the position)
Main Dimensions

R 172 min turning radius of axis 4

R 337 min turning radius of axis 1
Flexible mounting
Floor, wall, ceiling & tilted (round the Y-axis)

- Wall mounting, max working range for axis 1 is ±40 degrees with max payload and armload. More with reduced loads.
- Max tilting angle for full axis 1 working range is 40 degrees with max payload and armload. More with reduced loads.
- Check with RobotLoad for your specific load case.
Easy to integrate
Customer interfaces

DeviceNet, PROFIBUS or Parallel I/O (CP/CS)

EtherNet/IP or PROFINET

To customer equipment

Air
Easy to integrate
Mechanical mounting interfaces
Easy to integrate
Mechanical mounting interfaces

M6 (x2)

Tool flange

Ø 50 Hole through axis 6

Ø 55 H7 ▽ 10

R

R

Ø 100 h8

Ø 8 H7 ▽ 8

0,05 B C

6x M8 ▽ 10

Ø 80

0,4 B C D

R-R
Easy to integrate
Flexible conduit (option)

Features
- 36 mm diameter empty conduit for user hoses and signal cables.
- Large capacity - less than 30% utilized with 4 air hoses and 4 signal cables.
- Can handle the full working range of axis 4-6.
- The rotation of the conduit follows the rotation of the hoses and cables inside. Can be fixed in the rear (see lower image), free rotation at the wrist end.
- Mounted on delivery or available as spare part.

Benefits
- Much simplified engineering of the cable solution from the rear of the upper arm to the wrist.
- RobotStudio offline programming possible with few or no touch-ups required
- Prolonged life expectancy of hoses and cables when routed inside the flexible conduit.
- Lower cost of ownership.
- Fewer production stops due to cabling issues.
Summary

- **Up to 90% shorter programming time** thanks to a combination of controlled upper arm cabling movements and RobotStudio offline programming with few or no touch-ups.

- **Up to 15% shorter cycle times** vs. the competition thanks to the reduced cabling movements, QuickMove and high accelerations.

- **Drastically reduced costs for upper arm cabling investments** thanks to the flexible conduit, housing the cables and hoses for the end-of-arm tooling.

- **Up to 75% reduced costs for maintenance of cabling** incl. material and production stops savings.

- The first ID robot in its class - with outstanding performance in process applications which reduces waste.

- **Suitable for dispensing and laser equipment** thanks to a hollow wrist diameter of 50 mm to accommodate process equipment.