ROBOTICS

IRB 6660RX / IRB 7600RX

Rotational 7th axis robots for interpress automation

The benefits of traditional robot automation are enhanced by the addition of a rotational 7th axis. Thanks to the 7th axis, the robot keeps the orientation of the part when transferring it from the press to the next. This entails lower inside-press time occupation and better overlapping between loading and unloading robots.

Transfer without part rotation
The parts are transferred in a smooth linear trajectory without the vibration that can be generated by the 180º rotation when using 6 axis robots. Additionally, in case of new lines, as consequence of not having to rotate the part, the inter-press distance can be reduced, minimizing the press-shop floor occupation space.

Rotational 7th axis
The added rotational 7th axis does not consist of a simple translation of the robot's 6th axis, but a real coordinated additional axis which maximizes robot versatility at minimum cost, providing maximum operational flexibility. The servo motor unit is fully synchronized with the other 6 axes of the robot.

User friendly programming interface
IRB6 6660RX, IRB 6650RX, and IRB 7600RX are programmed in the same way as standard 6-axis robots. Furthermore, same as 6-axis robots, they can be programmed with the well-established StampWare platform. StampWare wizard makes programming extremely easy and user-friendly. StampWare is currently running in more than 1000 robot units of 6 and 7 axes, worldwide.

Optimized performance with Carbon Fiber body
The Carbon Fiber body ensures a smooth part transfer, thanks to the stiffness/weight ratio of carbon fiber components.

Main applications
- Press automation

Technical information

IRB 7600RX	
Handling capacity (kg)	80
Reach (m)	3.50 + 1.45

Technical information

IRB 6660RX	
Handling capacity (kg)	70
Reach (m)	3.10 + 1.45

IRB 7600RX

IRB 6660RX

Technical information

Rotational 7th axis	
S – stroke (mm)	1450
L – length (mm)	2038
H1 – height (mm)	465
H2 – height (mm)	200
W – width (mm)	470

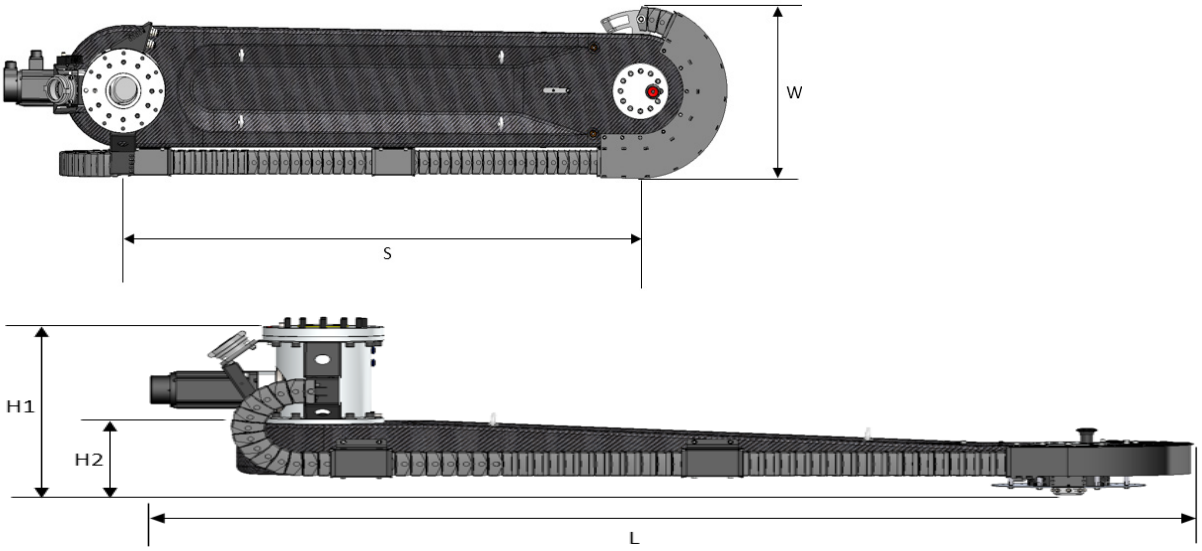

abb.com/robotics

ROB0291EN Rev.C September 2018