

IRB 760 Industrial Robot

The IRB 760 is a palletizing robot perfect for full-layer palletizing. The 4-axis robot can move and rotate large and heavy products at high speeds, and with the utmost care. Its compact design makes it ideal for fitting into existing packing lines.



Shorter cycle times

The IRB 760 is the fastest robot of its kind and is capable of significantly shortening cycle times and raising productivity for full-layer palletizing. This four-axis robot has a reach of 3.2 meters and a 450 kilograms payload capacity, enabling it to lift heavy objects and full pallet layers. With its high torque wrist and long reach it can achieve 880 cycles per hour at full load (400 mm, 2000 mm, 400 mm cycle).

High precision movements

Utilizing ABB's patented motion control software, Quick-Move™ and TrueMove™, the IRB 760 ensures palletizing is carried out with smooth movements and high path accuracy. This means even the most sensitive products will be handled with great care without losing cycle time.

Low cost of ownership and increased productivity

The robot's robust and rigid design – manufactured to automotive industry standards – ensures high uptime and low maintenance costs. The IRB 760 also features integrated process cabling which helps extend life and reduces wear. We also offer RoboCare, a three-year warranty package, that ensures worry-free operation of your robots at a fixed cost. This package includes the patented ABB wireless Remote Services, which enables ABB experts to monitor robots and suggest optimized maintenance to further increase productivity.

Faster, easier programming

The user-friendly software, RobotStudio with Palletizing PowerPac – which runs on a regular PC – lets users who have no robot programming experience create programs and simulations; and design palletizing installations. The software is used to “configure” palletizing systems rather than program them and reduces programming time by up to 80 percent.

Unrivalled experience and global support

With more than 25 years of experience in the palletizing sector, ABB is a multinational corporation that has a sales and service organization in 53 countries and over 100 locations.

Complete palletizing solutions

By combining the IRB 760 and RobotStudio with Palletizing PowerPac you get the fastest robotic full-layer palletizing system in the world. With both elements working together path accuracy is optimized to ensure that your products will not only be handled very fast, but also with the utmost care. With an ABB robot solution palletizing will never be a bottle neck; either now or in the future.

IRB 760

Main applications

Full layer palletizing, palletizing, depalletizing, material handling

Specification

Handling capacity	450 kg
Reach	3.18 m
Number of axes	4
Protection	IP67
Mounting	Floor
IRC5 controller variants	Single cabinet, Dual cabinet
Integrated power signal supply	Optional
Integrated air supply	Optional

Physical

Dimensions robot base	1140 x 800 mm
Robot weight	2310 kg

Performance (according to ISO 9283)

Position repeatability (RP)	0.05 mm
Path repeatability (RT)	0.80 mm

Movement

Axis movements	Working range	Maximum speed
Axis 1	+180° to -180°	85°/s
Axis 2	+85° to -42°	85°/s
Axis 3	+120° to -20°	85°/s
Axis 4*	+300° to -300°	160°/s

* +67 rev. to - 67 rev. max

Electrical connections

Supply voltage	200-600 V, 50-60 Hz
Power consumption	ISO cube 2.75 kW

Environment

Ambient temperature for mechanical unit:

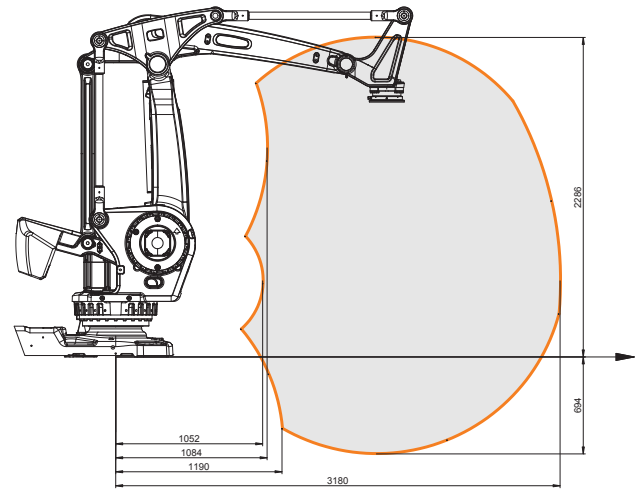
During operation	+/- 0°C (32°F) to + 50°C (122°F)
During transportation and storage	- 25°C (- 13°F) to + 55°C (131°F)
For short periods (max 24h)	up to + 70°C (158°F)
Relative humidity	Max. 95%
Noise level	< 70 dB (A)

Safety	Double circuits with supervisions, emergency stops and safety functions, 3-position enabling device
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Emission	EMC/EMI shielded
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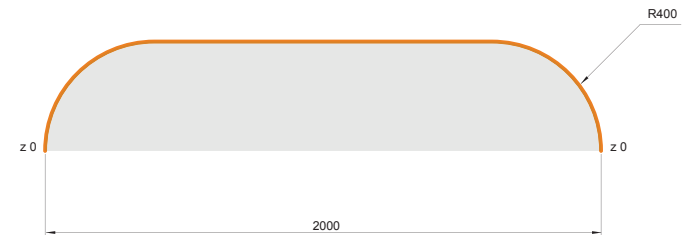
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Working range



Cycles per hour

Load	Cycles per hour
60 kg	1500
450 kg	880



Standard palletizing cycle