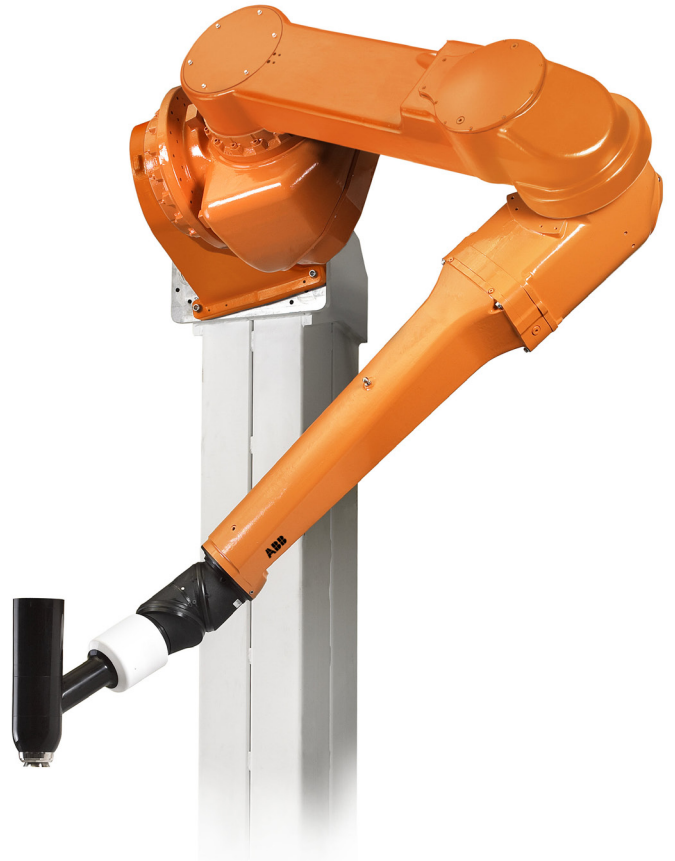


IRB 5500

The new automotive painting concept

The unique design and configuration of the IRB 5500 FlexPainter allows the robot arm to move parallel to both vertical and horizontal surfaces with minimum booth size requirements. Combined with a large working area and high acceleration and painting speed, the result is the most efficient and flexible painter of any exterior car body paint robot.



Saves cost

With its large work envelope, unique configuration and high acceleration, the IRB 5500 FlexPainter significantly reduces the number of robots needed in a spray booth. This lowers the investment cost as well as the running- and operation cost. This means reduced cost, both initially and in the long run.

High uptime

With fewer robots, you get improved reliability of your complete automation system. This is further enhanced by an optimized robot design with 50% reduction in number of parts and 40% reduction in weight. The unique flexible mounting, combined with the large work area, also means that no rail is needed. It all adds up to more uptime and reliability.

Less atomizers, higher flow

The IRB 5500 FlexPainter is designed for high flow atomizers. ABB's Cartridge Bell System (CBS) is the most efficient solution, with close to zero paint loss during color-change. The combination of ABB's high flow, RB1000 atomizers and the acceleration and speed of the IRB 5500 provides superior performance and high finish quality.

Saves space as well as the environment

The IRB 5500 FlexPainter is elevated and mounted on the wall. This saves space in the spray booth and makes the robot perfect to fit into existing, narrow spray booths (and ideal for replacing side- and top machines). For new booths, it enables reduced booth length and width, resulting in reduced air handling volume and reduced emissions.

IRB 5500

The new automotive painting concept

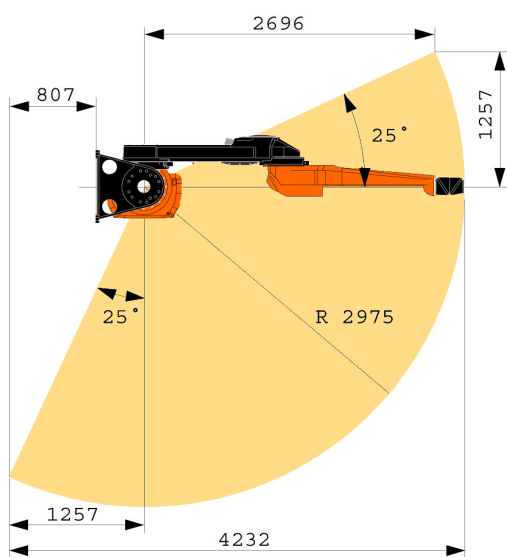
Specification

Number of axes	6 axes
Payload on wrist	13 kg
Robot mounting	Wall, floor, tilted, inverted
Ingress protection degree	IP67 (wrist IP54)
Robot unit ambient temperature	+5 °C to +45 °C*
Relative humidity, non-condensing	95 % maximum
Robot footprint	500 X 680 mm
Robot unit weight	540 kg
Ex classification	II 2 G Ex ib px IIB T4 II 2 D Ex pD 21 T65°C FM Class I,II. Div.1, Group C,D,G 135 °C
Robot controller ambient temperature	+48 °C maximum
Robot controller size (H x W x D)	1450 x 725 x 710 mm
Robot controller weight	180 kg

*Recommended max ambient temp <30°

Performance

Work area	See work envelope drawings
Velocity	Max speed
Axis 1, 2 and 3	100°/s
Axis 4 - Wrist rotation	465°/s
Axis 5 - Wrist bend	350°/s
Axis 6 - Wrist flange rotation	535°/s
Wrist work envelope	±140°
Static repeatability	0.15 mm



Designed for painting



The IRB 5500 uses IRC5P, the new generation paint robot control system, specifically designed for the paint shop, with its user-friendly Ex certified FlexPaint Pendant.



RobView 5, the customizable PC software for paint cell supervision and operation to manage and run your paint installation, is included with every IRB 5500 paint robot.

PC Tools

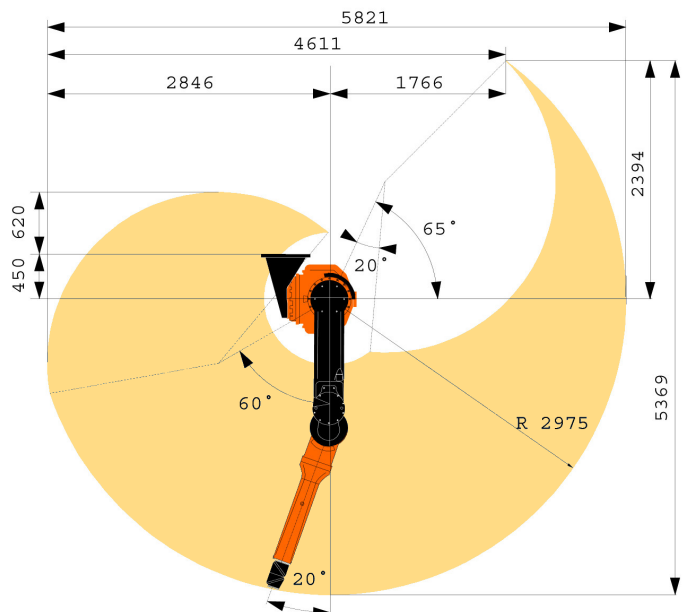
RobView 5	Paint cell supervision and operation (included)
ShopFloor Editor	Off-line path- and process tuning using 3D graphics
RobotStudio Paint	Full 3D simulation and programming of the paint cell

Electrical connection

Mains voltage	200 - 600VAC, 3-phase, 50/60 Hz
Electrical safety	According to international standards

Interface

Backup	USB connection and Ethernet
I/O boards	Analog, digital, relay, 120VAC, encoder and process I/O boards available
Fieldbus support	Interbus-S, ProfiBus, Profinet, CC Link, DeviceNet and Ethernet IP available
Network	Ethernet FTP/NFS



Information may be changed or updated without notice