IRB 540-12
A Cost-effective Solution

Gain an Edge on the Competition

The IRB 540 is a user-friendly and smart paint robot, using the same technology as the other ABB robots. It will maximize your paint performance and minimize your cost. This robot delivers constant high finish quality and reduced over-spray, thus reducing material consumption and waste.

Our solutions draw on over 30 years of paint process know-how and experience to address your requirements for lower costs, higher finish quality and reduced emissions.

User-friendly

The user-friendly IRB 540 is a fully balanced, streamlined robot with a unique patented FlexiWrist that is designed for easy manual programming (Point-to-point and Continuous Path). You simply move the robot by hand to the desired program point, press the trigger button and the system will write the RAPID program instruction (PaintL), it will number the program point and store the position. Then you enter test mode, and let the robot run through the program while you select the desired set of paint parameters at the specified positions.

State-of-the-art Technology

State-of-the-art motor, motor drive and transmission technology gives the IRB 540 high speed and acceleration. The resolvers are integrated in the motors, resulting in a slim design and reduced need for access.

ABB’s proven standardized technology provides high-quality finish for all powder, solvent and waterborne paint processes, however complex the product shape. Our solutions also include processes for difficult materials such as glaze, enamel, shield material and adhesives.

Global Controller Platform

The S4P+ Controller is modular and designed to the highest level of operational reliability. Because of ABB’s Global Controller Platform training, service and engineering costs can be significantly reduced.
TECHNICAL DATA, IRB 540-12

### MACHINE INTERFACES

- **Digital inputs/outputs**: 512/512
- **Analog inputs/outputs**: 16/12
- **Remote I/O**: Interbus-S 64/64
- **Profibus DP 128/128
- **Serial Channels**: RS-232, RS-422, RS-485
- **Network**: Ethernet NFS/FTP
- **RAP Robot Application Protocol**
- **Factory Ware interface**
- **High Speed IPS link**
- **Real Time data logger**
- **DDE server**
- **Diskette drive**: 3.5” MS-DOS format

### BASEWARE

**BaseWare OS**
- Robot Operating System, multitasking capability
- **RAPID**
- Powerful application programming language
- **Conveyor Tracking**
- Accurate synchronization of robotic motion, paint process regulation and the moving part for both linear and circular tracking in any direction

### PROCESSWARE

**APR**
- Analog Paint Regulation to atomizer.
- Fluid, Air and Electrostatic control.
- **IPS**
- Integrated Process System. Unique system for closed loop regulation and high speed control for paint and air flow adjustments. Based on open, flexible and adjustable architecture philosophy.

### PC TOOLS

**CAP**
- A Computer Aided Painting package containing ShopFloor Editor and RobView.
- **ShopFloor Editor**
- Off-Line editing of programs using 3D graphics for path and process tuning.
- **RobView**
- Monitoring of robots and process in production. Easy design of user screens.

### WORKING AREA

For information on “Small 540” see separate Data Sheet
Data and dimensions may be changed without notice.

www.abb.com/robots