MEETING YOUR DEMANDS

Consistently achieving an ever greater degree of efficiency and minimizing downtime are the major challenges of today’s manufacturing processes. To meet these demands effectively, ABB’s solutions are based on an extensive knowledge base of development, design and manufacturing know-how. The range of standard packages is designed to increase productivity, enable you to concentrate on your core activities. We aim to be your reliable partner in reducing your operational costs.

Tailored solutions

ABB Flexible Automation provides flexible tailored solutions within focused application areas. Based on function packages and standardized components, our systems utilize high-performance, cost-effective robots. Supported by a special design for glazing, our systems ensure accuracy and productivity. Supported by a special dosing device for glazing, even flow over the entire surface will be achieved every time you operate. Consistently achieving an even glazing is difficult even for the most experienced worker. With an ABB glazing solution, you will get a perfect film build every time.

Expertise and services always on your doorstep

No matter where in the world you operate, there will be an ABB Flexible Automation Centre nearby, offering engineering expertise, service excellence, and manufacturing know-how. Our range of standard and customized solutions is designed to increase uptime and improve productivity, enabling you to concentrate on your core activities. We aim to be a key resource.

ABB Flexible Automation Centres

India
Asea Brown Boveri Ltd., Calcutta 33 470 1811, Bangalore 80 839 5181

Brazil
Asea Brown Boveri S.A., São Paulo 05 571 3225, Brasília 07 3452 3366, Belo Horizonte 31 3356 5101, Porto Alegre 51 3236 7988

Argentina
Asea Brown Boveri S.A., Buenos Aires 11 423 7755

Australia
ABB Zamech, Sydney 02 8223 2200, Melbourne 03 9690 2222, Brisbane 07 3844 2222, Adelaide 08 8223 2222

China
ABB Flexible Automation Ltd., Shanghai 21 6485 5648

Japan
ABB Industry KK, Tokyo 3 5482 2210

Korea
ABB Zamech Ltd., Seoul 2 5283 0700

Canada
ABB Canada, Toronto 416 599 2222

USA
ABB Zamech Ltd., Chicago 312 579 2222, Los Angeles 213 675 2222, Houston 713 529 2222

UK
ABB Flexible Automation Ltd., Milton Keynes 01908 350300

Specifications

IRB 540

Technical data

Weight
Robot unit 670 kg
Robot base W 780, D 800
Operator panel In cabinet or external

Environmental conditions
Operation temperature 35°/10° C
Storage temperature -50°/10° C
Relative humidity Max. 95%
Ambient temperature 25°/10° C

Electrical safety
According to international standards

Safety
Robot controller 5 - 52° C
Robot unit 5 - 45° C

Power consumption
max. 4kVA

Electrical connections
Axis movements
1. Rotation 300° 120°/s
2. Arms 180° 120°/s
3. Arms 160° 120°/s
4. Arm 170° 200°/s
5. Bend 170° 300°/s
6. Turn 360° 700°/s

Applications
For the most experienced worker. With an ABB glazing solution, you will get a perfect film build every time.
Gain an edge on the competition

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

More user-friendly robots

Paint technology is a fast growing segment throughout the world. In the paint application field we offer solutions to a wide spectre of customers in sanitary ware, furniture, two-wheelers, electronics, agricultural and heavy construction equipment.

Our total paintshop solutions include robots and atomizers, spray booths, paint handling equipment etc. ABB Flexible Automation’s proven standardised technology provides high-quality finish for all powder, solvent and waterborne paint processes, however complex the product shape. Our standardised solutions also include dedicated processes for difficult materials, such as glaze, enamel, shield material and adhesives.

Leading edge technology

Based on our paint process know-how and leading edge technology, we are able to offer low per unit production costs, full service and standard system solutions worldwide.

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"After the initial setup and training, the flexible SAP controller simplifies programming and provides great adaptability to my specific needs. It’s a superior and reliable performer, and combined with the high quality of the ABB robots I have endless possibilities."

This is John Bjerrum Nielsen’s impression of our S4P possibilities. He is the production engineer at Bang & Olufsen, who has been using the S4P controller for the painting of plastic parts to Bang & Olufsen. Bang & Olufsen have over 20 years experience of paint spraying robots, which are ABB robots.

SAP Controller - Features & Benefits

The SAP (industrial Robot Controller) is a highly configurable modular system that will deliver superior performance in your applications. Plain language communication reduces the risk of misunderstandings and errors.

RobotWare software products

RobotWare is a family of software products designed to increase your productivity and lower your total cost of owning and operating robots. These products represent the most powerful set of robot tools available - tools you can depend on to help you, no matter what job you are doing and regardless of your level of experience.

A fully adaptable system for different needs

The system is easy to use for the operator, powerful for the programmer and accessible for maintenance personnel thanks to the powerful RAPID™ robot language and the extensive functionality available in the PaintWare™ software.

Extensive communication capability for integration and control

The controller contains fieldbus and serial channels for PLC and PC connections. Using the distributed I/O system, I/O devices can be placed separately, e.g. in a pneumatic cabinet. Robot control from a PC is possible using Ethernet, and a number of alternative fieldbuses are available for distributed devices.

Superior reliability

The S4P is designed to the highest level of operational reliability. The electronics and drives are mounted in a shielded ventilated cabinet with the drives fully protected against dust and dirt. Error recovery procedures and low energy consumption secure a high reliability.

User safety

User safety is designed into the S4P with multiple safety interlocks, easily accessible emergency stop, circuit status signals, 3-position enable device and plain language text messages on the programming interface. The operator can also be directed to appropriate recovery actions.

Total Support

As with all ABB Flexible Automation products the S4P is supported by a worldwide organisation, round the clock. Never more than a phone call away, the local team is your guarantee that you get maximum availability from your robots.

New Dosing for Glaze and Enamel

Our dosing unit secures a high quality finish with a consistent film build. Accurate volumetric dosing, optimised spray patterns and brush changes in the programme will reduce your material consumption. High capacity regarding flow at high viscosity and low demands on fluid supply pressure provide flexibility. The unit is based on proven technology consisting of a peristaltic pump solution, standard robot servo drive, tested design, and fast commissioning on site. There is one controller for motion and dosing, and the process is synchronised with the path. The brushes are user-optimised, and there is no need for separate calibration. Rugged design and well-proven components contribute to a high uptime. Minor clogging is handled without rejected products, and little monitoring is needed during production. There is no risk of fluid overflow and the system is easy to clean and maintain. Long intervals are permitted between preventive maintenance jobs.