

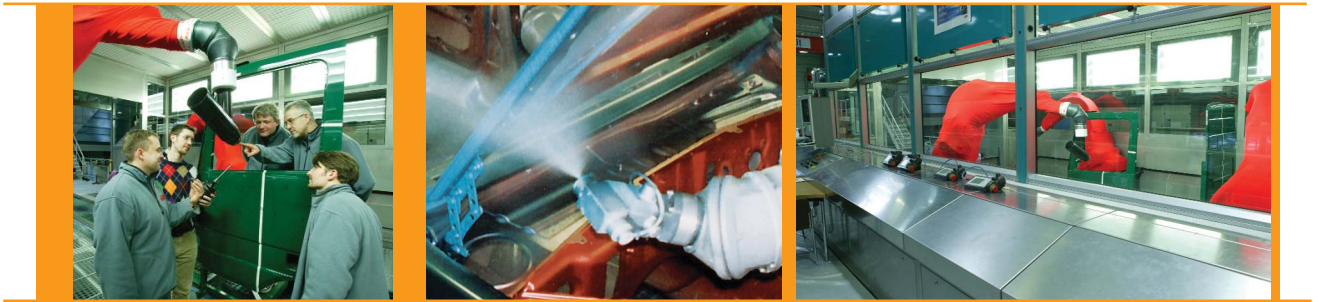
Paint process automation

High quality, product savings and high production capacity

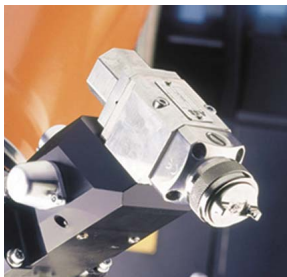


ABB

Multiple skills at your service



ABB, an expert in robotized paint application, develops robots as well as a full range of spraying equipment in order to obtain optimum result in terms of overall quality. Our objective is to reduce your overall production cost by helping manufacturers to reduce product consumption and the number of machines.



Finish quality

By combining application technologies (bells or guns), control of spray parameters and robots, ABB offers optimized solutions to reach the overall quality needed by consumers whatever the type of applied product - solvent, water-born or powder, single or double components. Our research laboratories allow us to develop new processes by testing them.

increasing paint transfer efficiency. This technology has a significant impact on reducing operating costs, solvent emissions and their treatment.

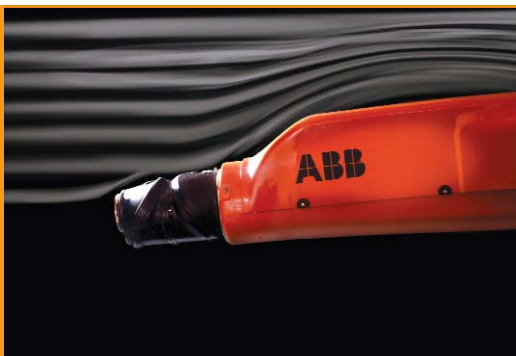
Production capacity increased

The increase of robot and applicator performance reduces the number of machines, and in turn decreases the investment while increasing the overall reliability of your production tool.



Low operating costs and environmental protection

The main advantage of using robotics for paint application is the reduction of paint product consumption by monitoring the spraying process. This system allows applying only as much paint as is absolutely necessary for the part. Moreover, the ABB applicator technology offers high performances,



Some figures

- 10,000 ABB paint robots installed worldwide
- 160,000 ABB robots installed worldwide in all applications
- 4 lead centers for Systems development and solutions in surface treatment: France, USA, Germany and Japan
- Presence in more than 27 countries including Customer Service organization

ABB commitment is to use its expertise to reduce emissions and



Savings for you

Get a high overall finishing quality!

Efficient process equipment

One of ABB's excellence areas is the development of spraying equipment such as the new series of bells called Robobel 1000. This product is able to:

- Quickly adapts its spraying size to the surface to be painted
- Spray twice as much product as previous atomizers
- Reach 70,000 rpm to improve spraying fineness and quality

A complete robot range

For paint applications, all robots working in explosive area meet EX norm.

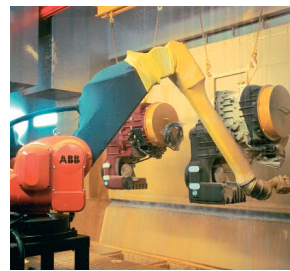
ABB robots, associated with their controllers, reach high speed and

acceleration, thus ensuring a uniform coating of the surface. Wrist payload capacity may reach up to 25 kg.

Software for process optimization

Simulation and off-line programming software such as RobotStudio, or production software like ShopFloor Editor, provides a real advantage by optimizing the application and saving time in robot programming and operating.

Optimize you



operating costs by providing optimized products, solutions and services.



our solutions!

Know-how through ABB lead centers

ABB lead centers, in close collaboration with their customers, develop optimized solutions that meet the needs of different industries. Their research laboratories develop and test processes. Our engineers are constantly searching for new concepts to offer you the best solution taking into account overall cost, quality and production capacity.



Turnkey solutions

Based on our products and know-how and according to our partner's needs and expertise, we provide complete solutions from the can of paint to the painted surface, ABB's complete painting line includes:

- Paint preparation and distribution,
- Robotized applications
- Booths, conveyors and ovens
- Integrated VOCs treatment systems – air recycling process.

Various processes for different markets

Automotive & Truck: Sealing, paint application (liquid or powder) and cavity waxing.

Plastics: Wiping, degreasing and flaming, painting, colorimetrics control, cutting, gluing and gel-coating.

Aeronautics, boat, public works, farm equipment, furniture,

sanitary: Liquid or powder coating, sealing, gel-coating, simultaneous screening and enamelling.



Improve your productivity!

ABB offers a full range of services to ensure production uptime and best performance to your robots and robotized installations.



Training and skills

- Products / process training in our approved training centers or on customer sites
- Complete training plans, audits and skill management



Field Service

- 24/7 technical support
- From Assistance to Service contracts
- Predictive maintenance with the help of a tracking tool



Parts and logistics

- Availability of parts guaranteed
- Cost optimization by using new parts, replacement parts or repaired parts



Refurbishment and second-hand robots

- Refurbishment of robots
- Replacement of robots and carry-over



Productivity improvement projects

- Analysis of your applications to increase productivity, optimize and update installation
- Remote services



Performance enhancement contract

- A full range of contracts dedicated to optimize the overall efficiency of your equipment (EEO)
- Consultancy for maintenance and reliability

Statements from our customers

ABB implements
its expertise to
offer a high
overall quality,
optimized
solutions and
improved
productivity.

Bumper



**Meridian Automotive
Systems
USA**

"ABB solutions for paint process represent a great value for Meridian. The overall costs of owning and operating are key elements when it comes to choosing our partners in paint systems."



Automotive



**Proton
Malaysia**

"We have shown a 35% reduction of paint used. When the paint supplier asked me why we suddenly had reduced the amount of product ordered, I explained that it was thanks to ABB's paint system."



Computer



**Flextronics
China**

"We strongly believe that this is the beginning of a long-term collaboration where ABB and ComPal will form a very competitive team."



Hydraulic pump



**Casappa
Italy**

"By decreasing the overspray, we also reduced management costs and emissions. The fact that the system is so easy to use - in terms of robot programming and maintenance - also enabled us to simplify the structure of our paint workshop."



Furniture



**NorDan
Norway**

"Automation by ABB of our production perfectly meets all our demands and requirements. Product quality is much better than expected, we save a lot of paint and our deliveries are now under control. Above all, our forecast return on investment has been met."



Over the last three decades, ABB has remained committed to building and strengthening relationships with customers, integrators and partners throughout the world. Underpinning this commitment is our belief that at the heart of innovative robotics lie mutual trust and confidence.



This belief has helped us to achieve clear leadership in a demanding field. Today, in the automotive, metal fabrication, foundry, plastics and consumer industries, our wide range of products and solutions help to pave the way for optimised production. Across the world, our global network of sales and service centres, and our carefully selected partners, make ABB products, systems and services available wherever they are needed.

Welcome to ABB



www.abb.com/robotics