ABB – The heart of Robotics
Welcome to the heart of Robotics

It has been more than 30 years since ABB installed the first microprocessor controlled robot. But even before that anniversary, we reached another milestone as the first robot supplier to install 100,000 robots worldwide. With such long experience and hard-won expertise behind us, it’s no wonder we are at ‘The heart of Robotics’.

We’re at the heart of Robotics, but what lies at the heart of ABB?

Although we’re a global leader in the field – with all the associated benefits of size and resources – at our core is a commitment to building strong customer relationships, whatever the scale of the contract.

Whether we’re undertaking a major robot installation or a simple parts replacement, our approach to our customers and to the job in hand remains the same.

Reliability in every respect

Just as you can rely totally on our products and solutions, you can rely totally on us too. Whenever and wherever you need us, and whatever you need us for, you can be sure that we will do whatever it takes to deliver.

And as we’re the leader in our field, you can be sure that the solutions we provide are based on state-of-the-art technology – giving you a real competitive advantage. We’ll enable you to adapt quickly to changing market requirements, and increase your production flexibility. However, in the race to stay ahead, we never compromise on safety.

So when you choose ABB, you can be completely confident that you’ve chosen the right solution and partner for your business, for your profitability, and for the long term.

Robots ready when you are

Because we’re driven by our customers’ needs, we not only design and build robots. For customers who want to start automated production as soon as possible, we can also supply standard robot and software solutions as ready-to-use cells for many applications. These packages include:

- Spot and arc welding
- Finishing and painting applications
- Mechanical and waterjet cutting
- Material handling and machine tending

“ABB has been a valuable partner due to its strong local presence and multi-skilled processes.”

Celso Salles, Ford Engineering Manufacturing Manager
Partners you can trust

Only the very best companies can match our quality and expertise, and our customers’ expectations. So to ensure you receive optimum service and complete satisfaction in every aspect of your robot automation programme, ABB has established a global network of approved partner companies, including system integrators, machine builders, and distributors.

They not only have long experience of integrating ABB products into production processes but also share our values, and focus on your satisfaction above all else.

As our partners, they benefit from our training and access to our knowledge and information resources, making them as well-equipped to work with ABB products and systems as we are ourselves.

So when you deal with any one of our global partners, you can expect the same high standards as when you deal with ABB.
Systems and Solutions to increase productivity, quality and profitability.

Whatever your industry or application, and wherever you are, our engineering teams and global network of approved partner companies ensure you’re never too far from an ABB solution to increase productivity, enhance quality and boost profitability. The flexibility of ABB robots and systems – and the breadth of our expertise and our partners, is demonstrated by the range of industries in which our products can be found:

### Industry Applications

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Undoubtedly robot-based automation...has given us major cost savings and competitive advantages in the market place.

Stephen Hobbs, Rittal
Understanding your industry
Our close customer partnerships ensure we understand the processes involved in a huge variety of applications. And our experience gives us an unparalleled expertise, enabling us to develop the technology to deliver the most efficient and cost-effective robot, controller, and controller-based software solutions.

Integration for maximum efficiency
ABB hardware and software is easily and effectively integrated to create highly efficient manufacturing systems – systems which not only increase productivity but also enhance quality and boost profitability.

Whether through our standardised products or pre-tested modular solutions, off-the-shelf or specially designed and manufactured, together with our partners we can provide the system to suit your needs. And our project management expertise ensures that – whatever the system – your time, resource and quality issues will be fully addressed, to deliver the project on time and budget.

Global competence, locally accessible
If you have a robotics problem, you want fast, local assistance. But when you have a broader need – perhaps an innovative solution for a new application – you want the resources and expertise of a major global organisation. With ABB, you get both.

Our Lead Centres are centres of excellence, encompassing engineering expertise, service excellence and local industrial manufacturing experience – all able to call on the worldwide resources of ABB. Additionally, for large automotive systems, we offer:

Press Automation – comprising standardised products and pre-tested modular solutions, guaranteeing a continuous and steady flow from stack to rack and moving parts faster for less.

Paint Automation – world class sealing and paint finishing, high efficiency and environmentally conscious paint shop solutions.

Body and Component Assembly – standard modules deliver high uptime, lower life-cycle costs, shorter lead times and high flexibility.

Powertrain Assembly – ‘plug and produce’ solutions from machining cells for engine components to the powertrain assembly line.
From the heat and heavy weights of an iron foundry, to the precision and speed of an automotive production line, or the sterile conditions of a pharmaceutical installation, our robots are ideal workers – and help to improve conditions for their human counterparts.

We wanted to move forward to stay ahead of the competition. Now our productivity has risen enormously and we have reduced commissioning time for new products by 90%. 

Mario Smink, Manager, Equipment and Infrastructure, Polynorm.

Robots
Being the only supplier of industrial robots with mechanical units ranging from 2kg to 650kg, our range truly covers the whole spectrum of operating environments. With a well-deserved reputation for reliability, hard work, fast working cycles and superior accuracy.

Available for various mounting positions, ABB robots' wide range makes them suitable for the most demanding or arduous environments.

Robot controller
Our Industrial Robot Controller (IRC), can control a wide range of industrial motions, faster, more flexibly and with more uptime than any comparable controller. And our latest IRC5 controller can control up to four robots at once, allowing for independent or co-ordinated control, to cut cycle time, increase flexibility and improve profitability.

Controller software
Our controller-based software is effective and easy to use, because it utilises RAPID: its own language and one of the most powerful robot tools available. Together with BaseWare OS robot controller software and ProcessWare application-specific software, this enables ABB robots to operate quickly, accurately and reliably.

ABB PC-based RobotStudio and WebWare software is designed to enhance ease-of-use and add value. As well as off-line programming, robot simulation and remote operation the software can accurately predict the true outcome of a process or cycle, reducing the engineering and start-up time considerably.

Products of the future
As the first robot manufacturer to install 100,000 units, we continue to innovate. In fact, through our advanced designs and manufacturing techniques, we’re delivering the products of the future today.
To give you complete confidence in our robots and robot-based systems, we provide a comprehensive portfolio of services from installation to operation, as well as maintenance and optimisation.

Our support is more than just reactive. By addressing Overall Equipment Effectiveness (OEE), we can help to increase the productivity and performance of our products in your business, and help you to realise the return on investment in your robot equipment.

We can assess the issues affecting your business, then identify productivity improvements and operating cost reductions which would meet your specific requirements.

We provide you with real-time performance measurement and analysis, helping you to adjust production equipment procedures to improve efficiency. And we can ensure that your inventory is managed efficiently and cost-effectively, with our inventory tracking and management system.

You can create your own ABB support package from the following modules:

**Parts & Logistics**
Combining local availability and a global logistics network. Ensures both new and exchange parts are delivered when you need them, without delay.

**Field Service**
A team of qualified service engineers: the largest field service support resource in the industry. Meets guaranteed response times in the event of breakdown. Also provides preventative maintenance. A choice of standard and flexible agreement like 24/7 technical support.

**Training**
Hands-on training at dedicated Training Centres, and tailored training delivered on your site.

**Productivity Improvement Projects**
A full review of your processes and applications, with the aim of increasing production, improving quality and reducing costs. The option to buy or lease fully reconditioned, pre-owned ABB robots, with full warranties, if a large capital investment cannot be justified.

**Performance Services Contracts**
Total robot management provides you a warranted OEE (Overall Equipment Effectiveness).
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 helps 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’re needed.

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