Our mission
The Process Automation division provides its customers with products and solutions for measurement, control, automation, and optimization of industrial processes. It enables customers from different industries to increase their efficiency and simultaneously decrease impact on the environment.

Pioneering technologies
We are pioneers and leaders of a wide range of technologies in the area of automation, which form the basis of our modern society. We dispose of a unique know-how and expertise:
— ABB supplied one of the first control systems in the world at the beginning of the 1980’s and continues to maintain its leading position on the market. We are the leader in the area of distributed control systems (DCS).
— We have also been developing, supplying, and installing measurement products and solutions for more than 100 years.

Unique portfolio and know-how
— We have our own engineering know-how proven by a number of successful projects all around the world.
— We offer a unique range of products and services for the pulp & paper industry including DCS, drives, quality control systems (QCS) and measurement products.
— We globally dispose of the largest service portfolio in the area of automation.
— We have the widest global installed system base for process automation.
— We also dispose of a large installed base of products for measurement & analytics including more than 1,000,000 installed flowmeters worldwide.
— We supply reliable solutions proven in space, sea bottom as well as everywhere in between.

Industrial segments
Optimization of production processes
We help our customers from different industries to optimize their processes and increase efficiency.

2 global centers
for process automation
Except the responsibility for domestic market we have 2 global centers in Ostrava represented by Operation Center and Regional Execution Center for pulp & paper.
Process Automation in the Czech Republic

Process Automation (PA) has a long tradition in the Czech Republic, well-proven by more than 20 years of experience and successful projects in the Czech Republic, Europe, and in other parts of the world. We currently employ almost 300 employees and work in 3 locations:
- Prague, Vyskočilova
- Ostrava, 28. října
- Most, Josefa Ressla

Operation Center Czech Republic (CZOPC)

It was found in 2002 based on ABB global initiative and it supplies engineering services throughout Europe, but fast developing center for supply chain management is also a part of it. The center was established as a small unit with 5 employees, yet now has more than 220 employees. In recent years it has doubled the range of services provided in the engineering area, and the number of employees has increased accordingly. Moreover, the CZOPC now also supports the development of control system for BU Marine and participates in the supply of a number of other services and systems in Europe and other parts of the world.

Regional Execution Centre for pulp & paper (REC)

This is a centre for the paper industry in Europe, the Middle East, and Africa. It was found based on ABB global initiative combining Czech center for quality control systems and Finnish center for drives. The ABB systems offer for the pulp and paper market includes the main drives for paper machines (PMD), systems for the Collaborative Production Management (CPM), quality control systems (QCS), distributed control systems (DCS), and web imaging systems (WIS). The centre in Ostrava is responsible for QCS, DCS, WIS and drives projects with the use of ABB products.

Export

TOP 5 in export

We supply successful solutions all around the world. The most important export countries: Norway, Finland, Germany, France and Great Britain.

- Finland
- Norway
- Great Britain
- Germany
- France

PA division on local market

We also are active on the local Czech market. We provide our customers with process automation systems and solutions including supply of control systems, drives applications, and complex automation solutions for technological processes. We are also a well-proven supplier of a wide choice of products for measurement & analytics ranging from temperature, pressure, flow, level, and force sensors through drives, controllers, recorders to complex deliveries in continuous gas and liquid analysis area.

Development in the Czech Republic

The Ostrava facility has recently moved to the Nova Karolina Park building in the city centre. These new premises in Ostrava offer a better background for further development in the region.

A significant proportion of our funding is also invested in the development and education of our employees at all levels. We are also certified as ABB University Center in Ostrava for System 800xA training focused on operations, maintenance, engineering and configuration. Qualification and building the expertise and skills of our employees are key factors for achieving the quality of our provided services.

Employee development

High quality of our services

Education and expertise of our employees is key for us.
Complex solutions for automation
We provide complete portfolio of automation solutions to increase quality, efficiency and accuracy to industrial processes ranging from the simplest to the most complex, including aughters service. This includes control systems, measurement products, variable speed drives, motors and generators.

Managing complexity in industrial processes
Automation systems and industry environments are growing increasingly complex. Consequently, thousands of products and systems must work together seamlessly. We offer you solutions which help manage complexity in industrial processes.

— Control systems which enables to consolidate DCS, SCADA, PLC connectivity for plants with a mix of control system types and vendors
— Batch control over dynamic recipe parameters and all tools to achieve quality, including simulation support for all phases of the plant life cycle
— Decision making support via visualization and analysis of operations data in real time

Managing risk and helping keep plants safe
Managing risk and ensuring timely deliveries, as well as controlling costs and maintaining a budget, are some of the key challenges. Cyber security is another concern. We are a partner to ensure high levels of system performance, helping you benefit from a long-term strategic approach to automation and using of our solutions:
— Plant safety systems – portfolio of safety systems with TÜV certification
— A common system for both process and power substation automation for removing people from electrical danger
— Cyber security - modular approach from built-in DCS security to fundamental & enhanced security offerings
— Safety critical instruments - sensors, valve positioners and actuators with high integrity level (SIL), increased safety motors with protection type Ex ‘e’

Managing risk
Keep plant safe
Sophisticated solutions for safety systems in order to eliminate risks in production

Solutions to increase operational effectiveness
We help our customers to sustain capital productivity and utilize assets while adhering to local environmental and emissions regulations. Our solutions enable integrated operations while guaranteeing optimal operator effectiveness and productivity:
— Advanced alarm management, video, extended operator workspace, control room design, mobile solutions for operator effectiveness
— Integration of process and power systems together with system for energy management reducing operational costs and bringing energy savings
— Variable speed drives eliminating losses in energy chain, motors reducing energy costs and emissions

Tailor-made solutions to meet every requirement
We are able to tailor our solutions to the specific needs and requirements of your industry. We provide industry specific products, solutions and services. Our engineers maintain the highest levels of expertise on the automation and electrical equipment and processes used in your industry.
Successful local projects

Project in Mondi Štětí a.s. constitutes control system reconstruction in caustification which is one of the key processes in regeneration i.e. recovery of basic chemicals used in pulp & paper production. System 800xA replaced previous system used from the 1990s.

Project in Českomoravský cement a.s. constitutes a reconstruction of control and operation of distribution control for main substation, including 800xA platform and AC 800M controllers as well as visualisation. 800xA breaks barriers of traditional DCS and enables complete integration of power and automation systems. This part was followed by reconstruction of operator, engineering and management interface of control system for production technology.

Scope of delivery for Unipetrol RPA, s.r.o. is distributed control system for ethylene unit. It includes modernization of the system - replacement of ABB Advant for MOD with 800xA for MOD. It wasn’t just simple replacement of old HW and SW with new ones, but it includes gradual extensions as required by technology modernization as well as improvements in organization and quality control.

Successful global projects

We help the world’s largest underground copper mine in Chile located about 2,300 meters above sea level to be more efficient. ABB solutions help the mine increase overall efficiency, availability, reliability and productivity. Conveyor systems with electrical drive solutions will extend the mine’s operation for another 50 years.

We also work on project for unique floating, production, storage and offloading unit (FPSO) in the Barents Sea which not only extracts the oil and gas but it also enables storage and processing. ABB’s reliable integrated automation and electrical solutions help our oil and gas customers to run their operation in a safe, efficient and sustainable way, and increase offshore productivity and energy efficiency.

Our customers

TŘINECKÉ ŽELEZÁRNY, a.s.; ArcelorMittal Ostrava a.s.; BRUSH SEM s.r.o.; Mondi Štětí a.s.; Unipetrol RPA, s.r.o.; Českomoravský cement, a.s. and many others.

Our solutions are successful in space, sea bottom and everywhere in between