

# ABB Group

## Introduction of ABB Czech Republic

# A global leader in power and automation technologies

## ABB Group

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- Headquarters: Zurich, Switzerland
- About 135,000 employees in around 100 countries
- Orders received in 2015: 36,4 billion USD
- Revenues in 2015: 35,5 billion USD
- Listed on Stockholm, Zurich & New York exchanges
  
- 4 divisions:
  - Power Grids
  - Discrete Automation and Motion
  - Electrification Products
  - Process Automation



# ABB's vision

As one of the world's leading engineering companies, we help our customers to use electrical power efficiently, to increase industrial productivity and to lower environmental impact in a sustainable way.



**Power and productivity for a better world**

# Power and automation are all around us

You will find ABB technology ...

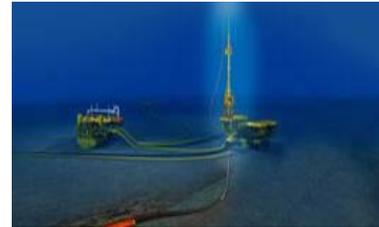
... orbiting the earth and working beneath it

... crossing oceans and on the sea bed

... in the fields that grow our crops and packing the food we eat

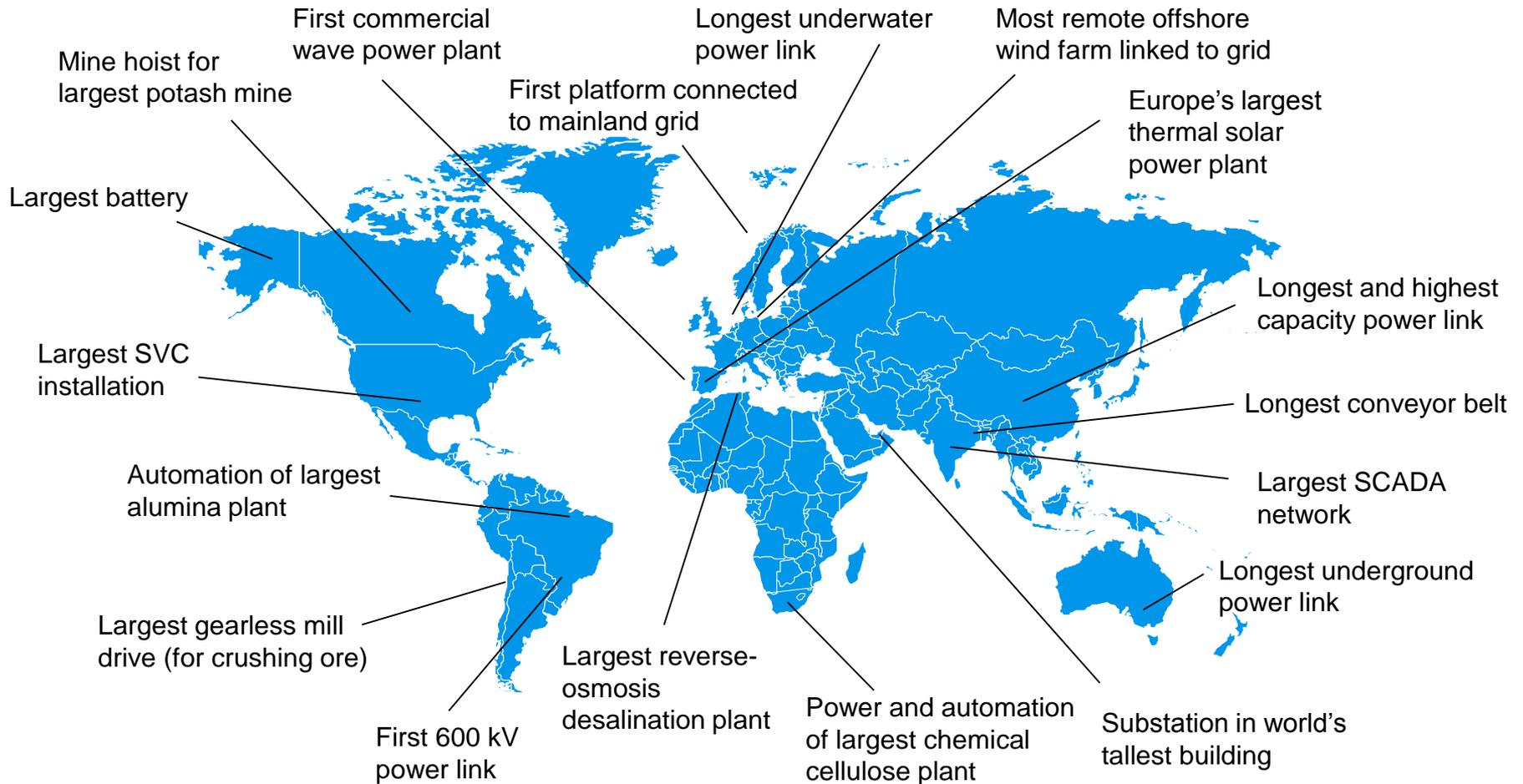
... on the trains we ride and in the facilities that process our water

... in the plants that generate our power and throughout our homes



# Ground-breaking and nation-building projects

## Pushing the boundaries of technology



# Shaping the world we know today through innovation

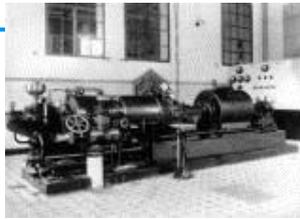
## Pioneering technology since 1883

Founding fathers



1900

Steam turbine



1920

Turbochargers



1930

Gas turbine



1940



1950

Industrial robot



1980

Gas-insulated switchgear



1970

Gearless motor drives



1960

HVDC



First synthetic diamond

Variable-speed motor drives



1990

Electric propulsion systems



2000

Extended control systems



Ultrahigh voltage



# ABB's mission



## **Improve performance**

ABB helps customers improve their operating performance, grid reliability and productivity while saving energy and lowering environmental impact.



## **Drive innovation**

Innovation and quality are key characteristics of our product, systems and service offering.



## **Attract talent**

ABB is committed to attracting and retaining dedicated and skilled people and offering employees an attractive, global work environment.



## **Act responsibly**

Sustainability, lowering environmental impact and business ethics are at the core of our market offering and our own operations.

# Global Awards



## Ethisphere Institute names ABB as one of the world's most ethical companies

ABB was recognized because of its demonstrated leadership in ethical business practices. Nominations from companies in more than 100 countries and 36 industries. ABB was awarded in 2013 and 2014.



## Innovation isn't dead: MIT's 50 disruptive companies

Among the usual suspects such as Amazon, Apple, Facebook and Google the publication of the prestigious Massachusetts Institute of Technology cites ABB for "perfecting a circuit breaker for high-voltage DC lines" – a crucial step for widespread use of renewable energy.



## Thomson Reuters recognizes ABB as a Top 100 Global Innovator

This award recognizes companies around the world for their outstanding commitment to global innovation, the protection of ideas and the commercialization of inventions. The company employs some 8,000 technologists in more than 20 countries.



## Zayed Future Energy Prize 2014

This prize was launched to recognize and reward the very best solutions in renewable energy and sustainability. It was named in honor of the late Sheikh Zayed bin Sultan Al Nahyan, who was a founder of the UAE, ruler of Abu Dhabi, and the UAE's first president.



## ABB tops Fortune magazine list of the most admired companies for 2014 in its sector

Fortune's annual rankings are derived from a survey of 15,000 senior executives and industry analysts who rate companies on nine attributes ranging from innovativeness to the ability to attract and retain talent. ABB ranked first within its sector on five.

# ABB Group Executive Committee



Ulrich Spiesshofer  
CEO



Claudio Facchin  
Power Grids



Pekka Tiitinen  
Discrete  
Automation and  
Motion



Peter Terwiesch  
Process  
Automation



Tarak Mehta  
Electrification  
Products

## Division Leaders



Eric Elzvik  
CFO



Jean-Christophe  
Deslarzes  
Human Resources



Diane  
de Saint Victor  
Legal & Integrity

## Corporate Officers



Frank Duggan  
AMEA



Greg Scheu  
Americas



Bernhard Jucker  
Europe

## Regional Leaders

# ABB in the Czech Republic

## ABB CZ

ABB divisions:

- Power Grids
- Discrete Automation and Motion
- Electrification Products
- Process Automation

More than 3.400 employees

Orders received in 2015: 15,1 billion CZK

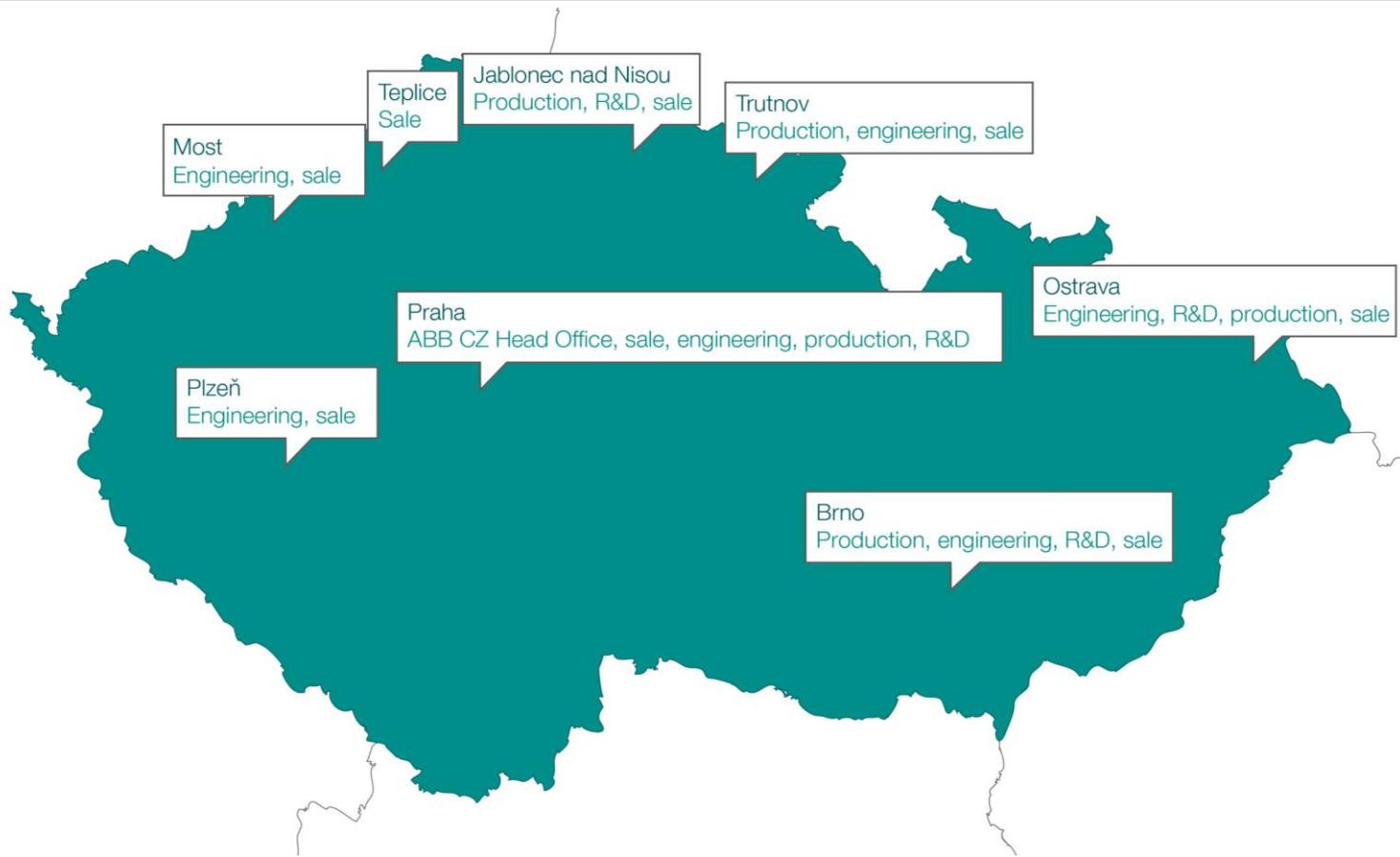
Revenues in 2015: 14,0 billion CZK

ISO 9001, ISO 14001, OHSAS 18001 certified



**Power and productivity for a better world**

# ABB in the Czech Republic



# What we offer in ABB Czech Republic

## Divisional structure and portfolio



### Power Grids

Transmission and distribution grid systems for traditional and renewable energy integration, T&D infrastructure & grid integration solutions, HV substations and devices, power and distribution transformers, substation automation, equipment and systems for communication, automation and control networks, lifecycle services.



### Discrete Automation and Motion

Motors, generators, drives, industrial robots, modular manufacturing systems, projects & turnkey solutions, related services, wind converters, solar inverters and fast DC chargers, lifecycle services.



### Electrification Products

Full range of LV and MV solutions including modular substations, distribution automation products, switchgear, circuit breakers, instrument transformers and sensors, control products, wiring accessories, enclosures and cabling systems, KNX systems, ventilation, heating, security and data communication networks, lifecycle services.



### Process Automation

Control systems and application-specific automation and electrical complex solutions for industry and power generation, measurement and analytics products, drives engineering and lifecycle services, Operation Center Czech Republic including Regional Execution Center for pulp & paper service.

# Power Grids division



## Power Products High Voltage (Praha, Brno)

- Sales of Substations and HV devices, Power and Distribution Transformers and accessories, Generator Circuit Breakers, Surge Arresters
- Production of Gas Insulated Switchgear (GIS) components for HV applications (110kV - 550kV)
- Gas leakage testing (SF6), HV testing, service

## Automation and Control Networks

- Sales of products and systems for protection, monitoring and control of networks, substations and electric devices
- Regional Focus Factory (RFF) - engineering, cubicles production and testing
- Modernisation of HV and MV substation
- Control systems for distribution networks
- Substation automation service (Trutnov)

# Power Grids division



## **Semiconductors (Praha)**

- Production and sales of high power semiconductor devices
- Welding diodes, rectifier diodes, avalanche diodes
- Phase control thyristors, fast thyristors, RCT thyristors, GTO thyristors and bipolar modules
- Research & Development focused on development and research of new diodes and thyristors

# Discrete Automation and Motion division



## Robotics (Praha, Vestec, Ostrava)

- Industrial robots, positioners, application equipment and software
- Standardized manufacturing cells for material handling, machine tending, welding, cutting, painting and finishing
- Projects & Turnkey solutions, Engineering for systems in press automation, Body-In-White, paint processes, power train assembly
- Product and system service, consultancy
- Certified robots refurbishment
- European Welding and Cutting Center
- Global Repair and Reconditioning Center
- Training Center

# Discrete Automation and Motion division



## Drives and Motors (Praha, Ostrava)

- Drives, motors, generators for a wide range of automation applications
- Drives, motors and generators service

## Power Conversion (Praha)

- Fast DC chargers
- Wind converters
- Solar technologies

# Electrification Products division

## Medium Voltage products



### Medium Voltage products - production and sales of medium voltage switchgear and instrument transformers and sensors (Brno)

- Regional focus feeder factory, production and sales of Medium voltage air insulated switchgears
- Global focus feeder factory, production and sales of Medium voltage instrument transformers and sensors
- Technology Center – development of MV current instrument transformers and sensors and MV air insulated switchgear PPMV Service
- Testing Laboratory – HV, MV and LV testing
- Full-range service portfolio

# Electrification Products division

## Low Voltage Products and Systems



### **Production and sales of low voltage switchgear and instruments (Brno)**

- Production of low voltage products, ie. circuit breakers, contactors, thermal overload relays, motor starters and other
- Sale of the whole portfolio of low voltage products produced by ABB Group
- Production and sale of low voltage switchgear type MNS 3.0 and MNS iS
- Securing service in a whole range of the NN products

### **Production and sale of building wiring accessories (Jablonec nad Nisou)**

- Production and sale of wiring accessories (plugs, sockets, IK plus lighting, door entry system ABB Welcome and Welcome Midi, etc.)
- Production of the KNX installation system and Ego-n® for modern intelligent building control

# Process Automation division



## Systems and solutions for process automation (Praha, Ostrava, Most, Brno)

- Complex automation and electrical solutions for technological processes including power generation, programmable logic controllers (PLC), distributed control systems (DCS) and drives engineering
- Measurement and analytics products
- Service portfolio for the installed base of ABB control systems across industry segments

# Process Automation division



## Operation Center Czech Republic (Ostrava)

- European engineering center for process automation
- Electrical engineering, design and commissioning of drives, development of SW applications for industry, automation software, IT systems and security, automation, distributed control system (DCS) engineering and commissioning, mechanical design and supply chain management.
- Regional Execution Center (REC) – regional center for pulp & paper projects in Europe, Middle East & Africa (excluding Nordic region)

# Main ABB Customers in the Czech Republic



**ABB**