

SITE MANAGEMENT – JUNE 2020

Welcome to Turgi

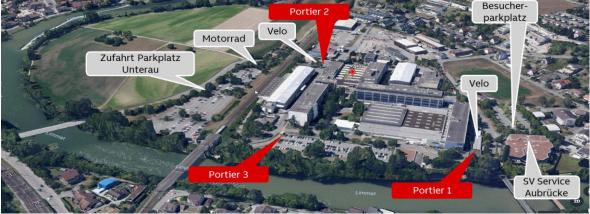
Onboarding of new employees



Safety

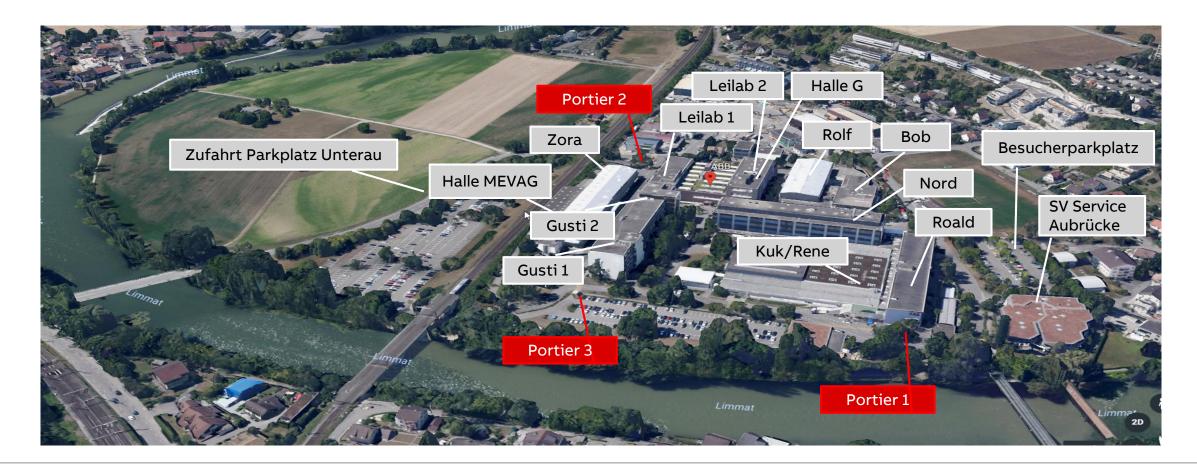


Orientation at Site



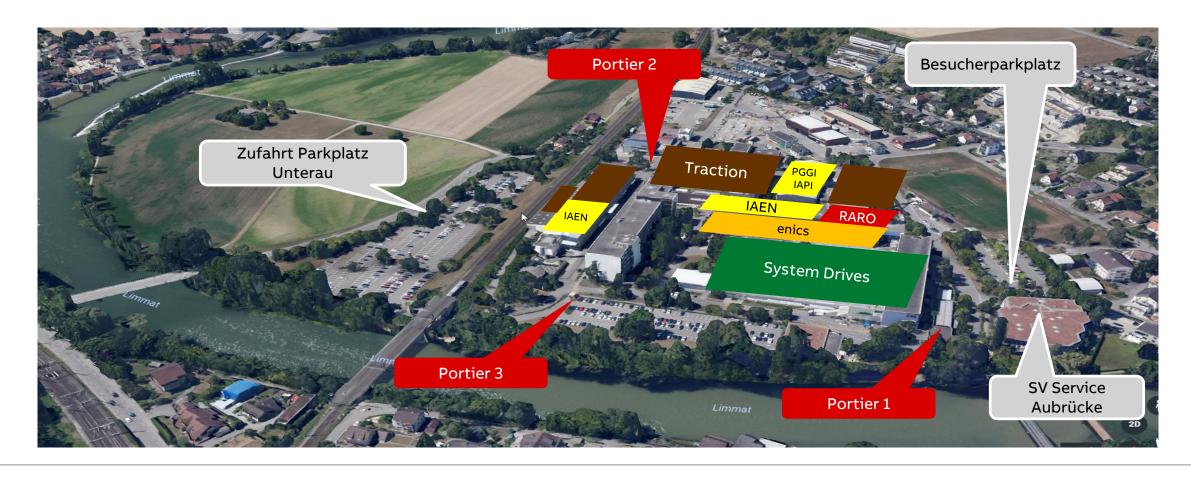


Orientation at Site





Occupation buildings





Orientation at Site - Sport, Child Care

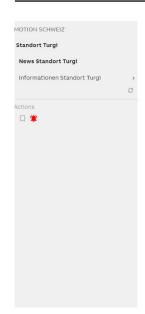




Slide 5

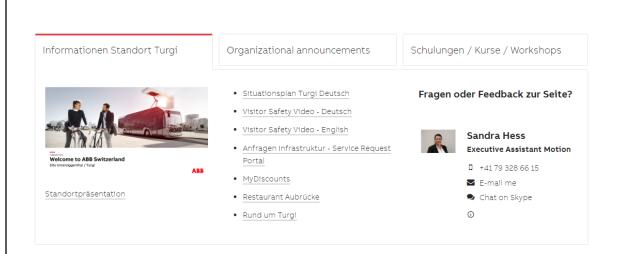
Inside + Turgi Site

Startseite





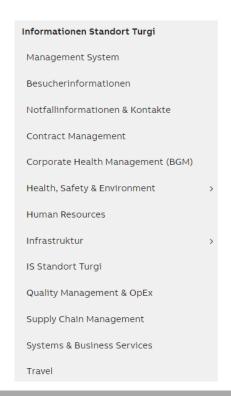
Startseite



https://go.insideplus.abb.com/ch/divisionen/robotik-und-antriebe/news-standort-turgi



Inside+ Turgi Site





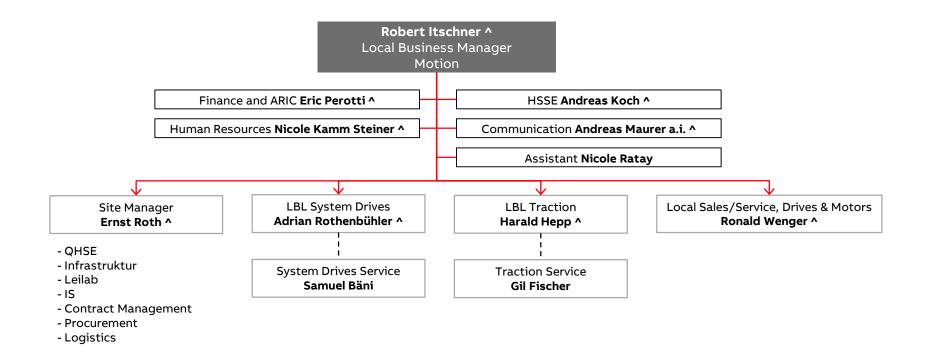
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MAERZ 2020

Welcome to Turgi

Organization Motion ABB Switzerland





Slide 8

ABB Switzerland Site Turgi/Untersiggenthal

Power electronics for energy efficiency

Turgi location

- 1,200 employees from 45 different nations
- 48,000 m² factory premises
- Functions global responsibility
 - R&D
 - Sales and marketing
 - Engineering and project management
 - Sourcing, manufacturing and assembly
 - Product support, service and training

Motion – System Drives & Traction Industrial Automation – Energy Industries Power Grids - Grid & Power Quality Solutions





Home of power electronics

One of ABB's key technologies



Corporate Research Center



Baden-Dättwil

Research areas such as power device technologies (materials, current interruption), power electronics, sensing and software solutions for power utilities and industrial applications

High-power semiconductor fab



Lenzburg

Design and manufacturing of high-power semiconductors GTOs, IGBTs, IGCTs, Thyristors and Diodes in the power range of 300 up to 12000 A and 200 up to 8500 V at the highest levels of quality

R&D and application engineering



Untersiggenthal / Turgi

Design and manufacturing of innovative power electronics products and systems for applications in transportation, industry and energy transmission segments



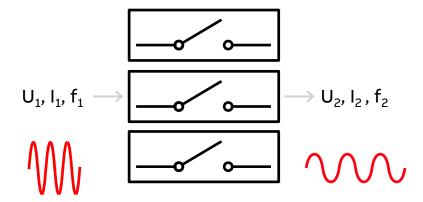
Home of power electronics

One of ABB's key technologies

Power semiconductors, the heart of our products



Electronic switch for high power



Innovative and energy efficient products and systems



- Sustainable energy
- Industrial productivity
- Clean transportation



Global market and trends

We are the #1 global drives player - and we are growing our lead

Our drives offering is the most comprehensive, unmatched by anyone else in the industry.

We serve all industries and all applications



Beverage industry



Mining and minerals



Cement





Food industry





Marine



Material handling



Metals industry



Oil and gas



Power generation



Pulp & Paper



Rail



Water and wastewater



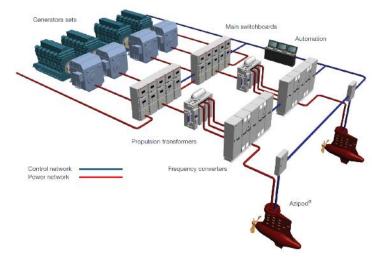
Wind



Motion – Drives: Enjoying cruising with ABB's propulsion system

Quantum of the Seas





Application

- The Quantum of the Seas cruise ship is one of many vessels utilizing ABB's integrated power plant and propulsion system
- More than 5000 MW of Azipod power has been delivered for various ship types

ABB scope

- Generators
- Main switchboards, transformers
- Automation and controls
- Thruster motors
- Propulsion drives
- 2 x 20.5 MW Azipod propulsion units

Customer benefits

- Reduced fuel consumption
- Environmentally friendly propulsion system
- Reliable solution, safe and maneuverable
- Easy noise and vibration management
- Freedom to optimize the ship interior and maximize payload







Motion – Drives: Next generation converter platform for regional trains

Significant increase in energy efficiency



Application

New converter platform for electric multiple units, using the latest converter and control technology.

Built with next generation power semiconductors.

High power density traction solution





Customer benefits

- Up to 25 % improvement of overall traction chain efficiency
- Compact and flexible design for various vehicle needs (roof, machine and underfloor mounting versions)



Motion – Drives: Converter replacement for locomotive Re 460

Improved reliability and availability for next 25 years

Application

Replacement of GTO converters with state-of-the-art IGBT based ABB traction converters. Existing traction transformer and motors are retained. 101 locomotives to be retrofitted until 2021



Customer benefits

- Significantly lower energy consumption
- Increase of train availability
- Easy maintenance
- Lower total cost of ownership

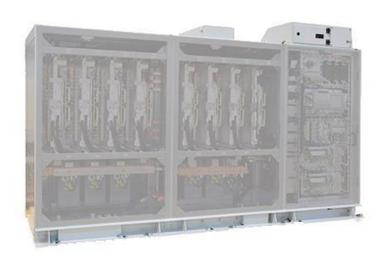




ABB Switzerland

Industrial Automation, Energy Industries – Local Site Turgi

Industrial Automation – Energy Industries

Industry-leading solutions to propel the energy revolution

Our business

Offering

- Automation & electrification
- Vertical specific solutions
- Digital solutions and services

Helping our customers

- Cut cost
- Minimize risk
- Improve operations

Markets served

Customer segments



Offshore



Onshore



Midstream & transportation



Refining & petrochemical



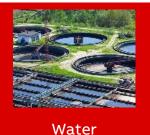
Chemicals



Conventional power



Renewables



Specialty chemicals

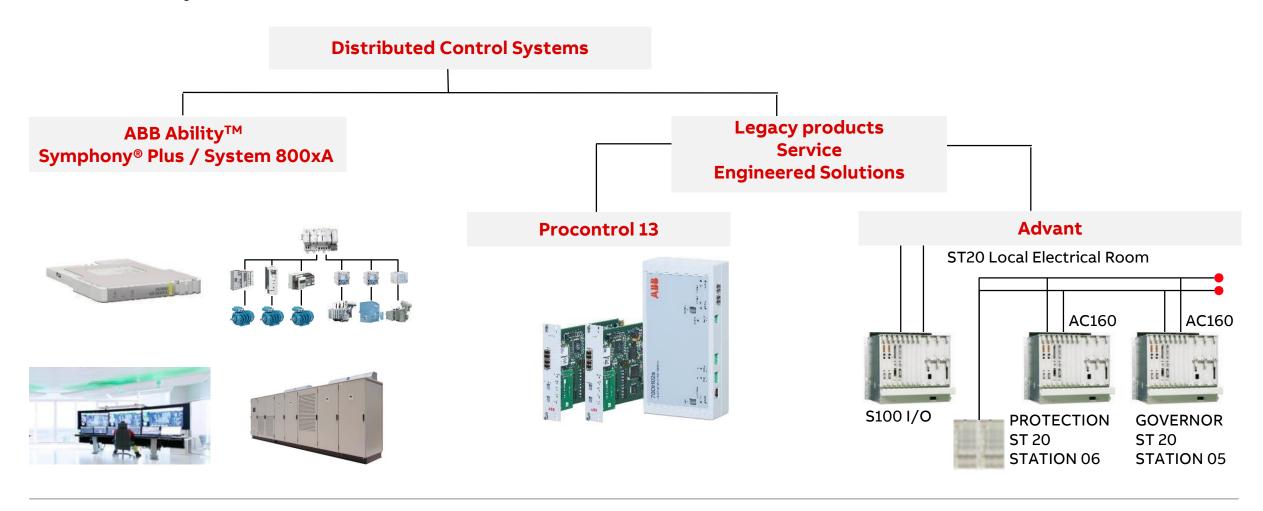


Primary pharma



Industrial Automation – Energy Industries

Automation Systems





Industrial Automation – Energy Industries

Excitation and synchronization products, systems and applications at a glance

INDUSTRIES

Power; Chemical, Oil & Gas; Minerals & Mining; Metals Power; Chemical, Oil & Gas; Pulp & Paper; Sugar

Power; Marine; Traction; Wind Power

APPLICATIONS

- Generator synchronization
- Paralleling of lines

 Synchronous generators and motors

- Synchronous generators and motors
- Rotating condensers and converters

- · Gas turbine starter
- Generator excitation
- Synchronous condensers
- Pumped storage

SYNCHROTACT



SYNCHROTACT® 6

UNITROL 1000



- UNITROL® 1005
- UNITROL® 1010 (AVR)
- UNITROL® 1020 (AVR)

UNITROL 6000



- UNITROL® 6000 Light
- UNITROL® 6000 Medium
- UNITROL® 6000 X-power

MEGATROL



- MEGATROL® Light
- MEGATROL® Medium
- MEGATROL® Power



Global Center of Excellence

Turgi, Switzerland

- Research & development
- Project Engineering and Management
- Manufacturing and Testing
- After-Sales Service
- Sales and Marketing
- Commissioning
- Training
- 24/7/365 telephone technical support

- Excitation & control units
- Assembly 860m2
- Testing 640m2
- 120m long
- 2'500 h/Mt
- 10'000A DC
- Process oriented layout



Watch the video



