

## INP Reference

### X2 High-speed Trains

**LOCATION:** Switzerland and Sweden

**SERVICES:** Production monitoring, Commissioning, Quality assurance

**INDUSTRY BRANCH/TYPE OF PLANT:** Other Industry Sectors

**CLIENT:** ABB

#### Project description

ABB Switzerland delivered and installed a range of energy-efficient technologies in conjunction with ABB Sweden as part of the Swedish State Railways project to modernize SJ X2 trains. The trains which have been in use since the late 1980s have been replaced with modern technology able to meet the needs of the coming decade.

ABB's assignment encompassed the drive system solution, power electronics and providing project management expertise. This retrofitting of the electrical systems of the X2 facilitates a more reliable power supply while simultaneously reducing energy consumption. ABB's delivery scope covers converters, traction transformers, charging devices, train safety systems and infotainment systems.

INP supported ABB during the engineering- and test phase in Switzerland as well as during commissioning in Sweden.

#### INP Services

- Creating and verifying routine instructions and protocols
- Logging the progress of commissioning
- Performing routine tests on the rail vehicle
- Collaborating on the commissioning of the powerhead and the 1st class carriage
- Managing inspections and the testing plan
- Collaborating on electrical commissioning
- Production collaboration as part of commissioning

#### POINTS OF CONTACT



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