

Project Overview

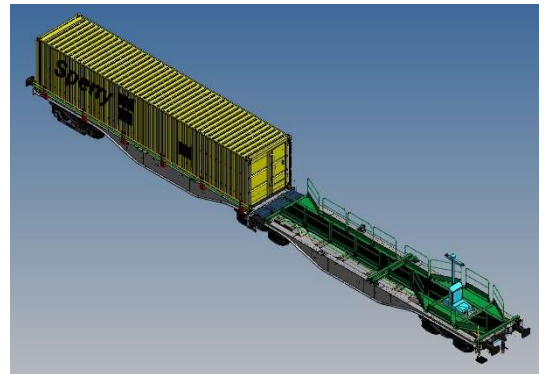
(Scope of services: CE cideon engineering Schweiz AG)

Client: SBB AG
Project: Conversion of base vehicle for rail inspection train
Project period: 2016 - 2017
Vehicle type: Freight wagon (Sggrss)
Year(s) built: 2016

Services:

- Electrical engineering
- Mechanical engineering
- Manufacturing supervision

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Project objective

Conversion of a freight wagon into a base vehicle for the measuring equipment of a rail inspection train.

Scope of services

- Engineering of the necessary modifications and integration of additional equipment for push-pull train operation
- Ensuring that the modifications and additional equipment meet the approval requirements of the Swiss Federal Office of Transport (BAV)
- Evaluation of a suitable integrator for the onboard systems
- Ensuring that all vehicle modifications can be reversed, including the required documentation
- Preparation of designs, manufacturing documents and conversion instructions
- Manufacturing supervision and monitoring of the conversion

Technical modifications

- Integration of main reservoir (HBL) air lines, 1,000 V supply lines and multiple-unit control cables
- Modification of the inter-vehicle gangways
- Installation and connection of earthing brushes on the bogie
- Installation of welded-on parts to support measuring systems and route cables and lines
- Construction of an access walkway for the measuring container

Benefits for the railway operator

- Compliance with mandatory inspection requirements for track and railway infrastructure
- Track inspection throughout Switzerland's standard-gauge network, with a few exceptions (Appenzeller Bahn, rack railway sections and the SZU mountain line)
- Inspection of approximately 25,000 km of track per year
- Easier detection of defects
- Modifications can be readily reversed