

Rail Services

Testing and Inspection

Railway systems are characterized by the functional and technical requirements that they must meet. These are the technical characteristics that guarantee its reliability and technical compatibility, precise maintenance standards and guidelines to preserve the required technical characteristics and behave in the desired way throughout its useful life.

Depending on the technology and characteristics of each requirement, specific methods are required for its verification and validation. Supervision during the manufacture and installation of railway components, equipment and assemblies allows verifying the quality of the materials, the processes used in the manufacture and installation of the equipment, its adequacy and compliance with technical specifications, standards and regulations.

Compliance with these characteristics makes it possible to guarantee their homogeneity, interchangeability, reliability and maintainability, with special emphasis on equipment and systems that may affect safety.

OUR SOLUTION

At SGS, we offer a broad range of services for the railway industry to help the manufacturers, component suppliers, network administrators & operators, and maintenance providers to deliver their projects and ensure the continued performance of their business.

Extensive experience in testing, inspection, certification and safety assessment make SGS the company of choice for the Verification & Validation of new and overhauled systems.

Focusing on the manufacturing and installation phase, we provide Quality Assurance services to guarantee the production, operation & maintenance of the railways systems, including the entire supply chain.

SGS experts intervene worldwide and along the full life cycle of railway components and systems, providing:

- Product certification & assessment services
- Testing services: Type Testing; Series Testing
- Inspection Services
- Manufacturing Supply Chain Services

We have a vast network of laboratories operating across a range of domain verticals, SGS is a key actor of the railway industry supply chain. In addition to our in-house laboratories, we can organize your railways system static and dynamic tests in our partners' laboratories and on test tracks.

ELECTROMAGNETIC COMPATIBILITY

EN 50121

Electromagnetic compatibility for railway applications

EN 50155

Electronic equipment used on rolling stock

EN 50238

Compatibility between rolling stock and train detection systems

EN 50388

Coordination between power supply and rolling stock to achieve interoperability

EN 50500

Magnetic field levels generated by electronic and electrical apparatus in the railway environment

EN 50507

interference limits of existing track circuits

ENVIRONMENTAL TESTING

- Chemical composition testing
- Environmental aging: salt spray, humidity, high/low temperature, thermal shock testing
- Indoor air volatile organic compounds (VOC)
- RoHS, hazardous substances testing
- Shock and vibration testing



We are the world's leading testing,
inspection and certification company

SGS has a network of more than 2.650 offices and laboratories worldwide, with more than 98.000 employees. SGS offers you a complete portfolio of railways services:

SGS RAILWAY SERVICES

- Railways Technical Certification – NOBO / DEBO Conformity assessment body
- Railways Safety Certification – ISA / ASBO Independent safety assessment body
- RAMS Safety Management
- Testing & Inspection
- Welding Services – EN 15085 Certification
- Manufacturing - Supply Chain Quality Services
- Cybersecurity

CONTACT US

If you wish to know more about our services or how to get started, please do not hesitate to get in touch.

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**SAFER
GREENER
SMARTER**

WHEN YOU NEED TO BE SURE

SGS