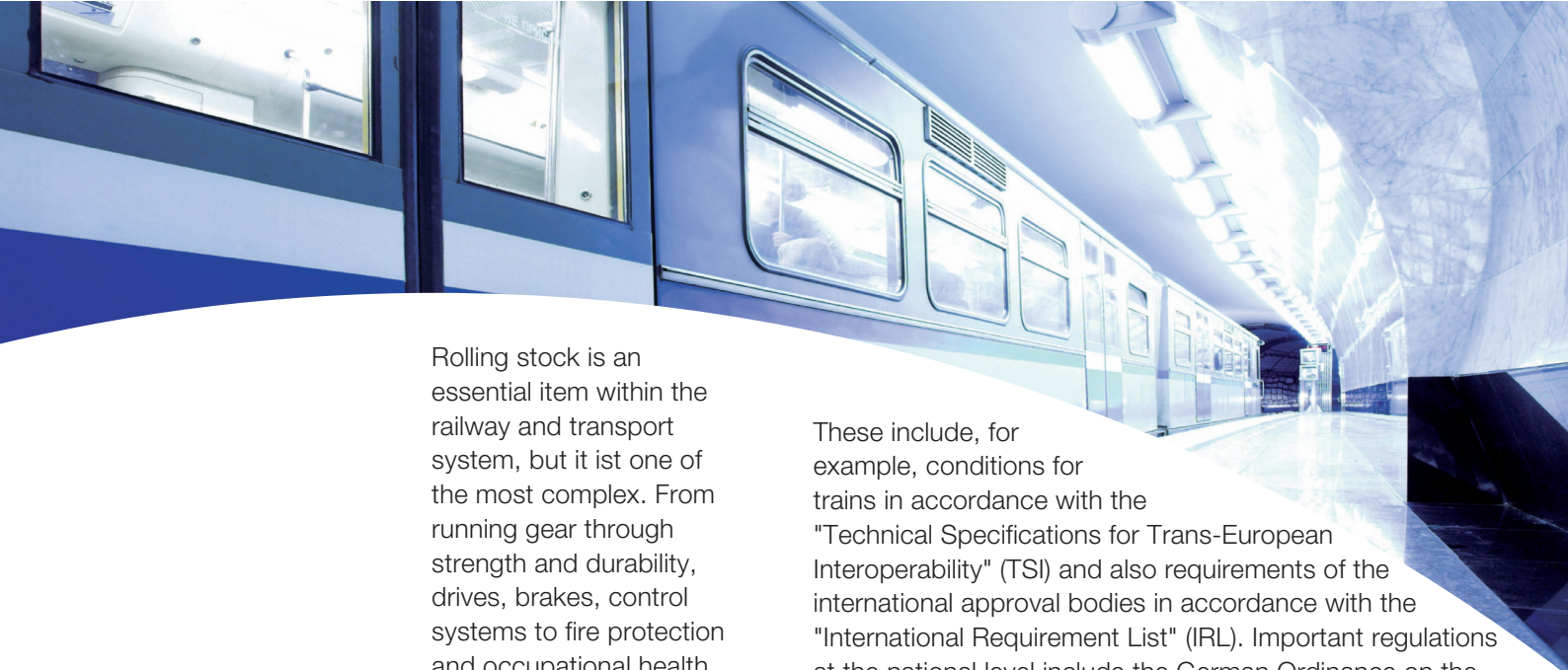


Rolling Stock



Rolling stock is an essential item within the railway and transport system, but it is one of the most complex. From running gear through strength and durability, drives, brakes, control systems to fire protection and occupational health and safety, all safety-relevant functionalities have to be in full working order at all times.

The entire system comprising the "rolling stock" must fulfil safety requirements according to both national and international standards.

These include, for example, conditions for trains in accordance with the "Technical Specifications for Trans-European Interoperability" (TSI) and also requirements of the international approval bodies in accordance with the "International Requirement List" (IRL). Important regulations at the national level include the German Ordinance on the Construction and Operation of Railways (EBO) and the equivalent ordinance with regard to trams (BOStrab).

Our inspectors and experts in the respective areas support rail operators, system integrators and suppliers over the entire lifetime of the project, from the design phase up to approval, as well as railway vehicle operation and maintenance. From the initial design through the system architecture up to the technical equipment itself.

You will benefit from system competence and many years of experience of the experts at TÜV NORD in the assessment of subsystems and railway vehicle components - whether for locomotives, trainsets or rail cars, passenger carriages, freight wagons, trams, underground railways or the system as a whole.

TÜV NORD - Making our world safer.

Our services

Rolling stock as a whole

- Testing and reports on the technical safety of rolling stock
- Evaluation of operators' regulations and residual risks for passengers
- Responding to system-related questions and questions regarding standards and regulations

Subsystems and processes

- Mechanics (strength and durability, running gear, explosion protection, plant subject to mandatory surveillance)
- Brakes (brake calculations, wheel slide protection, recuperative brake systems)
- Drive systems (e.g. hydraulic drives)
- Electrical systems (electrical safety/earthing, suitability of operating materials, FSF conformity, electromagnet compatibility EMC)
- Control system technology
- Software (application software, operating systems/tools)
- System technology (safety concepts, system architectures)
- Fire protection (preventive fire protection, firefighting measures and equipment)
- Damage analysis (assessments following damage, optimisation of maintenance processes for damage prevention)
- Safety and reliability (application of CENELEC standards EN 5012x, risk assessments according to CSM)
- Approval management (advice on and preliminary review of approval documentation, test and acceptance trial runs, assessments/acceptances according to EIGV)

Manufacturer and supplier certifications

- International Railway Standards (IRIS)
- Welders for railway vehicles according to EN 15085

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The benefit to you:

- One contact for all specialist technical disciplines
- Contribution to reliable planning outcome
- Independent assessments suited to requirements
- Reports acceptable to official bodies
- Conformity confirmed at an early stage
- More compact acceptance process
- Protection of people and the environment

Our expertise:

- Independence and neutrality
- Specialist independent experts with long-standing experience
- Assessors with EBA-recognition
- Accredited inspection body according to DIN EN ISO/IEC 17020 (DAkKS)
- Notified Body (NoBo)
- Designated Body (DeBo)
- Assessment Body (AsBo)
- Partner of country and municipal authorities (Landeseisenbahnaufsicht (LfB, TAB))
- Associated partner of the German notified body

We look forward to sharing our expertise with you.
Why not contact us.

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