

Approval Tests of Brake Systems



Following the static brake system tests, brake distance measurements were executed on the typical operation line Luleå – Kiruna – Narvik with the locomotive version with 30 tons axle load as well as with the version with 25 tons axle load.

Customer requirement

The technical accreditation of the brake system is a crucial part to every vehicle homologation. Besides the check of the design and the function of the brake, the assessment of the failure behaviour within the complex relationship between the vehicle control system and the various security systems becomes more important.



Contactless measurement of the temperature on a wheel brake disc of the NSB EMU Class 72

The verification of the thermal load, the correct function of the slide protection system as well as the brake distance measurement are also standard tasks within a brake system verification.

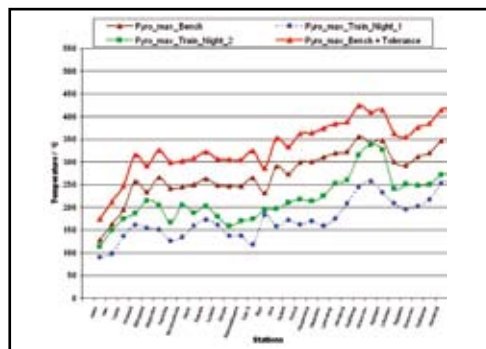
Realisation

We perform complete static and dynamic verifications of the braking system according to the relevant UIC leaflets as well as to the guidelines issued by the German Eisenbahnbundesamt,

Deutsche Bahn AG and the railway industry. Besides the standard requirements defined by the UIC, we also have experience in the testing of vacuum brake systems as well as in rack railways with their large variety of brake systems with special requirements.

Customer Advantage

Through our experience we can support the manufacturer already in the phase of conception of the brake system. Thus the effort for the approval of the brake system can be minimised. As a test institute, that is certified by the German Eisenbahnbundesamt we have the necessary international acceptance, to perform reliable brake system approval tests throughout Europe.



Validation of the brake disc temperatures of rig tests by temperatures measured in service on the NSB Emu Class 72.

Factsheet 2.00005

Detail informations

Scope of supply

- Tests of brake systems and slide protection systems according to UIC leaflets
- Tests of special brake systems (vacuum, hydraulic, rack railways)
- Assessment of the thermal load on the brake components
- Up to date knowledge of relevant EN standards, UIC leaflets and national regulations
- Certified as test institute for brake tests by the German Eisenbahnbundesamt
- The accreditation as test institute according to EN ISO/IEC 17025 has been applied for

References

- **VR Sr2 (Finland)**
complete static and dynamic brake system test with assessment of anti-slide system and thermal behaviour
- **NSB EMU Class 72 (Norway)**
static and dynamic brake test for the running gears (scope of supply of Adtranz)
- **Malmtrafik AB (Sweden)**
static and dynamic brake system test on the heavy haul iron ore locomotive with 25 t and 30 t axle load
- **Talgo TAV 350 (Spain)**
thermal load determination on the brake discs at mechanical brakings from speeds of 330 km/h

Contact

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Examination of the function of the brake system and its components also under winter conditions (NSB EMU Class 72, Norway)

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