

## RAIL TESTING AND CONSULTING

### EURAILTEST: A SUPPORT TO THE OPTIMIZATION OF THE SAFETY, PERFORMANCE AND COMFORT OF YOUR RAILWAY INSTALLATIONS

**Eurailtest, created in 1999, assists rail operators, rail manufacturers, organizing authorities or engineering companies, to carry out various tests, measurements and investigations.**

Eurailtest is renowned for its flexibility and its reliability. Ranging from the individual analysis to complete rail tests and measurements, its services can be either standard or custom-made. Moreover, it has a long-time experience in type approval tests as well as in rail measurements and investigations, essential to guarantee the safety, performance and comfort of railway installations. The company works with several tests laboratories owned by the French Railways (SNCF) and the Paris Metro (RATP).

Eurailtest is fully qualified to offer technical testing, measurement and investigation services for rolling stock, infrastructure and railway equipment. Eurailtest can intervene in five poles of expertise: Mechanics, Electrics, Physico-chemical, Acoustics, Health, Safety & environment.

These tests can either be performed on test benches in our partner laboratories or directly at the client's installations by using portable equipment and measurement tools.

#### MECHANICS

During the design phase of railway infrastructures, equipment and rolling stock, or during the qualification process, tests and measurements are essential to evaluate mechanical characteristics of the products and equipment. From the measurements performed and depending on the client's requirements, Eurailtest will, if requested:

- Perform assessments
- Suggest optimisations
- Carry out expert analyses on the mechanical behaviour of a vehicle or a sub-system.



#### ELECTRICS

Electrical tests and measurements aim to validate the electrical compliance of rolling stock, infrastructure and railway equipment or sub-systems to applicable standards. These tests are conducted on a test rig or on sites according to the needs and issues. Based on the values measured and depending on customer requirements, Eurailtest is available to:

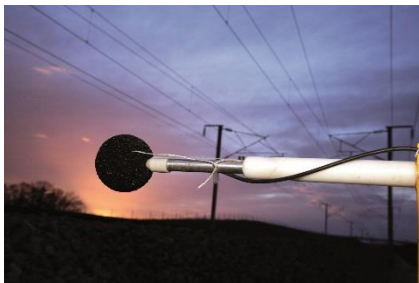
- Perform expert analyses
- Conduct verifications of the electrical characteristics of railway sub-systems and their interaction.



## PHYSICO-CHEMICAL

These measurements allow to qualify the physico-chemical characteristics if needed or validate the compatibility with another object. They are performed for failure causes or premature wear research. The expertise and analysis lead by the dedicated experts are performed in laboratories and can be subject, for some, to non-destructive tests (NDT). From the measurements performed and depending on the client's requirements, Eurailtest will, if requested:

- Verify
- Perform expert analysis of the physico-chemical characteristics of materials.



## ACOUSTICS

Acoustic is an important matter in the railway sector. The reduction of noise caused by rail transport is an important issue for transport operator. Noise pollution can affect the surrounding environment as well as the inside of trains.

## HEALTH, SAFETY & ENVIRONMENT

Health, safety and environment are at the heart of the concerns when it comes to workplaces and places accessible to the public. Eurailtest can perform multiple tests regarding protection against radiation, human exposure to electromagnetic fields, climatic comfort, workplace and tunnel air quality... Certain tests offered by Eurailtest can be performed not only on railway fields.



- **From software to mechanical engineering, rolling stock and infrastructure homologation, Eurailtest is certainly one of the world's most comprehensive offerings in rail testing and engineering.**

## EURAILTEST IN BRIEF

### Main References

- Atmospheric pollution at railway tunnel RER C worksite
- Fire performances for cables compliance – EN 50575
- Wheel testing for Alstom, Bonatrans, CAF and MG Valdunes
- Failure analysis for Alstom, Bombardier, RATP, SNCF, Thalys, CFL, Eurotunnel, (...)
- Track conductivity tests for Colas Rail, ETF, TSO
- Non-destructive testing (NDT) for Alstom, Bombardier, CAF, SNCF, MG Valdunes...
- Railway noise and vibration tests – local residents for RATP
- Human exposure to electromagnetic fields (lf/hf) tests for Bouygues Telecom, Orange, SFR, Siemens
- (...)

## External Recognitions

Laboratories and a hundred tests are **ISO 17025**

Eurailtest and its laboratories are **ISO 9001**

## Key Figures

**1 060** customers • **30** countries • Commissioning of over **3 000 km** of HSL • Over **120** accredited tests • **50** fixed test benches • **100 consulting** assignments/year • **400** technicians & engineers

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