

BACKGROUND

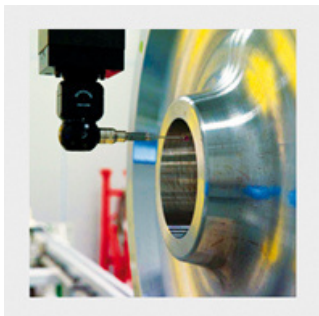
A wide range of Engineering services are provided by VALDUNES INDUSTRIES. Our Technical resources are dedicated to devising innovative solutions. Many railway projects for passenger and freight rolling stock have been designed with VALDUNES INDUSTRIES support.

SOLUTIONS

- Extensive experience of railway products
- Inspection & ND testing experts
- Mechanical & metallurgical laboratories
- Relationships with Railway companies
- Engineering & Design Department

AN ACTIVE RAILWAY PARTNER

- Member of the competitive i-Trans French rail hub
- Member of the IRT Railenium
- Active member of many Railway Associations (FIF, AIF,...)
- Partners of collaborative Research projects (Euraxles, stardamp...)
- Normative expert (CEN, TSI, ISO,...)
- SwitLab laboratory



OUR MAIN REFERENCES

- Wheelset design (worldwide)
- High Speed wheel design (Talgo, Hyundai Rotem)
- Metallurgical expertise (RATP,...)
- Non destructive testing, wheel / axle defect examination, residual stresses (Eurotunnel, Alstom, Matisa...)
- Resilient wheel design (Alstom, Bombardier, Siemens...)
- Overheated wheels NDT inspection (Matisa, Alstom, RATP...)



**METALLURGICAL EXPERTISE
DESIGN & TESTING
STANDARDISATION**

METALLURGICAL TEST CENTER - MTC

- **MTC center comprises a fully new workshop of 700m²** with a machining shop for sample preparation (sawing, oxygen cutting, machining, grinding, drilling and electro erosion cutting of notches are possible), a testing and a metallurgical laboratory associated to chemical analysis facilities.
- **MTC center is composed of technicians and engineers** with metallurgical skills and railway experience of more than 20 years.
- **Wheel and axle defect analysis, steel shop process, mechanical tests can be performed in our lab.**
- **Steel chemical analysis, harpy impact tests, pre-cracking equipment, tensile tests and Brinell hardness, micrographic examinations** are available according to the main Railway European standards EN13261, EN13262, and testing standards as ASTM E399, EN ISO 6892-1, EN ISO 148-1 and ISO 6506-1.
- **Accreditation accord to EN ISO-17025** in progress.

CONSULTING

Product standardisation, project management, consulting in European certifications and homologations, supplier evaluation, LCC (Life Cycle Cost).

TESTING/MEASUREMENT

Non-destructive testing expertise, acoustic characterization, inspection specification.

DESIGN

Full wheelset design, acoustic studies (STARDAMP, ANSYS ABAQUS), finite element analysis, failure analysis.

METALLURGY

Metallurgical defect analysis, mechanical properties evaluation.



**A WIDE RANGE
OF TECHNICAL SERVICES**

