

INSPECTIONS

In order to guarantee a uniform good quality chemical analysis, non-destructive testings, metallographic examinations and mechanical testings are performed according to international standards and specifications.

- **Non-destructive Testing**
 - Ultrasonic testing (manually and/or by means of automatic shaft/disc testing facilities)
 - Magnetic crack testing
 - Dye penetrant inspection
 - Visual testing
 - Heat stability testing
 - Material mix-up test

- **Destructive Testing**
 - Tensile testing (up to 900° Celsius)
 - Impact testing (-196° Celsius to 200° Celsius)
 - Hardness testing (HB, HV, HRC)
 - Bending and folding inspection
 - Jominy testing
 - Testing for intercrystalline corrosion/pitting corrosion
 - Residual stress inspection
 - Laboratory heat treatment

- **Metallographic Inspection**
 - Micro-section assessment
 - Sulphur print
 - Macro-etchings
 - Blue brittleness inspection
 - Mobile metallography
 - Measuring of ferrite content and permeability

- **Chemical Analysis**
 - Spectrographical analysis
 - Hydrogen determination
 - C-S-O-N determination
 - Slag analysis

- **Supplementary testings**

The following supplementary testings, for example, are provided for by means of contracts with qualified external cooperation partners:

 - Long-term trials
 - Fracture mechanics
 - Fatigue strength
 - Electrical and magnetic parameters
 - Time-temperature diagrams
 - Electron microscopy
 - Microanalysis
 - Computer simulations