



## Force and tension measurements using strain gauges

- How does my structure (machine, crane, truck, subway, conduit) behave under the influence of a static or dynamic load that is not always well known?
- Are the calculation hypotheses correct?
- How will my structure be loaded?
- What is the theoretical life of my new structure or the residual life of my existing structure?
- I want to carry out an overload test. Can this be done safely?

### Your tailor-made solution

Our engineers in the laboratory or in the field carry out the following checks on the design as well as during operations:

- Checking the strength and stability
- Verifying specific calculation hypotheses from the calculation note
- Determination of the actual stresses arising on dynamically loaded structures in realistic situations (for example, trucks in motion)
- Evaluation of the resistance to fatigue with estimation of the residual life of prototypes or estimation of the residual life of existing structures
- Check and protection in case of mechanical load tests
- Monitoring during the installation of adjustable items that are subject to load stresses, such as guy wires and tie rods
- etc.

The strain gauges are used for structures, machines, vehicles such as subway rolling stock and locomotives, lifting equipment, etc.

For more details, please refer to the technical data sheet: « Strain gauge measurements ».

### Your result

The exceedance of the calculation limits, either through determination of parameters that are difficult to assess, or for the purpose of confirming the starting hypotheses of the engineers, is also part of the considerable advantages of this highly effective technique.

### Please note

#### In which situation?

This service is intended for engineers, designers of machines (engineering consultancies), maintenance service providers that are confronted with problems relating to fatigue, mechanical failure or brittle fractures, and for experts in case of disputes, etc.