

MISSION PROFILES

From instrumentation to catch real-life situations to post-processing methodologies according to the failure mode mechanisms for optimized lifetime or efficiency.



Your expectations

Designing truly robust equipment requires a detailed and objective understanding of its actual use's conditions.

Mobile equipment, industrial machinery and mechanical systems operate in a variety of environments, some of which are harsh, and are subject to mechanical, hydraulic, electrical and vibratory stresses that are often complex. To guarantee safety, performance and durability, it is no longer enough to rely on theoretical assumptions such as limited load cases : these multi-axial stresses must be characterised, measured and accurately reproduced.

The "Mission Profiles" approach is a structured method designed to help manufacturers integrate field stresses from the beginning of the design phase.

In order to guarantee reliability and reduce your product development cycles and time to market, you wish to:

- Determine which parameters to measure on your product in relation to mechanical stress or functionality performance level
- Receive technical support for the complete implementation of instrumentation and on-field measurement campaigns
- Receive assistance with complex processing measurements on huge amount of data in order to create your design specifications or accelerated test bench profiles
- Have a justification file to present during safety audits to demonstrate that your design is adapted to real customers' uses
- Characterize, qualify or improve the reliability of your products by applying accelerated test profiles on CETIM's test benches

Our solutions

Cetim offers you:

Initial technical support from our measurement and calculation experts to **identify** directly accessible **parameters** or virtual sensor parameters created by digital coupling in order to **optimise their number and** specify the location

- **Instrumentation's implementation of your product at our premises or on your site**
- **Conducting measurement campaigns in "customer" use with the aim of capturing the multiplicity of real-world uses representative of the product's entire life cycle**
- **Our fatigue and post-processing experts with powerful dedicated software to operate temporal measurements into design specifications or accelerated test profiles**
- **The formalisation of knowledge about your product's uses and your design specifications to guarantee**

the safety of your customers

- **Validation of your product** or certain components on our various fatigue or performance test benches, using monitoring and failure analysis expertise

Your benefits

A multidisciplinary team led by a technical expert with over 15 years of experience in this field.

Technical expertise demonstrated through industrial applications and R&D work

Prove the reliability of your products with optimised validation time.



Question and Answer Service
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