Cetim's services

FAILURE OR DAMAGE TO MECHANICAL SYSTEMS

Analyse and understand the failure of the kinematic chain of a mechanical system

Your expectations

The unavailability or failure of mechanical systems is a major issue for industrial manufacturers and operators, whether on fixed installations (mining and cement industry, steel industry, paper industry, agri-food industry, energy, etc.) or mobile systems (road, off-road, rail, air, naval, aerospace, etc.).

Today's economic and ecological challenges mean that we need to push back the limits of performance and ensure that systems remain in operational condition: physical performance, vibration, efficiency, thermal performance, operating conditions, control of the life cycle and lifespan.

Following the failure of a mechanical system, you want to carry out an analysis to:

- Identify the causes, origins and remedies;
- Understand the incident scenario;
- Determine the responsibilities of the parties involved (designer, manufacturer, installer, user, maintenance);
- Prevent recurrence.
- Controlling the safety of goods and people

To meet economic and environmental challenges, you want to :

- Increase the lifespan, prolong operation
- Improve availability
- Reduce energy consumption and environmental impact

Our solutions

Propose and carry out a factual, exhaustive and multidisciplinary investigation of the entire system and its kinematics:

- On-site examination of the machine;
- Take into account the history, operating conditions and environment;
- Search for optimisation levers;
- Laboratory analysis of samples or components taken in the field;
- Component testing on dedicated or customised test benches;
- Use of digital simulation to confirm damage scenarios;
- Advice and support in implementing recommendations and redesigning or optimising performance.
- Repair recommendations

CONTACT

Question and Answer Service

contact@cetim.fr **www.cetim.fr**

Your benefits

Cetim, the mechanical engineering industry's technical centre, is a leader in the analysis of mechanical behaviour in operation.

All fields of mechanics are covered by the 1,500 expert assessments carried out each year by Cetim's experts, and our organisation is recognised by insurance companies and administrative authorities.

Our neutrality and independence guarantee you objective results.

A structured and proven methodology deals with the problem from its origins to the implementation of concrete solutions.

Your staff can upgrade their skills via customisable Cetim Academy® training courses, which have been awarded Qualiopi certification.

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