

Mechanical failure analysis

Minimise the commercial impact of mechanical failure through fast diagnosis, effective corrective action and reliable preventive measures. And optimise the process of data collection, analysis, diagnosis, corrective and preventative planning through independent coordination of experts and stakeholders. Maximise knowledge capture and lessons learned from mechanical failure incidents.

Fast and effective failure analysis

Your machinery fails. Your equipment breaks. Your hardware underperforms or fails to meet expectations. You want to find out what went wrong, fix it and make sure it doesn't happen again. Mechanical failure analysis is a unified approach to these three goals.

Over thirty years of mechanical troubleshooting, the expertise of our Engineering Dynamics team has evolved a suite of procedures and methods for collecting and analysing data, generating and evaluating hypotheses, creating models, planning tests, formulating corrective strategies and ensuring that lessons learned are captured for the benefit of future projects. The centrepiece of this suite of tools is our mechanical failure analysis methodology, which is taught to all our engineers.

Based on analysis of recorded data and field measurements, as well as witness testimony and design appraisal, this method draws on the experience and knowledge of experts and operators to penetrate directly to the crucial physical mechanisms that cause the failure and bring them to light.

This insight then forms the basis for corrective and preventative actions, negotiated in close dialogue with all stakeholders.

This mechanical approach to failure analysis is

- Fast and focused on resuming full operability
- Flexible: as appropriate to a small field fix as to a large scale failure investigation
- Versatile: suited to the new and unorthodox as well as the familiar and well known

Services

All of our services are adapted to clients' specific needs. Please contact us to discuss details. Vysus Group provides independent management and coordination of mechanical failure investigations:

- Establishing teams
- Facilitating meetings involving experts and stakeholders
- Coordinating and planning measurement and analysis campaigns and interpreting results
- Coordinating analytical and numerical modelling and interpretation of results
- Planning corrective actions and follow up
- Planning preventative actions
- Reporting and knowledge capture

We provide the full range of supporting services for mechanical failure analysis, including:

- Field measurement and analysis
- Analysis and interpretation of data logs
- Generation and evaluation of failure hypotheses using inhouse methodologies and tools
- Planning and executing modelling and analysis relevant to failure investigations

Your benefits

- Fast diagnosis
- Reduced time to resumption of full operability
- Knowledge capture and recommendations for future projects



Why Vysus Group

- World-leading discipline expertise and personnel
 - Global presence and fast response time
 - Resources and personnel to manage your asset through design, commissioning, and operation
 - Commercial independence from vendors and contractors
 - State-of-the-art numerical and analytical tools
 - Purpose built methods
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