RELIABILITY STUDIES

Assessing productivity and improving the reliability and consistency of asset performance.

Unreliable or underperforming assets are directly linked to the productivity, profitability and safety performance of an organisation. Whether the unreliability of an asset is a result of poor design, selection, maintenance or operation, it is critical that the organisation uses a structured approach to identify the root cause and systematically address the issues affecting the reliability of these assets.

Bureau Veritas assesses the reliability of assets and makes informed recommendations to clients on how to improve the reliability of asset systems and assets. In particular, optimising maintenance strategies and plans help to ensure that correct maintenance tasks are executed at the best intervals to improve the reliability and consistency of asset performance.

We apply various tools to conduct leading reliability studies, which may include:

- Ranking assets according to criticality (ACR);
- Reliability centred maintenance (RCM), which applies many industry and international standards such as the SAE, MSG, ARP, and IEE. SAE JA1011;
- Failure modes, effects, and consequence analysis (FMECA);
- Reliability availability and maintainability (RAM) studies;
- Overall equipment effectiveness (OEE); and
- Pareto distribution.

Key benefits

Reliability studies can provide several benefits to clients, such as:

- Optimised relationships between the costs of adequate operations and maintenance, and the cost of repair and lost production;
- An indication of the current state of the asset (age and lifespan);
- Predictions of future equipment failures;
- The effectiveness of redundancy;
- Identifying the “bad actors”; and
- Identifying the asset or asset system that has the highest safety, environmental or financial impact when failing.

Related services

- Operating and maintenance procedures
- Asset maintenance strategies and plans