VELOSI | ENGINEERING FOR A SAFER WORLD

Condition Based Monitoring (CBM)

Condition-based monitoring is a type of predictive maintenance that involves the use of sensors to measure the status of an asset over time while it is in operation. The data that is collected is used to establish trends, predict failure, and calculate the remaining life of an asset. Condition Based Monitoring (CBM) maintenance is only performed when the data shows that the required performance is decreasing.

Through continuous assessment of the assets the Condition Based Monitoring (CBM) solution makes it possible to detect potential problems of the assets at an early stage.

Although, the tool that is used can be expensive to install, and it may be difficult to monitor assets in harsher environments; CBM has the advantage of working while the equipment is in service and does not pose interruption to equipment operation.

Benefits of CBM

- Increased uptime/reduced downtime
- Reduction in/elimination of unplanned failures
- Decreased maintenance costs
- Increased asset life
- Reduction in collateral asset damages
- Greater ease in prioritization and planning of work orders
- Increased efficiency in maintenance practices & management

CBM Deliverables

- Anomaly Reports
- Marked up drawings with Excitation Sources
- Measurement Location for Excitation
- Vibration Monitoring as part of CBM

Risk-based inspection incorporates the below-mentioned processes;

- Pipeline Integrity Management System (PIMS-Onshore and Offshore)
- Structural Integrity Management System (SIMS)
- Pressurized Equipment Management System (PEMS)
- Inspection Scheduling Management System (ISMS)
- Wellhead Integrity Management System (WHIMS)
- Asset Performance Management System (APMS)
- Computerized Maintenance Management System (CMMS)