



Vibration Monitoring and Risk Analysis System for Process Piping

If you are responsible for the operation and maintenance of plant processes, you'll want to know that the pipework is performing to optimum levels including the likelihood of it developing fatigue induced cracks.

TWI's Vibration Monitoring and Risk Analysis System for Process Piping system (VARA) can give you vital data to inform your process piping maintenance strategy – providing a link between vibration analysis of pipework and the likelihood of the occurrence of fatigue crack initiation.

Capabilities

- Analyses and determines the presence of vibration induced fatigue in process plant pipework, and identifies excitation mechanisms
- Provides a detailed screening of main pipework including small bore connections
- Easy to install, and user friendly for a wide range personnel including route-based collectors

Applications

- Assessment of the likelihood of fatigue crack initiation using vibration analysis on an existing plant or process system
- Maintenance of integrity in process pipework within the oil, gas and petrochemical industries using risk-based analysis
- Provision of quantitative risk management with respect to asset integrity and maintenance activities
- Failure analysis and evaluation of the likelihood of failure
- Provision of low cost, continuous vibration monitoring

Key specifications

- Data collection including on board processing, and display of raw vibration output signal and fast fourier transform (FFT)
- Embedded display with touch screen sensing
- Internal data storage with removable microSD card
- Rechargeable Lithium-Ion 2.6Ah battery
- Optional wireless data transmission package
- Produced following standards from the *Guidelines for the avoidance of vibration induced fatigue failure in process pipework*, January 2008, 2nd Edition, Energy Institute



Get in touch – get assurance that your pipework will perform safely and reliably in service, by talking to us today about a VARA solution tailored to your business.