

Condition Monitoring



Mimic is a reliability software application used for the collection, storage, display, analysis and management of all asset condition and maintenance information.

Mimic collects equipment condition data from visual inspections, predictive maintenance technologies, controls, sensors, and data logging systems. Mimic consolidates and analyses all condition data, identifying potential failures and recommending corrective actions.

Data is converted to useable information and presented visually through traffic light indicators and trending graphs. Mimic identifies the optimum time to conduct maintenance activity which in turn realises savings by reducing downtime for unexpected repairs and breakdowns.

Examples of Types of Data Stored

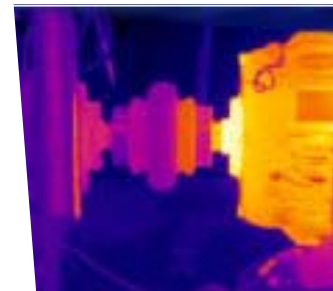
- Vibration
- Thermography
- Oil analysis
- Oil monitoring
- Pressures
- Temperatures
- NDT results
- Compliance information
- Visual checks (earth bonding, machine condition, leaks etc)

James Fisher Mimic has a wealth of experience that can be used to create cost effective and efficient condition based maintenance regimes for ship owners. The company provides consultancy services to facilitate the implementation enabling the ship owner to benefit from the early introduction of a proven solution.

“ You can't control what you don't measure”

Where Mimic CM Fits In

Many organisations have invested in a Computerised Maintenance Management System (CMMS) or enterprise asset management system. The data that drives the value from a CMMS usually comes from multiple data sources. In order to get the maximum benefit from the CMMS the data needs to be collected, analysed and collated which can be time consuming and is often neglected. Mimic CM addresses this problem by automating the data collection, analysis and distribution process thereby ensuring that maintenance decisions are driven by the condition and performance of the asset.



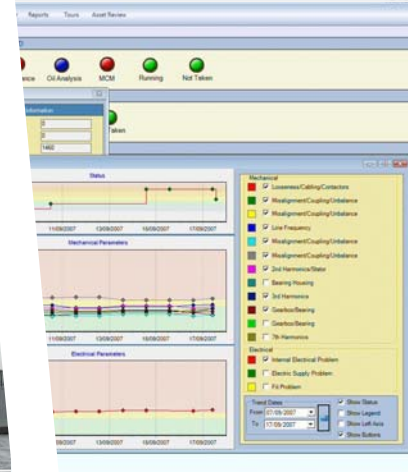
Practical Benefits

Gain greater value from Reliability Centred Maintenance (RCM) Implementation.

By detecting minor failures and gradual loss of performance early maintenance can be proactive and have a significant impact on availability.



Condition Monitoring



Maintenance duration.

Reduce subcontracted manhours by understanding the true condition of equipment. Extend major overhaul interval. Mobile assets such as ships have limited time for refit or overhaul. Mimic CM gives the operator the confidence to delay maintenance potentially to the next scheduled docking or maintenance period.

Planned or Unplanned Maintenance.

Early detection of a fault using Mimic CM shifts the balance from unplanned to planned maintenance.

Catastrophic failure.

Many catastrophic failures can be avoided by capturing the changing state of multiple parameters using Mimic CM.

Mimic

The Mimic dashboard instantly displays the health of each asset. Mimic is a state of the art condition monitoring system using the latest Microsoft .Net programming techniques and offers the following benefits:

- Choice of SQL Server, MSDE & Firebird Databases
- Real time links to machinery control systems
- Up-to-date industry standard data collector connectivity
- Simple user interface
- Ease of use
- Reduced user training
- Immediate data availability
- Fully user configurable
- Powerful data browsing area is

Data grouping & filtering

Mimic 2006 prevents breakdowns and optimises performance

- Powerful algorithms calculate and trend performance data
- Fully featured vibration monitoring capability contains
- Fast Fourier Transform (FFT) display
- Time Waveform Display
- Spectral Diagnostic Windows
- Harmonic and Sideband Cursors
- On screen acceleration, velocity & displacement conversion
- Re-creation of readings from internally stored raw data
- Dynamic Mimic Dashboard with drill down for further levels of information
- Runtime data trending and storage
- Process data trending and storage
- Unique Electronic Systems Interface (ESI) creates and manages links to CMMS and control systems
- Configurable 'favourites' area displays user relevant data

