

Fatigue Monitoring On-Line



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THE REAL TIME ANALYSIS OF REMNANT LIFE PERMITS ACCURATE PLANNING FOR COMPONENT REPLACEMENT

Corus through its Teesside Technology Centre have developed a powerful monitoring system for the real-time assessment of residual fatigue life of highly stressed components. The utilisation of parallel processing technology allows the concurrent presentation of summaries and graphical data without interruption to the continuous monitoring of operational parameters.

The application of this technique results in reduced unscheduled downtime and unnecessary overstocking of high cost spares through the determination of appropriate maintenance from this condition based maintenance approach.



IMPLEMENTATION ON LACKENBY UNIVERSAL BEAM MILL

The main benefits of fatigue monitoring are:-

- Continuous monitoring and recording of fatigue
- Historical records available for any event
- Linked to an alarmed warning system
- Allows a reduction in the spares holding
- Improved equipment and process control
- Can be applied to any monitored structure



FINITE ELEMENT MODEL OF UNIVERSAL DRIVESHAFT