

1.8.1. FROM VIBRATION MEASUREMENTS TO CONDITION BASED MAINTENANCE

Mitchell J.S., Founder and President of “Mimosa”,
former President of “Palomar Technology International”, USA

Over the last seventy or so years, dramatic improvements have occurred in the technology, equipment and practice used for machinery vibration measurements, condition monitoring and analysis. From mechanical instruments that might capture a simple, low frequency vibration waveform to today’s high performance digital instrumentation. Adoption of the microprocessors field data collector/analyzer, the PC for automated monitoring, diagnostics and information management combined with major improvements in electronics and signal processing technology have greatly advanced the ability to assess condition, detect and diagnose anomalies. Today, the earliest stages of most flaws can be recognized in ample time to minimize the impact on production and avoid outright failure. Condition Monitoring and Condition Based Maintenance have indeed come a long way. This paper is a short story of the seventy years of continuous progress.