



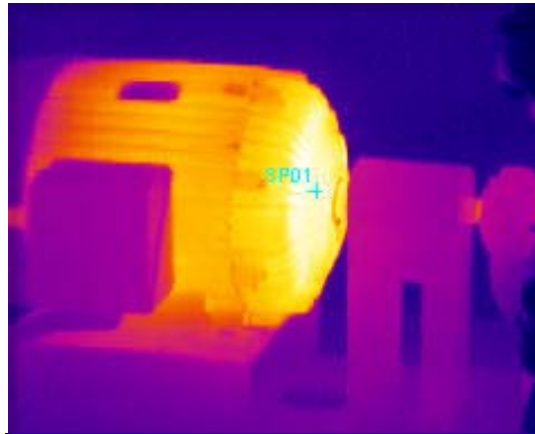
Understanding

CONDITION-BASED MAINTENANCE - 1

TOTAL APPROACH TO FAILURE PREDICTION & ANALYSIS



Vibration Monitoring



Thermal Monitoring



Lubricant Monitoring

2004 All Rights Reserve



UNDERSTANDING CONDITION - BASED MAINTENANCE

Course Objective :

- Introduce the concept of CBM as part of our day to day mtce activity
- Learn why CBM is more cost effective than conventional Preventive Maintenance system
- Provide a solid foundation for people moving towards CBM
- Learn the different techniques on how the condition of an equipment can be measured
- Provide a basic foundation on how to start a CBM program in your plant.





UNDERSTANDING CONDITION - BASED MAINTENANCE

Day
1

Module 1 : Introduction : Changing the Maintenance Culture

- Why maintain ?
- Facts about today's maintenance
- Are we accepting failures in our plant
- Defining maintenance and consequences of inadequate maintenance

Module 2 : Understanding The Different Maintenance Tasks

- Reactive Maintenance
- Preventive Maintenance
- Predictive Maintenance
- Proactive Maintenance

Module 3 : Understanding CBM

- Maintenance Belief
- CBM Defined and History
- Why Condition-Based Maintenance
- When to use CBM (P-F Curve) ?
- How is CBM related to Predictive Maintenance
- Understanding CBM as a mtce strategy

Module 4 : Common CBM Techniques

- Oil Analysis Monitoring
- Infrared Thermography Monitoring
- Ultrasonics
- Vibration Monitoring

Day
2



Day
3

Module 5 : Benefits of using CBM

- Advantages of using CBM techniques
- Disadvantages of CBM Techniques
- Case studies on PdM techniques

Module 6 : Justifying the need for CBM

- Top Reasons why CBM program fails
- Justifying the need for CBM

Module 7 : How To Start A Condition-Based Maintenance Program

- How to start a CBM program in your plant
- Equipment listing and machine ranking

Closing Remarks