



Maintenance Strategies

PART 1

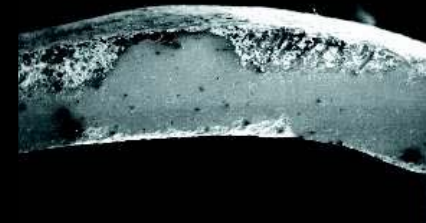
APPLICATION OF THE BEST MAINTENANCE PRACTICES



Lubrication Strategy / Tribology



Condition-Based Maintenance



Basic Maintenance Concept



Root Cause Failure Analysis



2005 All Rights Reserve



MAINTENANCE STRATEGIES- BEST OF THE BEST PRACTICES

Course Objective :

- Provide basic understanding & knowledge on the best of the best maintenance strategies World Class Companies are adopting
- Provide us a deeper understanding of our profession & that Maintenance is much much more than fixing and repairing failures
- Provide us a different mindset and paradigm on how to dramatically improve our assets reliability by reducing maintenance costs
- Generate a plantwide awareness & strategy & learn simple step by step on how to have these strategies implemented in your industry

illuminate

the possibilities...

In today's economy, survival is the name of the game, & that maintenance is much more than fixing failures

w/ Maintenance Best Strategies



MAINTENANCE STRATEGIES- BEST OF THE BEST PRACTICES

ADOPTING LUBRICATION STRATEGY - KNOWING THE IMPORTANCE OF TOTAL CONTAMINATION CONTROL

DAY 1 : MODULE 1

- 0745 - 0815 - Coffee and Registration
- 0815 - 0825 - Welcome and Introduction
of resource speaker
- 0830 - 0900 - Participants introduce themselves
- Take Pre-Test on Lubrication Strategy
- 0900 - 0915 - **Introduction**
- 0915 - 1000 - **Module 1 : All There Is To Know About Oil**
- Definition of oil
- SAE and API Standards
- 1000 - 1015 - **Morning Break / Meal**
- 1000 - 1100 - **Module 2 : Understanding Contamination**
- How oil gets contaminated ?
- Relationship between wear and contamination
- 1100 - 1200 - **Module 3 : Total Contamination Control**
- Our current practice on lubrication
- Importance of Contamination Control
- 1200 - 1300 - **Lunch**
- 1300 - 1400 - **Module 4 : Understanding Filtration To
Reduce Oil Contamination I**
- Nominal and Absolute Filtration
- Importance of Beta Rating
- How to reduce contamination ?
- 1400 - 1500 - **Module 5 : By-pass filtration for mobile**
- 1500 - 1515 - **Afternoon Break / Meal**
- 1515 - 1630 - **Module 6 : Test for Oil's Health & Condition**
- ISO Cleanliness Codes
- Particle Counters
- 1630 - 1700 - Take Final Post Test on Lubrication
- 1700 - End of Day 1

UNDERSTANDING CONDITION-BASED MAINTENANCE - TOTAL APPROACH TO FAILURE PREDICTION AND ANALYSIS

DAY 2 : MODULE 2

- 0745 - 0815 - Coffee and Registration
- 0815 - 1000 - **Module 1 : The Need for CBM**
- Going beyond Time-Based
- CBM defined
- Understanding P-F Interval
- CBM is detecting Potential Failures
- 1000 - 1015 - **Morning Break / Meal**
- 1015 - 1130 - **Module 2 : Oil Analysis**
- Testing Oil for Physical Properties
- Wear Metal Debris Analysis
- 1130 - 1200 - **Module 3 : CBM Through Ultrasonics**
- 1200 - 1300 - **Lunch**
- 1300 - 1500 - **Module 4 : Infrared Thermography**
- Understanding Infrared
- Application of Infrared
- Thermography for Industries
- 1500 - 1515 - **Afternoon Break / Meal**
- 1515 - 1600 - **Module 5 : Vibration Monitoring**
- How Vibration Monitoring works ?
- Application of Vibration
- Misalignment
- 1600 - 1630 - **Module 6 : Starting A
CBM Strategy In Your Plant**
- 1630 - 1700 - Take IQ Quiz on CBM
- 1700 - End of Day 2