



CONDITION MONITORING SERIES

7701: Maintenance Management

Course Hours: 4

The objective of this module, first in the series on Condition Monitoring, is to focus attention on the overall maintenance task, the different levels of maintenance required, and the development of Predictive Maintenance with its attendant need for "condition monitoring". After completion of this video and associated workbook, the participant should be able to understand the concepts and apply them in day-to-day activities.

7702: On-Line Condition Monitoring

Course Hours: 4

The objective of this videotape is to present major features of an on-line condition monitoring program. The videotape also indicates various techniques used to monitor equipment and also demonstrates how one should analyze the data after it has been collected. In the final segment, plant performance testing is discussed, as part of the condition monitoring program. Upon completion of this videotape and workbook exercises, the participants should be able to understand the concepts, and apply them in work activities.

7703: Vibration Monitoring & Analysis

Course Hours: 4

The objective of this module is to provide an understanding of vibration in machinery, including modes of vibration measurement. Typical examples of vibration analysis are presented, plus an introduction to the technique of balancing. After completion of this video and associated workbook, the participant should be able to understand the concepts, and apply them in day-to-day work activities.

7704: Non-Destructive Examination Techniques

Course Hours: 4

The objective of this module is to present an overview of different types of NDE testing techniques which are performed on mechanical equipment. Various techniques are demonstrated, noting their suitability for identifying particular types of material defects and degradation. After completion of this module, the participant should be able to understand the concepts and recognize their application in condition monitoring practice.

7705: Electrical Testing

Course Hours: 4

The objective of this module is to present and discuss the types of electrical tests being performed today for condition monitoring of large high voltage equipment such as generators and transformers. This includes "off-line" and "on-line" testing. After completion of this module and associated workbook, the participant should be able to understand the concepts, and employ these in work activities.

7706: Liquid Analysis

Course Hours: 4

The objective of this module is to present and discuss techniques of liquid analysis in order to collect data for condition monitoring of equipment. In particular insulating oils, lube oils, and water analysis are dealt with. After completion of this module, the participant should be able to understand and apply the following concepts in day-to-day activities.

7707: Applications of Condition Monitoring

Course Hours: 4

The objective of this module is to demonstrate the application of condition monitoring techniques in different types of power plant, including hydro-electric, gas turbine combined cycle, reciprocating engine, and steam turbine generation. After completion of this module, the participant should be able to understand the concepts and apply them in day-to-day work practice.