Session 1
Precision Maintenance for Supervisors – Course Overview and Objectives

1. Introduction

In Unit 1, Condition Monitoring for Engineers, the principal focus was on Condition Monitoring in the context of Reliability Improvement.

The inputs influencing Plant Reliability were considered;

There are some companies which employ good practices as promoted in Unit 1 and have very effective maintenance operations. They achieve
- high reliability, with
- low maintenance costs

There is the unfortunate reality that there are also some companies who employ those same practices as promoted in Unit 1, but they have
- excessive breakdowns,
- unsatisfactory reliability,
- excessive maintenance costs.
This latter group seems to be the majority group, and many in this situation apply considerable resources and effort in seeking ‘the Silver Bullet’ solution.

**What is the difference between these companies?**

The difference is a Plant-Wide Precision Maintenance Programme.

This will be the focus for Unit 2 – Precision Maintenance for Engineers.

### 2. Course Outline

Over the two days we shall discuss and raise your awareness of

- The Justification for Precision Maintenance
- Creative Disassembly
- Machine Overhaul – Fits and Tolerances
- Rolling Element Bearings – Installation and Optimising Service Life
- Precision Alignment
- A Quality Information System for the Workshop
- Root Cause Failure Analysis
- Implementation through Trade’s Skills Development, CM Options, and Measuring the Benefits

### 3. Course Outcomes

The outcome expected is that you will be able to make a greater contribution toward plant reliability and reduced maintenance costs through increased awareness of

- The appropriate application of Precision Skills on a Plant-Wide basis,
- The appropriate use of Root Cause Failure Analysis
- The use of a Quality Information System