

VA 1 : Fundamentals of Vibration Analysis

Course Objective

The course objective is to teach the fundamentals of vibration technology. It aims to provide a practical approach to detecting and analyzing common machine problems using vibration monitoring and analysis.

Course Description

Designed for maximum class participation. A combination of overhead presentations, group exercises, videotapes, and written reviews are used to peak participant interest and encourage participation and understanding. A 'Certificate of Attendance' is given by SKF Philippines, Inc.

Specific Topic includes:

Basics of vibration

- Time waveform analysis
- Amplitude vs. frequency
- Vibration – measurable characteristics
- Vibration sensors
- Scale factors
- Measurements and units
- Displacement probe/eddy probe
- Multi-parameter monitoring
- Resonance
- Detection vs. analysis

Setting up the vibration measurement

- Physical and database considerations
- Selecting the machinery
- Sensor location and mounting methods
- Cable attachments
- Setting Fmax

Alarm methods and setting alarms limits

- ISO guidelines
- Assessing overall vibration severity
- Exception criteria

Spectral analysis

- Spectral analysis techniques and pattern recognition
- Sidebands
- Harmonics

Analyzing typical machinery problems

- Imbalance and misalignment
- Bent shaft
- Mechanical looseness

Vibration Diagnostic Tables

- ISO 10816-1 Vibration Diagnostic Table

Pre-requisite

Participants should have a basic understanding of rotating equipment. Engineering background and / or industrial experience is an advantage.

Course Duration

1 Day (8:00 AM - 5:00 PM)

Course Schedule (Luzon Training)

VA 1 May 04, 2010 (Tue) FIRST BATCH
 VA 1 Aug 10, 2010 (Tue) SECOND BATCH

Course Fee

PHP 8,000.00 VAT Exclusive/person

Includes Training Manual, Certificate, lunch, morning & afternoon snacks.

