# **BEARING TECHNOLOGY & MAINTENANCE**

# 2 Day Training Course - Level 1

8-9 August 2017

Course Overview WE201

Learn world's best practice in bearing applications, principles of mounting and dismounting from engineers using the correct fitting and removal tools and techniques including clearance reduction, axial drive up, hydraulic nut withdrawal sleeve and oil injection methods.

SKF delivers this course under the auspice of TAFE SA in Australia and Manukau Institute of Technology (MIT) in New Zealand.

#### **Course Content**

#### **Basics of Bearings and Their Applications**

- Rolling bearing theory
- Plain bearing types and applications
- Meaning of "L 10 Life" and "Service Life"
- Application of fits and tolerances

#### **Fundamentals of Lubrication**

- How bearing lubrication works
- The importance of selecting the proper lubricant for an application
- Maximise bearing life through understanding of proper lubricating principles and functions
- How much and how often to lubricate rolling bearings

#### Seal Types and Application

- Contact seals, Non-contact seals
- Housing seal types

# Principles of Mounting and Dismounting Bearings

- Cylindrical seating
- Tapered seating
- Adapter and withdrawal sleeves
- Cold and hot mounting and dismounting
- Mounting and dismounting using oil injection
- Principles of mounting plain bearings

## Introduction to Bearing Failures and Their Causes

Identify and interpret actual bearing failures

#### Practical Mounting and Dismounting of Bearings

- Preparation for mounting and dismounting
- Checking the components
- Mounting and dismounting tools
- "Hands on" exercises

### **Target Audience**

**Maintenance Technicians** - understand how to fit and remove bearings using the correct tools and techniques, lubrication & cleanliness, bearing storage & handling.

**Reliability & Engineering** - selection of the right bearing, lubricant and sealing arrangements for specific applications, appropriate dimension and for housings and shaft, incorporate appropriate bearing mounting and dismounting requirements into the design and work instructions.

#### **Pre-Study**

#### E-Learning courses: GRB001 Bearing Basics GRB006 Deep Grove Ball Bearings

# **Reading material:**Bearing Basics

## **Post-Study**

Reading material:
Bearing Dismounting
Methods
Tips for Bearing Mounting
Proper bearing handling
and storage

	Course Information
Time	8:00am - 5:00pm (both days)
Days	2 days
Date	Tue 8 August - Wed 9 August
Course Fee	\$1150.00 + GST per person
Venue	Wintec Rotokauri Campus, Hamilton
Refreshments	Morning tea, Lunch, Afternoon tea





