



# Work Execution

## WE201

### Bearing Maintenance and Technology

#### Recommended for

Service, maintenance, machine repair, or plant/facility engineering staff of an industrial plant, OEM facility, institution, public utility or commercial building which uses rolling bearings and related equipment. Managers and technicians at industrial plants and OEM facilities responsible for rolling bearing performance and reliability. Rotating equipment engineers, reliability engineers, millwrights, mechanics, and maintenance supervisors. Those interested in rolling bearing and rotating equipment performance.

#### Course objective

To teach the attendee how to improve the service life of rolling bearings, which improves the reliability of rotating equipment.

#### Course description

Bearing Maintenance and Technology uses a combination of hands-on training, audio visuals, lectures and discussion opportunities. Specific topics include:

##### Bearing basics

- Learn the fundamentals of rolling bearing technology:
  - Bearing types, nomenclature, bearing components, terminology, loads and lubrication
- Factors effecting the performance of rolling bearings
  - Bearing quality
  - Operating environment
  - Installation
  - Maintenance practices
- Gain a basic understanding of why bearings fail

##### Mounting and dismounting

- Study proper bearing mounting and dismounting procedures, and observe what happens as a result of careless handling, neglected maintenance and poor lubrication
- Participate in hands-on demonstrations using specialized tools to correctly mount and dismount ball and roller bearings

##### Fundamentals of lubrication

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

##### Bearing failure causes and analysis

- Identify and interpret actual bearing damage

##### Prerequisite

Participants should have an understanding of industrial safety. A fundamental knowledge of, and ability to use, basic hand tool is required

##### RMI On-line course\*

WE100 Bearing basics

##### Reading material\*

RB02002 Bearing basics

SKF\_4417E Self aligning bearing systems

\* On-line learning material at [aptitudeexchange.com](http://aptitudeexchange.com)

#### 2009 course schedule

March 31–April 2	Atlanta, GA
April 14–16	Toronto, ON
May 12–14	Chicago, IL
June 2–4	Vancouver, BC
June 16–18	San Francisco, CA
August 25–27	Philadelphia, PA
Nov. 10–12	Houston, TX
Nov. 17–19	Montreal (French), PQ
Nov. 17–19	Toronto, ON

#### 2009 tuition

Public classes	\$1,095
On-site	
per class	\$12,995
# people	16
17+ people	\$395 per person

#### 3 days

A written examination is included with this course and is conducted on the afternoon of the final day of class.