# MS 210 - Proactive Reliability Maintenance

## Recommended for

Maintenance personnel responsible for machinery repairs; however, all plant personnel can benefit from the information presented in this course. Managers and supervisors who oversee maintenance activities will gain an understanding of the support and tools required to become truly proactive.

## Course objective

The overall course objective is to provide information and training that enables plant personnel to increase productivity by improving the performance and reliability of rotating machinery.

## Course description

Profitability and meeting customer quality and delivery demands are top priorities in any company. Improvements in machinery reliability can provide significant contributions to these goals. However, countless maintenance programs and fads have largely failed to impact reliability or maintenance costs because they have not addressed the fundamental way maintenance is being performed.

The best plan cannot meet expectations unless maintenance personnel have the knowledge and tools to perform truly proactive and precision maintenance.

SKF has designed the Proactive Reliability Maintenance Skills course to address this very real industry need in a practical format utilizing hands-on exercises to teach and demonstrate the relationships between precision techniques and machine performance. A seasoned millwright or an apprentice will both benefit from the back-to-basics information presented in this course.

From rotor assembly to shaft alignment to the start up of the machine, students will learn to employ world-class practices in a cost- and time- effective manner. An introduction to machinery vibration and condition monitoring will enable mechanics to take basic readings to check their own work as well as better support current condition monitoring programs.

This course covers most rotating machines in any industry but emphasizes coupled horizontally mounted machines with rolling element bearings and belt-driven machinery.

On-site programs can be designed to address specific machinery or maintenance concerns.

The course includes the following topics, with an emphasis on providing solutions to specific maintenance and reliability problems:

- Overview of proactive and precision maintenance.
- Fundamentals of machinery vibration and condition monitoring with an emphasis on basic troubleshooting techniques.
- Precision shaft alignment utilizing a variety of tools.
- Inspection, preparation, and process optimization.
- Improving rotor balance through specifications and precision assembly. Techniques to make any machine run more smoothly.
- Maximizing rolling element bearing life – installation, handling, lubrication, and inspection.
- Belt-driven machinery – assembly, alignment, tensioning to obtain maximum belt and bearing life.

## Course length

4 days