



Work Execution

WE214

Bearing Reliability in Paper Machines

Recommended for

Service, maintenance, machine repair, roll shop or plant/facility engineering staff of a paper machine. Managers and technicians of paper machines and OEM facilities responsible for rolling bearing performance and reliability. Rotating equipment engineers, reliability engineers, millwrights, mechanics, and maintenance supervisors. Those interested in rolling element bearing and rotating equipment performance in paper machines.

Course objective

To provide information to improve the service life of rolling element bearings in paper machines.

2009 course schedule

On-site only

2009 tuition

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.

Course description

Hands-on training, audio-visuals, lectures and discussion opportunities. Specific topics include:

Review of bearing basics

- Learn the specifics of rolling bearing technology, care, nomenclature, bearing components, terminology, loads and lubrication in paper machines
- Review the specific types of bearings typically found in paper machine applications
- Gain a basic understanding of why and how bearings fail in paper machines
- The importance of proper storage, care and handling

Shaft and journal preparation

- Learn how to measure cylindrical and tapered shafts and journals. Participate in hands-on activities using a sine bar gauge
- Study the methods to determine proper shaft and housing fits in a variety of paper applications and how this effects internal radial clearances

Mounting and dismounting

- Study proper bearing mounting and dismounting procedures including, measuring the internal radial clearance of large bore spherical roller bearings and the axial drive up method
- Participate in hands-on demonstrations using specialized tools and techniques to correctly mount and dismount spherical roller bearings

Special housings

- Study the different types of housings used in the felt and dryer sections and what requirements are needed for these applications

Fundamentals of lubrication

- See how important it is to select the proper lubricant and lubrication method for an application
- Learn to maximize bearing life through an improved understanding of proper lubricating principles and functions
- Review circulating oil systems

Bearing failure causes and analysis

- Identify and interpret actual bearing failures from paper machines

Prerequisite

RMI On-line course*

WE101 Spherical roller bearings
WE103 CARB bearings

Reading material*

SKF_4690_E Rolling bearing in paper machines
GS04004 Lubrication practices in paper mills

* On-line learning material at aptitudeexchange.com