



WE245 TMEA Series Laser Alignment

Course objective

To familiarize participants with the use and application of the SKF TMEA Laser Shaft Alignment System on horizontally mounted machines.

Precision shaft alignment requires much more than the use of a laser alignment tool. It is a process that begins with an inspection of the machine and its foundation and then continues through to final soft foot corrections. This course demonstrates how to use the TMEA as part of this process—from installation and setup to the printout of the alignment results.

2009 tuition

\$6,995

3 days

Course description

Course topics are organized according to the steps necessary to operate the product.

- Understand the importance of precision alignment including the adverse affects of misalignment
- Shaft offset and angular misalignment conditions
- The three phases of the alignment process

- General types of soft foot and how to correct soft foot conditions
- Advantages and disadvantages of several alignment methods
- Basic operations and components of the TMEA Laser Shaft Alignment System
- Setup of the TMEA to obtain the highest quality readings
- How to interpret the results, make precision machinery moves, and document results

WE255 Balancing with an SKF Microlog

Course objective

To understand and practice how to successfully balance common rotating machinery in the field to precision levels using any SKF Microlog data collector/analyzer.

2009 tuition

\$6,995

3 days

Course description

Course topics are organized according to the steps necessary to operate the product.

- Understand the three common types of unbalance (static, couple and dynamic)
- Differentiate field and shop balancing tolerances
- Identify the correct approach to use based on the machine's L/D ratio, amplitude and phase readings, and response to the trail weight
- Perform single- and two-plane balancing
- Combine and split correction weights
- Understand lag angle and influence coefficients

Appropriate real-world case histories will be used to illustrate balancing techniques for applications such as: fans, overhung and between bearings, paper rolls, flails, augers and hammermills, cooling tower fans, fin fans and turboprop, and multi-stage pumps.

Please reference individual course syllabuses for more details on:

- **WE250** Precision Field Balancing