

SmartStart™ Technology Training

SmartStart™ on-site product start-up training

SmartStart™ is an on-site product start-up service that focuses on a specific product or system. It is designed to get that product up and running, your employees trained, and your program implemented quickly and effectively.

The training takes the form of mentoring and classroom instruction, and the site instructor will offer guidance in applicable product and/or database optimisation and functionality.

Where is SmartStart™ training conducted?

Training is conducted at your site, in your training facility, using your computers and SKF purchased hardware and/or software.

How is SmartStart™ training conducted?

SmartStart™ instructors will provide you with real world application expertise by using your actual plant applications and requirements. The training is designed to take the form of mentoring rather than traditional classroom instruction.

The site instructor will offer guidance in applicable product and/or database optimisation and functionality. Furthermore, the instructor will offer insightful, pragmatic information that will provide you with powerful tools for predictive maintenance requirements.

What equipment do I need for this course?

Clients need to provide a suitable training room with an LCD data projector, projection screen, and white board or flip chart. Clients are also required to have all course related SKF products and equipment (hardware and software) available to the participants at the time of training.

WICM232 MARLIN /Microlog Inspector and SKF @ptitude Analyst Inspector



Course description

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

- Setup and utilise the MARLIN/Microlog Inspector Condition Detector (MCD) as a stand-alone

probe to monitor overall machinery and bearing vibration and temperature

- Installation and use of MARLIN/Microlog Inspector Quick Connect studs
- Set up and utilise the MARLIN/Microlog Inspector data manager to monitor and record machinery condition and plant process data
- Use the MARLIN/Microlog Inspector data manager to review data in the field
- Build a MARLIN/Microlog Inspector measurement database using SKF @ptitude Analyst Inspector software
- Transfer data between SKF @ptitude Analyst Inspector and the MARLIN/Microlog Inspector data manager
- Display and generate trends and reports

SKF continues to add new MARLIN/Microlog Inspector hardware and software platforms. The SmartStart™ program will be tailored to match customer specific systems and requirements

| Course Information | |
|--------------------|---------------------|
| Time | 8.30am – 4.30pm |
| Days | 2 days |
| Course Fee† | \$825 AUD + GST |
| Course Type | Public |
| Category | Work Identification |

† Course fee is per person for a Public course. Contact SKF for Onsite course fees.

SmartStart™ Technology Training

WICM264 AX/GX Series Microlog and SKF @ptitude Analyst



Course description

Course topics are organised according to the steps necessary to set up a portable monitoring system and to operate the SKF Microlog AX/GX SKF @ptitude Analyst software product.

Condition monitoring training topics

- Condition based Maintenance Program Overview
- Guidelines for Implementing a Portable Condition Monitoring Program – practical guidelines for implementing a portable condition monitoring program
- Introduction to Vibration Analysis – Discuss the advantages of various vibration signal processing techniques to isolate and detect specific machinery faults (e.g., acceleration enveloping signal processing for early detection of bearing faults)

SKF product training topics

- Set up default properties on the SKF @ptitude Analyst software
- Learn to navigate the software using its menus, dialogs, windows, hierarchy, terminology, workspaces
- How to create a database of vibration measurements
- Download and upload measurements between SKF software and the AX/GX Microlog data collection device
- How to set up default properties in the AX/GX Microlog
- How to operate the AX/GX Microlog data collector/ analyser to collect both route and off-route measurements
- Generate graphic plots and reports for analysing measured machinery condition (both software and AX/GX Microlog)
- Advanced AX/GX Microlog application modules, multiple channel measurements, FRF measurements, balancing

| Course Information | |
|-------------------------|---------------------|
| Time | 8.30am – 4.30pm |
| Days | 3 days |
| Course Fee [†] | \$950 AUD + GST |
| Course Type | Public |
| Category | Work Identification |

[†] Course fee is per person for a Public course. Contact SKF for Onsite course fees.

WICM270 Online Systems and SKF @ptitude

Course Objective

Participants will learn how to design and build an effective online system vibration measurement database, download measurements to online system local monitoring units, understand online system data collection processes, display and analyse the online system Event Log and online measurement data plots for detection and analysis purposes, and generate online system reports.

Course Description

Designed for maximum class participation, this course is divided into sections that are viewed with presentations, computers practice, and reviewed with hands-on group exercises and written reviews.

- SKF @ptitude Online Hardware System (H/W), concept, product structure, and applications
- System checkout and troubleshooting procedures Software installation and setup
- Hardware and software requirements
- Windows® system settings and installation options
- Installing SKF @ptitude Online H/W System
- Operation and theory
- Database configuration: ideology, application and best practices
- Parametric Gating and Control Points
- Online data collection process
- Measurement process and Heartbeat concept
- DAD communication and live data collection process
- Displaying Online data plots
- Generating and printing data reports

| Course Information | |
|-------------------------|---------------------|
| Time | 8.30am – 4.30pm |
| Days | 3 days |
| Course Fee [†] | \$950 AUD + GST |
| Course Type | Public |
| Category | Work Identification |

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SmartStart™ Technology Training

WECM250 Balancing with an SKF Microlog



Course Objective

This course is designed to understand and practice how to successfully balance common rotating machinery in the field to precision levels using any SKF Microlog data Collector/Analyser.

Course Description

Course topics are organised 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

Course Information

| | |
|-------------|---------------------|
| Time | 8.30am – 4.30pm |
| Days | 2 days |
| Course Fee† | \$825 AUD + GST |
| Course Type | Public |
| Category | Work Identification |

† Course fee is per person for a Public course. Contact SKF for Onsite course fees.

WECM245 Easy-Laser Shaft Alignment Systems



Course Content

1. Review Shaft alignment/Pulley alignment theory:
 - Angular and offset misalignment
 - Alignment tolerances.
 - Dial gauge alignment v/s laser alignment processes
2. Setting up the system:
 - Review the Shaft alignment system purchased
 - Application programs
 - Components of the system
3. Taking measurements:
 - Conducting a rough alignment
 - Alignment procedures
 - The clock method.
 - Easy turn method (not using D450 model)
 - Result evaluation and machine adjustment
 - Feet values
 - Coupling values
 - Managing the measurements in alignment software and producing a final alignment report.
 - Summary and questions.
4. Practical exercises using Easy-Laser Shaft Alignment Products
5. Introduction to geometrical measurement
 - Including flatness, straightness, squareness

Course Objective

This course focuses on the step by step procedures for using any Easy-Laser® Shaft Alignment product. Plus groove and face mounted pulley alignment products.

Course Information

| | |
|-------------|---------------------|
| Time | 8.30am – 4.30pm |
| Days | 1 Day |
| Course Fee† | \$825 AUD + GST |
| Course Type | Onsite & Public |
| Category | Work Identification |

† Course fee is per person for a Public course. Contact SKF for Onsite course fees.