Laser Shaft Alignment Learning System

97-ME2A





Learning Topics:

- Laser Alignment Systems
- Safety Rules
- Rough Alignment
- Jack Bolts
- Laser Shaft Alignment Installation
- Laser Shaft Alignment Operation
- Soft Foot Correction
- Laser Shaft Alignment Analysis
- Shaft Alignment Tolerances

The Laser Shaft Alignment Learning System (97-ME2A) covers the installation, operation, and applications of laser shaft alignment in a variety of industrial scenarios. Laser shaft alignment is the preferred method of shaft alignment among maintenance and plant engineering personnel due to its superior efficiency and accuracy over older methods like the dial indicator method or the straight edge and feeler gauge method. Laser shaft alignment systems also avoid problems such as sagging indicators, reading resolution error, and reading parallax error. These components add to the Mechanical Drives 2 Learning System (97-ME2) and the Mechanical Drives 1 Learning System (970-ME1).

The Laser Shaft Alignment Learning System includes a laser alignment system, two measuring units, two shaft v-brackets, two locking chains, and a motor mount horizontal adjustment assembly. Amatrol learning systems are composed of heavy-duty components that provide learners with real-world equipment they'll recognize on the job and already understand how to use. These components will be used to study topics like rough alignment, laser shaft alignment installation, soft foot correction, and laser shaft alignment operation and analysis.

Technical Data

Complete technical specifications available upon request.

Laser Alignment System with Mounting Hardware

Carrying Case
Display Unit
Measuring Units (2)
Shaft V-Brackets (2)
Measuring Tape
Locking Chains (2)
Chain Tightening Rod
12V DC 3A Power Supply
Micro USB to USB Cables (2)

Motor Mount Horizontal Adjustment Assembly Multimedia Curriculum (M19166) Instructors Guide (C19166) Installation Guide (D19166) Student Reference Guide (H19166) Additional Requirements:

Mechanical Drives 2 Learning System (97-ME2) Mechanical Drives 1 Learning System (970-ME1) Install and Align a Power Transmission System using a

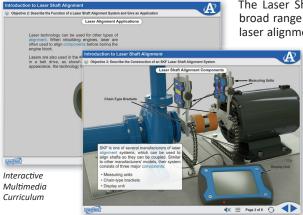
Jack Bolt Motor Base

Misalignment of power transmission system components is a major cause of excess wear and premature machine failure. When a misaligned machine is allowed to operate uncorrected, the resulting vibration will eventually cause bearing, shaft, seal, and coupling failure. This is why laser alignment systems are so vital. Within the Laser Shaft Alignment Learning System, learners will practice hands-on laser alignment skills, such as: install and align a power transmission system using a jack bolt motor base; using a laser alignment system to correct soft foot; and determine shaft alignment tolerances for a given machine installation.



Requires 970-ME1 and 97-ME2

Use a Laser Alignment System to Align Two Shafts



The Laser Shaft Alignment curriculum covers a broad range of topics, including: safety rules for laser alignment system operation; the operation

of an SKF laser shaft alignment system; and how to align two shafts using a laser alignment system. The curriculum for the laser shaft alignment learning system is presented in an interactive multimedia format. This multimedia features all of the content from Amatrol's printed curriculum and adds stunning 3D graphics, video, audio voiceovers, and interactive quizzes.

Amatrol's Extensive Line of Mechanical Drives Expansion Systems

Because the Laser Shaft Alignment Learning System requires the Mechanical Drives Learning System, the opportunity to explore a wider range of mechanical drive topics and skills is available through additional expansion learning systems. Other Mechanical Drive 1 expansion options include: bearings and right angle gears used in heavy duty mechanical transmission systems (97-ME3); linear axis drives, clutches, and brakes (97-ME4); machine tool axis drives based on roller-pack type bearings (97-ME4-A) and plain bearings (97-ME4-B); flat belt conveyors (97-ME4-D) and tool chip conveyors (97-ME4-E); and more!

Student Reference Guide

A sample copy of the Laser Shaft Alignment Student Reference Guide is also included with the system for your evaluation. Sourced from the system's curriculum, the Student Reference Guide takes the entire series' technical content contained in the learning objectives and combines them into one perfectly-bound book. Student Reference Guides supplement this course by providing a condensed, inexpensive reference tool that learners will find invaluable once they finish their training making it the perfect course takeaway.

