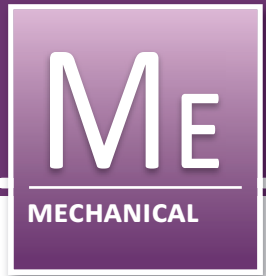
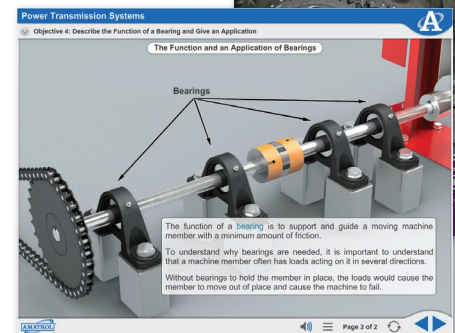


Mechanical Drives 1 Learning System

970-ME1



970-ME1 Learning System
(Includes 3 Component Storage Trays)



Interactive Multimedia and Student Reference Guide

Learning Topics:

- Mechanical Drive Systems
- Shaft Speed Measurements
- Key Fasteners
- Torque & Power Measurements
- Power Transmission Systems
- Shaft Alignment
- V-Belt Drives
- Belt Tensioning
- Chain Drives
- Chain Tension Measurement
- Spur Gear Drives
- Gear Drive Designs
- Multiple Shaft Drives
- Sleeve Couplings

Amatrol's Mechanical Drives 1 Learning System (970-ME1) covers the installation, operation, alignment, and applications of various motor drive systems. Learners will use the 970-ME1 system and curriculum to gain theoretical knowledge and hands-on skills for shaft, belt, gear, and chain drives using real-world motor drive components. The 970-ME1 covers major topic areas like mechanical drive systems, key fasteners, power transmission systems, v-belt drives, chain drives, spur gear drives, and multiple shaft drives.

The Mechanical Drives 1 Learning System includes a constant speed drive motor, variable speed motor, motor control unit, and multi-tray storage unit that include real-world components for building and operating mechanical drive applications. Learners will practice hands-on skills like leveling an electric motor, calculating mechanical efficiency, installing a flexible jaw coupling, installing and removing a chain with a master link using a chain puller, and installing and aligning a sleeve coupling and shaft. Amatrol expertly mixes theoretical concepts immediately followed by hands-on practice to build the strongest possible retention and competency for learners. This method allows learners to simultaneously build motor drive conceptual knowledge and hands-on competency.



Technical Data

Complete technical specifications available upon request.

Mobile Workstation
International Motor Control Unit
Constant Speed Drive Motor
Variable Speed Motor
Lockout/Tagout Package
Prony Brake
Digital Tachometer
Alignment / Measurement Package
Indicator Package Level 1
Multi-Drawer Storage Unit
Interactive Multimedia Curriculum (M19416)
Student Reference Guide (H19416)
Instructor's Guide (C19416)
Installation Guide (D19416)

Requires:

Hand Tool Package (1227)

Utilities:

Electricity (120 VAC/60 Hz/1 phase)

Practice Hands-On Skills Like Installing a V-Belt Drive

The Mechanical Drives 1 Learning System features a mobile workstation with a constant speed drive motor, variable speed motor, motor control unit, and multi-drawer storage unit. This system includes various components separated into sliding trays for building specific motor drive systems. These sliding trays include components for building and running shaft, belt, gear, and chain drives. Additional components include a prony brake, lockout/tagout package for safety skills, and a digital tachometer and alignment / measurement package for motor drive measurement and alignment skills.



Motor Control Console

Learners will use this system to practice real-world motor drive skills like: install and adjust a pillow block anti-friction bearing and shaft, align two shafts using a straightedge and feeler gauge, install and align a fractional horsepower v-belt drive with finished bore, determine allowable chain sag for specific applications, and measure gear backlash.

Mechanical Drives Training Designed for Safety and Efficiency



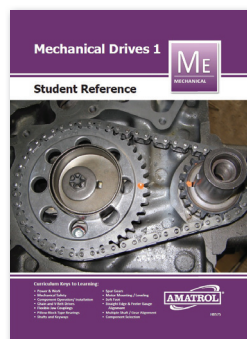
Components Store Easily in Sliding Drawers

The Mechanical Drives 1 Learning System is designed with safety and efficiency in mind. Components store on sliding trays under the training surface for easy access and storage. Each component fits within molded slots on these trays for easy identification and inventory. The work surface is shielded by a protective guard that locks into place. If the guard is dislodged or removed, the motor drive circuits immediately stop.

Interactive Multimedia Motor Drive Curriculum

The Mechanical Drives 1 Learning System includes highly interactive multimedia curriculum that integrates various types of learning methods to create an astoundingly engaging learning experience. Amatrol's multimedia includes text with voiceovers, video, 3D animations, pictures, and interactive activities, quizzes, and self-reviews.

Specific to the Mechanical Drives 1 course, topics include motor mounting, keyseat fasteners, shaft alignment, belt tensioning, chain tension measurement, and spur gear installation. Within these topics, learners will study objectives like how to mount and level an electric motor, the types and applications of keys, the types of shaft misalignment, how to determine belt tension, adjusting chain sag to a specified amount using adjustable centers, and the function of backlash.



Student Reference Guide

A sample copy of the Mechanical Drives 1 Student Reference Guide is included with the learning system. Sourced from the system's interactive multimedia curriculum, the Student Reference Guide takes the entire series' technical content from the learning objectives and combines them into one perfectly-bound book that students can reference for years to come. If you would like to inquire about purchasing additional Student Reference Guides for your program, contact your local Amatrol Representative for more information.

