

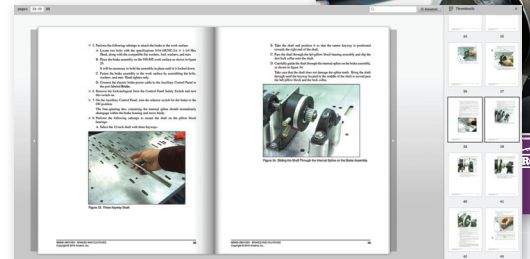
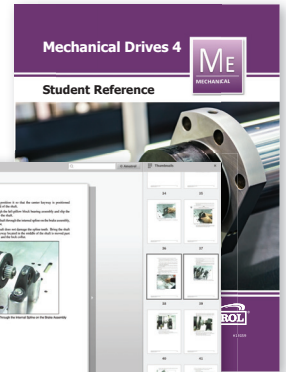
Mechanical Drives 4 Learning System

97-ME4



97-ME4

Student Reference Guide



Optional eBook Curriculum

Learning Topics:

- Brakes
- Friction Clutches
- Cam Clutches
- Brake/Clutch Selection
- Brake/Clutch Maintenance
- Linear Drives
- Linear Ball Bushing Applications
- Linear Ball Bushing Identification, Maintenance, & Selection
- Ball Screw Operation & Applications
- Ball Screw Identification, Maintenance, & Selection

Amatrol's Mechanical Drives 4 Learning System (97-ME4) adds to the Mechanical Drives 1 Learning System (970-ME1) to teach the operation, installation, maintenance, troubleshooting, identification, and selection of precision ball screws, linear ball bearings, cam clutches, friction clutches, electric brakes, and axis slides.

The 97-ME4 includes a Linear Ball Bushing Package, Ball Screw Drive Package, Clutch Package, Brake Package, Flywheel Package, Cable and Switch Package, Student Learning Activity Packet Set, Instructor's Guide, Installation Guide, and Student Reference Guide.



Technical Data

Complete technical specifications available upon request.

Linear Ball Bushing Package

- Base & Top Plate
- Support Ball Bushings & Blocks
- Shafting

Ball Screw Drive Package

- Ball Screw Shaft
- Ball Nut & Retainer
- Bearing Mount and Retainers
- Tail Bearing Mount
- Angular Contact Bearings
- Ball Bearing
- Hand Wheel

Clutch Package

- Cam Clutch
- Clutch Coupling
- Clutch Mounting Plate

Brake Package

- 24V DC Model ERS-42 Brake
- Splined Hub
- Brake Mounting Bracket

Flywheel Package

- Flywheel Rotor & Hub
- Locknut Spanner Wrench

Cable and Switch Package

- Clutch & Brake Cables
- Switch & Plate Assembly

Student Learning Activity Packet Set (B19159)

Instructor's Guide (C19159)

Installation Guide (D19159)

Student Reference Guide (H19159)

Additional Requirements:

- Mechanical Drives 1 Learning System (970-ME1)

Utilities Required:

- Electric (120 VAC/60 Hz/1 phase)

Study Brake and Clutch Concepts and Practice on Real-World Equipment

The 97-ME4 features real-world, industrial-quality brake and clutch components, including a 24V DC Model ERS-42 brake with splined hub and a cam clutch. Users will learn about the operation and applications of multiple types of brakes and clutches. They will also gain hands-on skills, such as calculating the torque created by an inertial load and installing and adjusting an electromagnetic brake and cam clutch.



The 97-ME4 adds clutch and brake switches to the Motor Control Console.

Learn Essential Linear Ball Bushing and Ball Screw Drive Skills

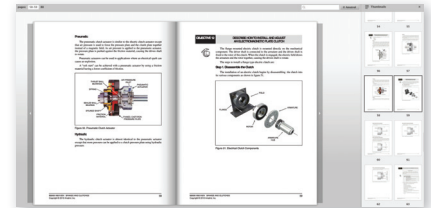


Hands-On Skills with Real-World Equipment

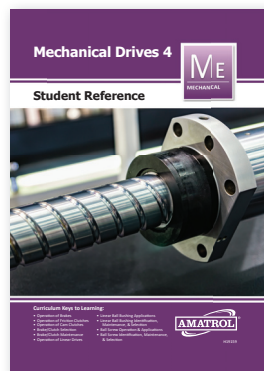
The 97-ME4 also provides in-depth instruction related to linear ball bushings and ball screw drives. For example, learners will study a variety of topics, including: linear ball bushing applications, how to properly lubricate a linear ball bushing, ball screw applications, how to install and adjust a ball screw drive, and how to disassemble, inspect, reassemble, and lubricate a ball screw drive.

In-Depth Curriculum

The 97-ME4 includes in-depth, comprehensive curriculum that provides a strong foundation in brake and clutch concepts, including selection and maintenance. Learners will also study topics related to linear ball bushings and ball screw drives. The curriculum is also available in a convenient eBook format with enhanced features like keyword searches and zoom controls that enable users to quickly locate and view information.



Optional eBook Curriculum



Student Reference Guide

A sample copy of the Mechanical Drives 4 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.

