

# BELT DRIVE TRAINER

MT-10-13-14

EDU-LABS



## GENERAL DESCRIPTION

- This heavy-duty, multi-functional training fixture allows for convenient training in the identification, installation, tensioning and alignment of common belt drives types found in industry.
- A steel baseplate and aluminum components combine to create a lightweight, yet realistic and stable device.
- Packaged with hardware for applications related to multiple matched belts, fractional horsepower belts, positive drive belts and variable pitch sheaves, this device provides a variety of training scenarios in one benchtop piece of equipment. Optional drive hardware relating to other belt types and chain drives are available to expand the device's usefulness.
- This versatile product, combined with a variety of realistic exercises, represents a complete course in this fundamental industrial technology, useful within industrial training programs, as well as in the educational setting.

## Features And Specifications

- 7-Gauge, formed-steel baseplate with provision for tabletop mounting.
- Welded aluminum motor and driven elements.
- High-durability powder coating, allowing for repeated use and rough handling.
- Multiple motor positions allow for demonstration of multiple tensioning requirements.
- Heavy-duty, adjustable motor base for parallel tensioning.

- Provision for two-point tensioning using jacking bolts.
- Heavy-duty, flanged bearings allowing for variations in shaft misalignment.
- Fractional horsepower belts and sheaves, allowing for installation at two shaft centerline distances.
- Multiple type-A belt set, including tapered bushing, 2-groove sheaves, matched belts and a mismatched belt example.
- Positive drive belt set including belt and sheaves.
- Sheave bushings, including QD and taper-lock varieties.
- Belt maintenance tool set.
- Provision for mounting on related bench and workstation products.
- Packaging for shipment via motor freight.

## **STANDARD ACCESSORIES**

- Belt sample set (nine samples).
- Belt tension gauge.
- Sheave inspection gauge.
- Allen wrench set.
- Combination wrenches.
- Straight edge/rule.
- String.
- Angle indicator.
- Shim selection (5 each of 5 sizes).
- Toolbox.
- Use/Exercise Guide, with 12 hands-on exercises.
- Industrial Trades Training Manual, with 55-page section on belt drives (IPT).
- Gates Belt Preventive Maintenance Manual.

## **COURSE CONTENT**

- The courseware, useful in both an instructor-led or self-directed format, includes a textbook on belt drives, and illustrated hands-on exercises.

## **EXERCISES INCLUDE**

- Introduction to belt drive components and concepts.
- Introduction to belt types.
- Belt identification systems.
- Introduction to belt drive sheave terminology and use.
- Use of a dial indicator in belt drive maintenance.
- Installation and removal of QD bushings.
- Belt drive maintenance pre check.
- Alignment and tensioning of fractional horsepower belts.
- Alignment and tensioning of multiple, conventional v-belts.
- Alignment and tensioning of belt drives with variable-speed sheaves.
- Alignment and tensioning of wedge belts (optional).
- Alignment and tensioning of positive drive belts.

**Note: Due to products continuous development process, layout and specification may change without prior notices.**