

Purpose

The Hampden **Model H-IMTS-1** Industrial Maintenance Training System provides maintenance technicians with the equipment needed to learn state-of-the-art techniques for maintaining complex drive systems through “hands-on” practice.

Description

The Industrial Maintenance Training system consists various drives and mechanisms used in industry, including:

- Gear Drives
- V-Belt Drives
- Chain Drives
- Right-Angle Drives & Speed Reducers
- Shafts and Keys
- Bearings
- Roller Chains
- Couplings
- Clutches
- Brakes
- Conveyors
- Pumps
- Electric Motors
- Lubrication Techniques

Test Equipment:

- Feeler Gauge
- Dial Indicator
- Spirit Level
- Assorted Tools

Optional

H-IMTS-DT DVD Training Package:

Includes the following titles:

- *Power Transmission Physics*
- *Roller Bearings*
- *V-Belt Drive Selection*
- *V-Belt Drive Installation & Maintenance*



- *V-Belts & Sheaves*
- *Roller Chain Drive Selection*
- *Roller Chain Drive Installation & Maintenance*
- *Roller Chain & Sprockets*
- *Synchronous Belt Drives*
- *Ball Bearings*
- *Shaft Couplings*
- *Gear Reducers*
- *Gear Reducer Selection*
- *Shaft Coupling Selection*
- *Clutches and Brakes*
- *Ball Bearing Maintenance & Failure Analysis*
- *Anti-Friction Bearing Lubrication*
- *Spherical Roller Bearing Installation & Maintenance*
- *Mounted Bearing Selection*

H-IMTS-CP Courseware Package:

- Maintenance of Mechanical Drives
- Mechanical and Fluid Drive Systems
- Installing and Replacing Bearings & Shaft Seals
- Pump Installation and Maintenance
- Installing & Maintaining Pipefitting

- Installing and Maintaining Tubing & Hose Systems
- Installing and Maintaining Valves & Piping System Protection
- Course Managers Handbook

H-IMTS-CDL Computer Data Logging Package

Consists of:

Hampden HPT-100A Digital Photo Tachometer
Hampden H-REM-LCD Load Cell
Hampden H-MGI-A I/O Interface Module including Genie Software

H-IMTS-EBM Electric Brake & Clutch Module

H-IMTS-STP Special Tools Package (Metric Only)

H-IMTS-TEP Test Equipment Package

- Infrared Thermometer
- Vibration Meter
- Photo Tachometer

H-IMTS-LAK Laser Alignment Kit

H-IMTS-VAK Vibration Analysis Kit

H-IMTS-2S Second Student Package

- Includes additional set of all standard hardware

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All Hampden units are available for operation at any voltage or frequency

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H-IMTS-GB

Gearbox Maintenance Trainer

Purpose

The Hampden **Model H-IMTS-GB** is designed to introduce students to gear basics by having them construct a single stage spur gear reducer, along with three other types of gear reducers. Exercises included gear installation, installing bearings, setting shaft end play, adjusting shaft centers for alignment, measuring backlash, and proper speed ratio.

Description

The **Model H-IMTS-GB** is a precision-machined, heavy aluminum plate gear housing, mounted on a baseplate; machined shafts; and standard industrial grade spur gears make this a rugged training aid that will provide years of effective training experience.

Features

- Precision-fabricated gearbox mounted on a heavy aluminum baseplate
- Gear sets include: spur gears, helical gears, worm gears and miter gears
- Bearings include: tapered roller and radial ball
- Shafting with keyways and keys
- Machined bearing housings
- Dowel pins
- Assorted shims
- Handwheel
- All required hardware
- All required tools



Model H-IMTS-GB Gearbox Maintenance Trainer

Purpose

The Hampden **Model H-IMTS-BM** is a realistic, industrial-duty trainer that provides for effective and accurate instruction in the installation and removal of precision anti-friction bearings. The basic module provides for three basic exercises.

Two precision machined shafts are provided for installation an interference fit ball bearing and for the installation of a spherical roller bearing. A split housing pillow block is also provided to complete the spherical roller bearing, shaft assembly.

Features

- Heavy aluminum baseplate
- Shaft mounting attachments
- Steel precision machined stub shafts allowing for installation of bearings provided
- Provision for installation of a deep groove radial ball bearing
- Provision for installation of a tapered bore cylindrical roller bearing on a parallel shaft using a taper adapter sleeve provision for installation of a radial ball bearing, externally seated, in a pillow block housing
- Bearing Lab Manual



Model H-IMTS-GB Gearbox Maintenance Trainer

H-IMTS-BM

Bearing Module Trainer

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