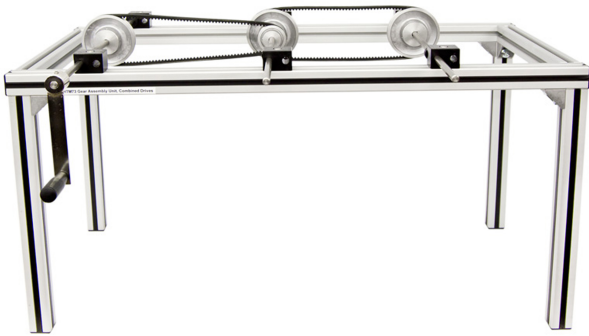




## GEAR ASSEMBLY UNIT COMBINED DRIVES

### HTM73



Year 1  
study

#### Features

- Floor or Bench top apparatus
- Fully customer configurable using components supplied
- Manual driving of system
- Quick and easy setup of arrangements
- Belts, chains, sprockets, tensioner, bevel gear, spur gear, worm/wheel, rack/pinion
- Smooth, quality frame
- Storage container for component parts

#### Description

A wide variety of drive arrangements can be mounted inside this apparatus. Based around a rigid, sturdy frame each drive arrangement can easily be interchanged and fixed into position. Bearing blocks ensure excellent and repeatable alignment of the drives as well as smooth running. The base frame allows for accurate meshing of the drives. The drive arrangements available include dual belt drive, chain drive with tensioner and spur gear train, dual spur gear, compound bevel gear and spur gear, compound worm / wheel gear and bevel gear, rack and pinion with a spur gear drive. Each of the drives is made from durable, long life materials, and conforms to industry standards giving the student a practical knowledge of the arrangement they may use in industry. A cranked handle operates the drives giving more control and feel for each drive arrangement. The cranked handle is away from the main working area of the drives thus ensuring safety during drive rotation. The layout of the drives gives an excellent visual indication of motion, direction, velocity, and mechanical action.

#### Related Laws/Applications

- Automotive
- Assembly of different drive mechanisms, layout and meshing
- Industry standard drives

#### Learning capabilities

- Introduction to gear trains, transmissions, ratios, velocities
- Variety of drive arrangements
- Introduces spur gears, drive belts, pulleys, chains, tensioners, worm and wheel, bevel gears, rack and pinions, compound drives
- Drive construction
- Gearing up
- Gearing down
- The motion, direction, ratios of different arrangements

#### Technical Specification

- 2 'V' belt cogged (toothed) belt, SPAX section
- 4 'V' belt pulleys (approximately 4.5" diameter and 2.5" diameter)
- Chain drive with tensioner and sprockets (toothed sprockets of 24 and 60 teeth)
- 4 spur gears: 2 x 28 teeth, 1 x 56 teeth, 1 x 70 teeth
- Bevel gear pair, 90° between axes
- Shaft blocks: Single height (6 off); double height (2 off)
- 4 shafts: 650mm long (3 off); 610mm long (1 off)

#### What's in the Box?

- 1 x Frame assembly
- 2 x 'V' belt cogged (toothed) belt, SPAX section
- 4 x 'V' belt pulleys
- Chain drive with tensioner and sprockets (24 and 60 teeth)
- 4 spur gears: 2 x 28 teeth, 1 x 56 teeth, 1 x 70 teeth
- 1 x Bevel gear pair, 90° between axes
- 1 x Compound bevel and spur gear pair
- 1 x Compound worm / wheel with bevel gear pair
- 1 x Rack and pinion drive with spur gear
- 1 x Hand operated crank handle
- Shaft blocks: Single height (6 off); double height (2 off)
- 4 shafts: 650mm long (3 off); 610mm long (1 off)
- 1 x Component case
- Instruction manual
- Packing list
- Test sheet

#### You might also like

- HFN8
- HFN9
- HTM7
- HTM25

#### Weights & Dimensions

- Weight: 30 kg
- Length: 1000mm
- Width: 500mm
- Height: 500mm

#### Essential Services

- Sturdy Bench top

#### Operational Conditions

- Storage temperature: -10°C to +70°C
- Operating temperature range: +10°C to +50°C
- Operating relative humidity range: 0 to 95%, non condensing

#### Ordering information

To order this product, please call PA Hilton quoting the following code: HTM73

All brand and/or product names are trademarks of their respective owners. Specifications and external appearance are subject to change without notice. The colour of the actual product may vary from the colour shown in the brochure.

Copyright © 2018 P.A. Hilton Limited. All rights reserved. This technical leaflet, its contents and/or layout may not be modified and/or adapted, copied in part or in whole and/or incorporated into other works without the prior written permission of P. A. Hilton Limited. Hi-Tech Education is a registered trade mark of P. A. Hilton Limited.

COUNTRY OF ORIGIN - UK WARRANTY PERIOD - 5 YEARS