

H-6986

Universal Pump Test Trainer

Purpose

The Hampden **Model H-6986** Universal Pump Test Trainer provides a hands-on introduction to centrifugal, axial, gear and piston pumps.

Description

The Hampden **Model H-6986** Universal Pump Test Trainer consists of a mobile bench, control panel, two dynamometers, sump tank and volumetric measuring tank. Pumps include a centrifugal, axial flow, gear and piston. Each pump is coupled to the dynamometer with easy release couplings. Students will be able to explore first hand pumping mechanics and their effects.

Experiments

- Determination of Flow - Volumetric and Weir
- Efficiency
- Flow Rate Plots at Various Constant Speeds
- Brake Power Input Measurement
- Variation of Pump Capacity with Speed
- Pump Speed Analysis
- Cavitation

Specifications

Base

Mechanical steel tubing, 2" square with heavy duty casters. Finished in instrument tan texture.

Panel

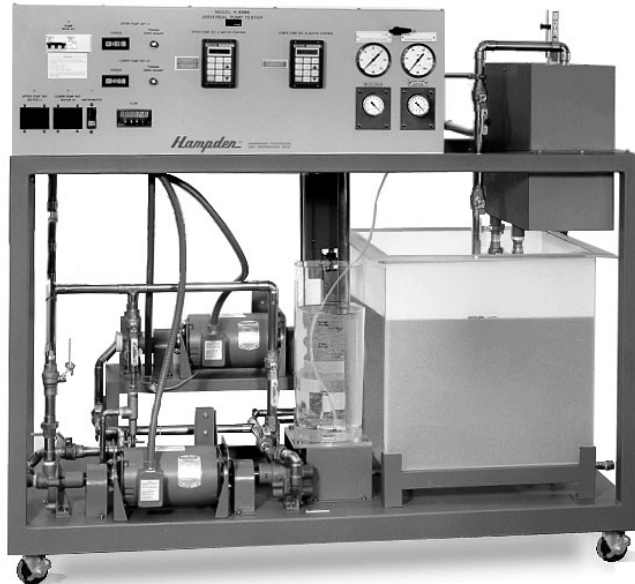
11 gauge furniture stock steel finished in instrument white enamel.

Enclosure

14 gauge furniture stock steel finished in instrument tan texture.

Nomenclature

Silkscreened with black KEM enamel.



Model H-6986 Universal Pump Test Trainer
Dimensions:
62"H x 70"W x 30"D,
Shipping Weight:
1,100 lbs.

Instruments

Gauges:

Delivery circuit and discharge circuit, (4 reqd.).

Torque Meter:

Digital indicator coupled to the dynamometer load cell, (2 reqd.)

Variable Frequency Drive Module:

Motor speed, voltage and current readout, (2 reqd.)

Tanks

- Sump tank constructed of polypropylene, 59 gal. (223 liters)
- Volumetric measurement tank constructed of stainless steel calibrated for 4 gal. (15 liters) and 15 gal. (57 liters) with gravity discharge to sump tank.
- Clear Tank for Axial Pump, 3.8 gal. (14 liters)

Motor Speed Drive:

Variable frequency module, (2 reqd.)

Dynamometer

Trunnion mounted 2HP squirrel cage induction motor - double shaft with load cell arm, (2 reqd.).

Pumps

- Centrifugal
- Axial flow
- Gear
- Piston

Protection

- 3-pole ground fault interrupter circuit breaker. (2 reqd.)
- 1-pole GFI instrument circuit breaker.

Accessories

- Vernier hook-gauge
- Weir, V-notch
- Operating Instructions
- Stop Watch

Services Required

120/208V AC-3 ϕ -60Hz

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

Hampden
ENGINEERING CORPORATION