# Mechanical Engineering Systems

Educational Training Equipment for the 21st Century

**Bulletin 669A** 

### H-6690

#### **Engine Test Bed Demonstrator**

### **Purpose**

The Hampden **Model H-6690** Engine Test Bed Demonstrator provides a high quality dynamometer system for the analysis of a internal combustion engine. The test Bed is a compact, self contained system and incorporates a DC dynamometer with an AC solid state control unit that provides full starting and monitoring services. The DC dynamometer is trunnion mounted and coupled to a spring balance. The engine is a tecumseh horizontal mount over head valve 8Hp engine.

### **Specifications**

 Base: Welded square mechanical steel tubing finished in instrument tan texture.

#### ■ Control Panel:

Enclosure: 14-gauge steel finished in instrument tan texture.

Panel: 11-gauge furniture steel finished in instrument white enamel.

*Nomenclature:* Silk-screen, black KEM enamel.

#### Dynamometer:

- 8Hp
- 1800 RPM (nominal)
- Trunnion Bearing Mount
- Armature Volts 125
- Field Volts 125
- Load Cell

#### ■ Engine:

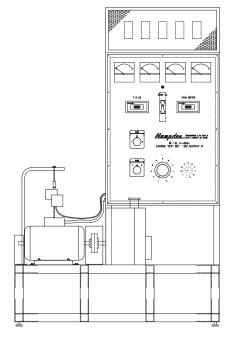
- 8Hp Tecumseh Power Sport
- Over Head Valve
- Electronic Starter
- Large Non-rusting Fuel Tank (26 oz.)
- Cast Iron Sleeve
- Paper Air Filter
- Mesh In-line Fuel Filter

#### AC Solid State Control Unit:

- DC Power Supply
- Voltmeters (3)
- Ammeter
- Variable Transformer
- Circuit Breaker with Pilot Light
- Resistive Load Bank
- Digital Tachometer
- Digital Torque Indicator

### **Services Required**

220V AC-1φ-60Hz



Model H-6690 Engine Test Bed Demonstrator

## **Computer Data Logging**

This feature adds digital meters and one interface package containing National Instruments I/O modules provided for interfacing with a PC through the RS-232 port. Templates for LabVIEW® control software are included.

Specify Model H-6690-CDL

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

