

## H-ICS-7617 Instrument and Process Control Trainer

### Purpose

The Hampden **Model H-ICS-7617** Instrument and Process Control Trainer was designed to provide hands-on training for industrial process automation.

### Description

The system consists of a clear process tank, centrifugal pump and other instrumentation mounted on a mobile carrier. The trainer provides measurement and/or control of flow, temperature and level (pressure transducer and adjustable level switches), with both internal control and external access.

### Specifications

#### Construction:

Mobile carrier and control panels are all steel construction finished in textured tan and instrument white, respectively.

#### Nomenclature:

2-ply brown-white-core engraved phenolic secured to the panel with self-tapping screws.

#### Plumbing:

All air, water, and drain fittings are Parker quick-disconnect type.

All piping shall be clear tubing.

#### Casters:

Two stationary, two swivel with locks

#### Process Control:

Digital, single system microcontroller (PID) with RS-485 communications port.

#### Components:

- Digital Flow Indicator and Processor
- Pressure Transducer with Transmitter - Level
- Pressure Alarm and Light
- Alarm Reset Switch
- Pressure Switch

#### Model H-ICS-7617 Instrument and Process Control Trainer

Dimensions: 30"H x 30"W x 20"D,  
Shipping Weight: 400 lbs.

- Control Valve with Current to Pneumatic Valve Positioner
- High Level Float Switch
- Low Level Float Switch
- Resistance Temperature Detector (RTD) with Transmitter
- Pump Speed Control
- Input/Output Jacks
- Air Regulator with Gauge
- Control Switches
- Set Point Control
- PLC Interface Receptacles, Hampden HR-1S
- Main Circuit Breaker with Ground Fault Interrupter Protection
- Power Supplies (2)
- Solenoid Valves (3)

### Services Required

#### Power:

120V AC 1Ø 60Hz via 3/c power cord.

#### Air:

100 PSI @ 2 SCFM

#### Water:

Cold - normal cold water service  
Hot - 120-140°F

#### Drain:

2 GPM minimum outlet flow



### Options

#### Model H-ICS-7617-CCS

Computer Control System, IBM compatible with data translation hardware and data acquisition program

#### Model H-ICS-7617-PO

Printer

#### Model H-ICS-7617-CC

Computer Workstation

#### Model H-ICS-7617-PLC-AB

Industrial Programmable Logic Controller, PLC-5/15 complete with terminal, software and I/O modules

#### Model H-ICS-7617-FT

Ten instructor-insertable faults

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

**Hampden**  
ENGINEERING CORPORATION