



NUCLEAR ENGINEERING TECHNOLOGY



Hampden[®]
ENGINEERING CORPORATION



Instrumentation

H-ICS "T" Series

The Hampden H-ICS "T" Series Trainers provide experience in setting up, tuning, operating, and troubleshooting actual instrument and control systems of the type used in the power and process industries. Each panel, by simulating a different process loop, provides instruction in the measuring and transducing of such physical variables as pressure, temperature, flow and level. Student trainees learn instrumentation and control techniques of standard Fisher-Rosemount equipment. Covered are open-loop control as well as the various types of closed-loop control: on/off, proportional, proportional plus integral, and proportional plus derivative, as well as a variety of final control devices, including electric, pneumatic and electronic.



MODEL H-ICS-8189-4 Hampden Instrumentation and Controls Trainer
The system consists of two clear process tanks (one for flow/temperature and one for level/pressure), two reservoir tanks, two pumps and other instrumentation mounted on or inside the mobile bench. This trainer provides measurement and control of flow, temperature, level and pressure utilizing microprocessor based controls.



MODEL H-ICS-PT Hampden Instrumentation and Controls Pressure Process Loop Trainer



MODEL H-ICS-TT Hampden Instrumentation and Controls Temperature Process Loop Trainer



MODEL H-ICS-APT Hampden Analytic Process Loop



MODEL H-ICS-pHT Hampden pH Control Trainer



MODEL H-ICS-FT Hampden Instrumentation and Controls Flow Process Loop



MODEL H-ICS-LT Hampden Instrumentation and Controls Trainer Level Process Loop



MODEL H-ICS-HET Hampden Heat Exchanger Process Loop

Power Plant Simulators



MODEL H-185-2A Hampden Advanced Boiler Trainer



MODEL H-186-1 Hampden Combustion Technology Simulator



MODEL H-187-1 Hampden Turbine/Generator Technology Simulator



MODEL H-188-1 Hampden Electrical Generation Fundamentals Trainer with Laptop



MODEL H-IRT-1
The Hampden Industrial Refrigeration Trainer consists of industrial refrigeration components completely factory assembled and wired. It is designed to provide training with larger commercial and industrial refrigeration systems which require water-cooled condensers (tube-in-tube and shell-in-tube), electric and hot gas defrost systems, cooling towers, hot bypass capacity control systems, crankcase pressure regulators, crankcase heaters and pressure pumps.

Mechanical



MODEL H-RIG-1C
The Hampden Rigging Systems Trainer is designed to teach the techniques of safely moving loads of various shapes, sizes and types.



MODEL H-6645
Series/Parallel Pump Trainer is a tabletop unit for the operation and investigation of series and parallel pump operation. The trainer consists of two centrifugal pumps that are fed by a common water reservoir and a PVC plumbing arrangement, along with five valves that allow various configurations to be implemented.

Standard Products...Designed to Meet Your Growing Needs!

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Electrical



MODEL HMD-100-CM-DA

Mobile Experimentation Station

allows students to experiment with power supplies, instrumentation, and have the work surface necessary to perform these experiments on rotating electrical and electronic devices.

MODEL SIM-100
VIRTUAL MOTORS AND MACHINES SOFTWARE provides a "Virtual Workbench", allowing students to assemble, test and analyze a large range of equipment.

Also available:

MODEL SIM-200
VIRTUAL AC/DC CONTROLS

MODEL SIM-300
VIRTUAL AC/DC DRIVES



WB-6A-C WORKBENCH shown with Hampden **MINI-MOTORS** and **H-MGI-100-L MOTOR-GENERATOR INTERFACE MODULE**

Mini-Motors Laboratory

All of the rotating electrical machines and accessories required for a basic Electrical Power Course are contained in the Hampden Mini-Motors Laboratory. The equipment illustrated is the basic package, to which compatible Hampden motors, controllers, and accessories may be added.

MODEL H-6515

The Hampden Anaerobic Digester is a bench top trainer designed to demonstrate the fundamentals of the anaerobic treatment processes.



MODEL H-6518

The Hampden Aerobic Digester is a comprehensive study facility of biological water treatment processes.

A synthetically prepared waste water is used to gain a working knowledge of the operational parameters and purification efficiencies.



Hampden is committed to providing industry-leading technology.

For the latest from Hampden, visit our home page at <http://www.hampden.com> or e-mail us at sales@hampden.com

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