

Digital Power Simulators

Educational Training Equipment for the 21st Century

Bulletin 187E

H-187-1 Turbine/Generator Technology Simulator

Purpose

The **Model H-187-1** Turbine/Generator Technology Simulator serves to demonstrate principles of operation and trouble-shooting techniques of a steam turbine/generator system. The module's front panel displays a complete pictorial view of the system. All functions operate as on the actual equipment and present the student with realistic problem solving opportunities.

The steam turbine/generator simulation is based on a typical modern steam turbine/generator system including turbine operation, analog control loops, digital controls, alarms and trips.

Operational "hands-on" activities performed by students include; real time, dynamic experience with all stages of a steam turbine/generator system.

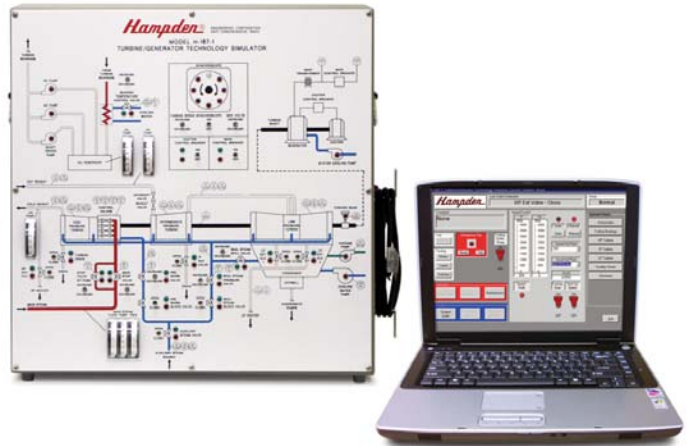
Description

The Hampden **Model H-187-1** Turbine/ Generator Technology Simulator is a fully computer-controlled unit designed to interface with a provided Laptop Computer.

Turbine, generator, turbine valves, bearing oil, flows, pressures, temperatures, speed, loads, voltages and control positions are continuously displayed on screen to student and instructor.

The courseware covers all aspects of operation including:

- System Description
- Theory
- Component Identification
- Sub-Systems Operation
- Controls
- Integrated Operations



Hampden **Model H-187-1** Turbine/Generator Technology Simulator

Features

The **H-187-1** Turbine/Generator Technology Simulator can be set to simulate the following conditions:

- Turbine stopped and cold
- On turning gear
- Turbine pre-warming complete
- 200 RPM heat soak complete
- 1000 RPM heat soak complete
- Ready to synchronize
- 3000 RPM heat soak complete
- 5% load in full arc mode
- 30% load in partial arc mode
- 100% load

Complete your Power Plant training with these additional Hampden Digital Simulators



MODEL H-185-2A
Advanced Boiler Trainer



MODEL H-186-1
Combustion Technology Simulator



MODEL H-188-1
Electrical Generation Fundamentals
Trainer

Students are able to interact with different graphic displays, view system parameters, in addition to operating digital and analog controls.

Instructors may insert simulated mechanical or electrical "faults" into the system to test a students' troubleshooting capabilities.



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

Hampden
ENGINEERING CORPORATION

041116