SIMUOIL™ is an oil furnace simulator and troubleshooting training system, designed for HVAC students and service technicians. The simulator is an invaluable tool for teaching the basics of oil furnace operation and troubleshooting, as well as improving the service skills of experienced technicians.
GENERAL FEATURES OF THE UNIT

SIMUOIL simulates four different configurations of generic oil furnaces that a service technician would commonly encounter in the field. The configurations include:

- Cad cell primary control with one-pipe gravity feed tank
- Cad cell primary control with 2-pipe buried tank
- Stack-mounted primary control with one-pipe gravity feed tank
- Stack-mounted primary control with 2-pipe buried tank

Indoor and outdoor temperatures, room thermostat, burner air shutter, draft regulator, fuel pump pressure, and electrodes are all adjustable in the simulator. Up to 30 different mechanical and electrical faults may be inserted into the simulator, as shown in the Fault Lists below.

SIMUOIL provides “point-and-click” selection of meters and test points, and display of temperatures and pressures in either imperial or metric. For troubleshooting the simulator, the following on-screen test instruments are included:

- Draft gauge
- Fuel gauge
- Pressure gauge
- Vacuum gauge
- Thermometer
- Combustion analyzer
- Clamp-on ammeter
- Voltmeter
- Ohmmeter

EXPERIMENTS

SIMUOIL provides testing and troubleshooting of components and devices commonly found in actual oil furnaces, including the following:

- Burner
- Fuel pump
- Nozzle
- Combustion chamber
- Heat exchanger
- Draft regulator
- Oil and air filters
- Primary control
- Fan and burner motors
- Motor run capacitor
- Ignition and control transformers

REQUIRED

requires the following minimum computer system to operate:

- IBM compatible PC with a Pentium®, Core®, or equivalent processor
- Windows XP, Vista, 7, 8, 8.1, and 10 (32 or 64-bit)
- VGA/SVGA display
- Hard disk drive, 17.5MB available disk space (12MB if other Simutech simulators are also installed)