Installing and maintaining solar thermal open-loop systems require hands-on skills and troubleshooting ability across both drainback and pressurized systems. Likewise, engineers and designers need to understand the technologies used in these systems as well.

Amatrol’s 950-STOL1 Solar Thermal Open-Loop Troubleshooting Learning System allows students to develop the specialized skills and knowledge needed for working with open-loop system configurations and situations. The 950-STOL1 teaches students connection, programming, and troubleshooting problems system wide. The curriculum is PC-based multimedia that is highly interactive. It allows students to use the learning style best for them – reading, listening, visual. The 950-STOL1 supports the NABCEP (North American Board of Certified Energy Practitioners) test for Certified Solar Thermal System Installer.

The 950-STOL1 includes all components needed to develop hands-on, job-ready skills: all solar specific components as well as balance of system items. The learning system contains a mobile workstation, multiple component circuit panels, a solar collector unit, fault insertion, PC-based multimedia student curriculum, and instructor’s assessment guide. An optional sun simulator is available to facilitate classes indoors when outdoor conditions do not support solar heating.
Fault Insertion For Both Electrical and Fluid Systems

At the heart of a technician’s skill set is the ability to troubleshoot a system. The 950-STOL1 is equipped with a wide array of both electrical and fluid faults that allow instructors to replicate realistic system and component failures students. Students will learn to independently solve the many common types of situations they will encounter on the job.

Balance of System Components – Replicates Real World Thermal Systems

Developing installation and troubleshooting skills for solar thermal systems requires all the components commonly found in these systems. Amatrol includes elements such as vacation bypass, check valves, relief valves, flow meters, and tempering valves are essential to create realistic systems and troubleshooting situations. Amatrol also includes a digital differential controller that features many programming capabilities which allow students to learn how to program the more sophisticated thermal systems they are likely to encounter.

Optional Sun Simulator (95-STS1)

Amatrol offers an optional sun simulator, the 95-STS1, for use indoors with the 950-STOL1. The Solar Thermal Open-Loop Learning System’s two thermal collectors work either outside with direct sunlight or inside with the sun simulator.