

HYDRONIC HEATING NYS (NYS only)



PURPOSE

To evaluate contestants' preparation for employment and recognize outstanding students for excellence and professionalism in Hydronic Heating.

CLOTHING REQUIREMENT

White crew neck short-sleeved T-shirt, work pants, safety glasses or goggles, leather or steel-toed work shoes, and safety glasses with side shields or goggles. (Prescription glasses can be used only if they are equipped with side shields. If not, they must be covered with goggles.)

Note: Contestants must wear their contest clothing to the contest orientation meeting. Also bring #2 pencil, resume, and safety assurance form.

ELIGIBILITY

Open to active SkillsUSA members enrolled in CTE heating service as the occupational objective.

EQUIPMENT AND MATERIALS

Equipment and Materials:

1. Supplied by the NY chair/committee:
 - a. All information necessary for the contestants and judge.
 - b. Special tools, meters gauges, testing and operation equipment.
2. Supplied by the contestant:
 - a. 1 each- 14" and 18" pipe wrench
 - b. 4- 3/4" SWT ball valves
 - c. 6' folding rule and tape
 - d. 2- 3/4" 90 deg. copper El's
 - e. 1 each 6" and 10" adjustable wrench
 - f. 2- 3/4" x 3/4" x 1/2" CxCxFE tee cast
 - g. 1 pr. 10" pump pliers
 - h. 7- 3/4" male adapters

- i. 1- 8" torpedo level
- j. 4- 1" male adapters
- k. 1- medium size screwdriver-blade
- l. 2- 1" 90 deg. copper El's
- m. 1- phillips head screwdriver
- n. 1- 1" 45 deg. copper El's
- o. 1 tubing cutter 1-1/4"
- p. 2- 1"x 3/4" copper El's
- q. 1/2" & 3/4" pipe cleaner
- r. 2- 1"x 1x 3/4" copper tee's
- s. pipe compound/Teflon tape
- t. 1- 1"x 1/2" x 1" copper tee
- u. plumbers cloth
- v. 1- 1"x 1/2" x 1" ccc wrot
- w. solder and solder flux
- x. 1- 3' length 1/2" "m" copper tubing
- y. 1 torch & striker
- z. 1- 4' length 3/4" "m" copper tubing
- aa. 2- 1/2" x close nipples
- bb. 1- 4' length 1" "m" copper tubing
- cc. 1- 1/2" Blk Tee
- dd. 4- 1" X 3/4" Blk Bushings
- ee. 1- 1/2" SWT ball valves
- ff. 4- 1/2" male SWT adapters
- gg. 1- 1/2" FE adapter
- hh. 3- 1/2" I.P.S. boiler drains
- ii. 6- 1/2" SWT 90 deg. El's

NOTE: Contestants will disassemble project. All tools must be brought to the contest site in a toolbox with no visible student or school name.

Note: Your contest may also require a hard copy of your résumé as part of the actual contest. Check the Contest Guidelines and/or the updates page on the NYS SkillsUSA Web site:
<http://www.nysskillsusa.org/>

SCOPE OF THE CONTEST

The contest is divided into two parts: a written exam and a series of testing stations designed to assess knowledge in Hydronic Heating industry standards.

Knowledge Performance

The contest will include a written knowledge exam assessing knowledge of Hydronic Heating. The test will be completed during the contest.

Skill Performance

1. Contestants will be given job sheets explaining the tasks to be performed.
2. Contestants will be asked to assemble on a boiler all necessary heating specialties such as circular, flow valves, air scope, expansion tank, etc./ with pipe and fittings so that the boiler may be connected to a two zone hot water heating system.
3. Projects will not include air conditioning units.
4. Contestant's knowledge of equipment, fittings and parts associated with heating systems, domestic hot water and gas, and oil burners will be tested.
5. Contestants will be rated on their technical knowledge, identification, manipulative skills, safety and speed.