

MARCH 14 2024	UA LOCAL 56
Time	Task
7:30 am – 8:00 am	Orientation
8:00 am – 9:30 am	Competition
9:30 am – 9:45 am	Break
9:45 am – 12:00 pm	Competition
12:00 pm – 12:30 pm	Lunch (provided)
12:30 pm – 2:30 pm	Competition
2:30 pm – 2:45 pm	Break
2:45 pm – 4:00 pm	Competition
4:00 pm	Competition ends / judging

### 1. Purpose of the Contest (2024)

To assess the contestant's knowledge and skills in the fabrication of a piping system and components, with high regard to the aspects of quality, workmanship and accuracy of work.

### 2. Criteria

# 3. Number of Stations / Allocations

There will be a maximum of 8 stations.

# 4. Skills & Knowledge to be Tested

- Applying mathematical concepts involving planning, measuring and layout of a piping system;
- Interpretation and application of blueprint specifications;
- Fabricate and assemble a piping spool
  - Measure, cut, bevel and fabricate steel pipe and fittings;
  - Use fabrication tools & equipment to join pipe and fittings;
  - Apply safe work practices;
- Fabricate and assemble an equal spread offset piping loop using various materials and joining methods as per supplied drawing;
  - Measure, cut, thread and install steel pipe and fittings;
  - Measure, cut, solder, and install copper pipe and fittings;
  - Measure, cut, bend and install steel tube and fittings;



- Air test piping assembly once complete as per testing specifications
- Apply safe work practices

SAFETY AWARENESS / REQUIREMENTS WILL BE MAINTAINED TO MINIMUM INDUSTRY STANDARDS AT ALL TIMES.

Tasks that may be performed during the contest:

- Applying mathematical concepts involving offsets;
- Interpreting and applying the blueprint specifications;
- Assembly of various pipe and fittings:
  - Carbon steel threaded / welded
  - Copper /soldering
  - o Tube bending
  - Pipe fabrication
- Apply safe work practices;
- All dimensions shall be in imperial;
- All dimensions will be taken from the designated centerline or benchmarks unless directed otherwise;
- Tool inspection will be ongoing;
- There will not be any onsite pipe joinery technique instruction;
- Proper insertion for all pipe joints are mandatory;
- It is to be understood that throughout the competition, safety and project judging will be ongoing;
- No project specific aids, tools or jigs allowed;
- Dimensions may be modified before competition.

## 5. Prerequisites

### **Contest-Specific Prerequisites**

• Competitors must be registered Steamfitter – Pipefitter apprentices or attending a preemployment program for this trade.

### **SCNS** Prerequisites

- Enrolled in a community college, university or private school OR be registered as an apprentice with the Department of Labour and Advanced Education;
- Registered as a competitor with Skills Canada Nova Scotia (SCNS);
- The competitor cannot be a certified journey-person;



- The competitor must possess a Canadian citizenship or landed immigrant status and be a resident of Nova Scotia. Competitors are responsible for verifying this information if requested;
- Have been earning post-secondary credits any time during the academic school year (September to June);
- All competitors must be able to show either current apprenticeship status and/or proof
  of enrollment in a post-secondary institution upon request of the Provincial Technical
  Committee (PTC) or SCNS.

## 6. Tools, Equipment & Clothing

# a) What Will Be Supplied

## **Offset Project**

- 2- 18" Pipe wrenches
- 2-14" Pipe wrenches
- 1- 1 1/8" wrench
- 2- 9/16" wrench
- 1-10" Adjustable wrench
- 1-8" Adjustable wench
- 1-Tape measures
- 1- Combination square
- 1-Ball pein hammer
- 1-#15 Tube cutter
- 1-Reamer
- 1-1/4" tube bender
- 2-Torpedo levels
- 1-Acetylene B-tank
- 1-Turbo Torch with S-5 tip
- 1-Striker
- 1- Chain Vice
- 1- Pipe stand
- 1-Power vice 1/2" ¾" & 1"-2" dies
- 2-Rags
- 1-Thread sealant
- 3-Teflon tape
- Lead free solder/Solder paste
- ¾" Fitting brush
- 1-Pencil, pen and sharpie



- Sand cloth
- Safety glasses
- Ear Plugs
- Calculator

### **Pipe Fabrication**

- 1-2' level
- 2-Torpedo levels
- 2-2' squares
- 1-Wrap around
- 2-Grinders
- 1-Pencil grinder (wrenches)
- 1-Steel fitters wedge
- 1-Ball pein hammer
- 1-1/4" grinding disc
- 1-Zipcut disc
- 1-Flap wheel
- 1-Set flange pins
- 1-half round file
- 1- Tape measure
- 2-25' heavy duty extension cords
- 1-Chain Vice
- 2-Pipe Stands
- 1-Soapstone
- 1-Pair of fitters gloves
- 1-Safety glasses
- 1-Clear shield
- Ear plugs
- 1-Dust mask
- 1/8" gap wire
- 2-1/8" 6010 Electrodes
- Calculator

Note: No other tools than the tools listed ABOVE will be allowed into competition area.

## b) What Competitors Must Supply

- Coveralls / overalls allowed, if sleeves used;
- CSA approved safety boots & hard hat;



- No jewellery;
- Long hair must be tied back and concealed;
- No cell phones or electronic devices allowed.

### 7. Additional Information

• No ties are permitted. In the event of a tie, the winner will be determined by the shortest completion of all the projects combined.

### 8. PTC Contact Information

• Greg Pope: <u>training@local56.ca</u>

• Jonathan Lethbridge: lethbridge.jonathan@irvingshipbuilding.com

• Charles Murphy: murphy.charles@irvingshipbuilding.com