

## Contest Description

Edmonton Expo Centre, Edmonton

May 8 & 9, 2024

<b>EVENT:</b> Steamfitter/Pipefitter	<b>LEVEL:</b> Post-Secondary																								
<b>DURATION:</b> 12hrs (Two Days)	<b>LOCATION:</b> Hall A, Edmonton EXPO Centre, Edmonton																								
<b>COMPETITION SCHEDULE:</b> <div> <div> <b>May 8:</b> <table> <tr> <td><i>ORIENTATION/ COMPETITION</i></td><td>7:30AM 9:30AM</td></tr> <tr> <td>BREAK</td><td>9:30AM - 9:45AM</td></tr> <tr> <td>COMPETITION</td><td>9:45AM - 11:30AM</td></tr> <tr> <td>LUNCH</td><td>11:30AM - 12:00NOON</td></tr> <tr> <td>COMPETITION</td><td>12:00NOON - 1:45PM</td></tr> <tr> <td>BREAK</td><td>1:45PM - 2:00PM</td></tr> <tr> <td>COMPETITION</td><td>2:00PM - 3:30PM</td></tr> </table> </div> <div> <b>May 9:</b> <table> <tr> <td><i>ORIENTATION/ COMPETITION</i></td><td>7:30AM 9:30AM</td></tr> <tr> <td>BREAK</td><td>9:30AM - 9:45AM</td></tr> <tr> <td>COMPETITION</td><td>9:45AM - 11:30AM</td></tr> <tr> <td>LUNCH</td><td>11:30AM - 12:00NOON</td></tr> <tr> <td>COMPETITION</td><td>12:00NOON - 2:00PM</td></tr> </table> </div> </div>		<i>ORIENTATION/ COMPETITION</i>	7:30AM 9:30AM	BREAK	9:30AM - 9:45AM	COMPETITION	9:45AM - 11:30AM	LUNCH	11:30AM - 12:00NOON	COMPETITION	12:00NOON - 1:45PM	BREAK	1:45PM - 2:00PM	COMPETITION	2:00PM - 3:30PM	<i>ORIENTATION/ COMPETITION</i>	7:30AM 9:30AM	BREAK	9:30AM - 9:45AM	COMPETITION	9:45AM - 11:30AM	LUNCH	11:30AM - 12:00NOON	COMPETITION	12:00NOON - 2:00PM
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*Please Note: This document is subject to change as competition information is updated. Competitors are responsible for staying up to date with the most recent information. Check the footer for last updated date. Changes will be highlighted in yellow.*

## CONTEST INTRODUCTION

To assess the competitor'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.

## SKILLS AND KNOWLEDGE TO BE TESTED

- Applying mathematical concepts involving planning, measuring and layout of a piping system.
- Interpretation and application of blueprint specifications.
- Assembling and fabricating a piping system
  1. measure, cut and fabricate copper pipe spools and fittings
  2. use fabrication tools & equipment to join pipe and fittings
  3. applying safe work practices

- Assemble and fabricate a tubing system
  1. measure, cut, join, and install a tubing system and related components
  2. apply safe work practices
- Assemble and fabricate a heating system and related components
  - measure, cut, thread and install a heating system (hydronic – steam)
  - apply safe work practices

#### Tasks that may be Performed During the Competition\*

- Applying mathematical concepts involving offsets.
- Interpreting and applying the blueprint specifications
- Assembly of various pipe and fitting systems
  1. carbon steel threaded / bolted
  2. copper /compression /ProPress
  3. fabrication of strut-based hangers and supports
- Apply safe work practices
- All dimensions shall be in millimetres
- All dimensions will be taken from the designated centerline or benchmarks unless directed otherwise
- Tool inspection prior to event or the evening before competition
- There **will not** be any onsite pipe joinery technique instruction
- Proper insertion for all pipe joint is 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

## EQUIPMENT AND MATERIAL

### Equipment and Materials Supplied by the Committee:

Power vises	Benches, vises and/or tables	2' Level
2 foot square	Combination square	9" Level
ProPress crimping tool	ProPress depth gauge	Tube deburring tool
8", 12" Adjustable Wrench	Half-round bastard file	Permanent sharpie marker / calculators
Soap stone + holder	Copper Tubing Cutters 1/4"-1" OD	Teflon tape
Master Pro-Dope, Brush top	Combination Wrench Sets (7/16-1-5/8")	Ball Peen Hammer
Channel locks	6' step-ladder	Power cords
Welding gloves, Fitters glove	Non-prescription safety glasses	Face shields
Hack Saw	Ready Rod Cutter	Torque wrench
Hearing protection	Emery cloth	

**\*\*No other tools than the tools listed ABOVE will be allowed into competition area.**

### Equipment and Materials Competitors Must Supply

No further equipment and materials will be required by the competitor.

## JUDGING CRITERIA

POINT BREAKDOWN – HEADER and HEX-PLATE MOUNTING/ SUPPORTS	/100
Hex-Plate Orientation	10%
Bolt-up practices (bolt symmetry, bolt-up procedure)	15%
Proper gasket insertion/ flange alignment	10%
Bolt stamps	15%

Hanger length	10%
Alignment of supports	15%
Hardware and hanger installation	15%
Safe Work Practices (deduction)	10%
<b>Point deduction:</b>  Full points for dimensions within 2mm Half points for dimension within 3-4mm Points deduction for each material item request Points deduction for each deviation from plan	<b>= 100%</b>

POINT BREAKDOWN – PROPRESS FABRICATION	/100
Correct measurements	20%
Orientation	15%
Alignment	15%
Grade	10%
Attachments	10%
Joint Preparation (deburring and depth)	10%
Joining Practises	10%
Safe work practices (deduction)	10%
<b>Point deduction:</b>  Full points for dimensions within 2mm Half points for dimension within 3-4mm Points deduction for each material item request Points deduction for each deviation from plan	<b>= 100%</b>

POINT BREAKDOWN – HEATING FABRICATION (threaded)	/100
Correct measurements	15%
Orientation/Grade	15%
Threading Procedure	10%
Use of Thread Lubricant	10%
Tightening	10%
Proper Fitting Sequence	10%

Use of Pipe Wrenches	10%
Neatness	10%
Safe Work Practices (deduction)	10%
<b>Point deduction:</b> Full points for dimensions within 2mm Half points for dimension within 3-4mm Points deduction for each material item request Points deduction for each deviation from plan	<b>= 100%</b>

### TIE BREAKING PROCESS

In the event of a tie, the winner will be determined by the time of completion of all the projects combined.

### Required Clothing (Provided by Competitor)

- Coveralls /Overalls\* (\*long sleeves required)
- No jewellery
- Long hair must be safely secured
- \*\*No cell phones or electronic devices allowed

### SAFETY REQUIREMENTS (Provided By Competitor)

- CSA approved safety shoes
- Prescription safety glasses (if required)

### SAFETY

The health, safety and welfare of all individuals involved with Skills Canada Alberta are of vital importance. Safety is a condition of participation with Skills Canada Alberta and shall not be sacrificed for the sake of expediency. At the discretion of the judges and technical committees, any competitor can be denied the right to participate should they not have the required proper safety equipment and/or act in an unsafe manner that can cause harm to themselves or others.

### ADDITIONAL INFORMATION

#### Skills Canada Alberta Regional and Provincial Rules and Regulations

[Regional and Provincial Rules and Regulations](#)

#### Test Project change at the Competition

Where the Test Project has been circulated to competitors in advance, PTC can change a maximum of 30% of the work content.



### **Lunch**

Lunch for competitors will be provided by Skills Canada Alberta.

### **Parking & Venue Maps**

<http://edmontonexpocentre.com/attend/parking/>

Parking is FREE for all attendees.

### **Opening Ceremonies / On-site Provincial Competitor Registration**

Opening Ceremonies for the PSCC will take place on Tuesday May 7, 2024, at 6:00 pm in Hall D of the Edmonton EXPO Centre. Admission is free, and everyone is welcome to attend. It is important to note that competitor registration will open immediately following the Opening Ceremonies.

### **Awards Ceremony**

The Awards Ceremony will take place on Thursday May 9, 2024, at 6:30 pm in Hall D of the Edmonton EXPO Centre. Admission is free and everyone is welcome to attend. The Awards Ceremony will be shown live at <http://skillsalberta.com/>

### **Team Alberta Information**

Team Alberta will be selected at the PSCC Awards Ceremony. Gold medalists will then be eligible to participate at the Skills Canada National Competition (SCNC) on May 27- June 1, 2024, in Quebec City, QC. It is recommended that competitors review the SCNC contest description to be familiar with the national contest description and project at <http://www.skillscanada.com/>.

During the PSCC Awards Ceremony on Thursday May 9, 2024, gold medalists will be given their Team Alberta information package and will confirm their participation in the SCNC. Students must be present at the Awards Ceremony to claim their position on Team Alberta. If the Gold medalist is not able to attend SCNC, the next top ranking individuals will be asked to participate. If a student is not able to attend the Awards Ceremony a letter confirming the student's interest in Team Alberta participation must be emailed to [javierad@skillsalberta.com](mailto:javierad@skillsalberta.com) prior to the start of competition on May 8, 2024.

**Please prepare your students in advance to accept a position on Team Alberta and outline how your school will support their participation.**

### **Questions?**

Please contact Whitney Koop at [whitneyk@skillsalberta.com](mailto:whitneyk@skillsalberta.com) if you have any questions regarding the Contest Description.



## COMMITTEE MEMBERS

Ryan Buhler	Rob Elliott	Kenny Linton
David Johnston	Daryl Magas	Rob McCrea
Graham Hammel		



Example Project

