



## Contest Description Edmonton Expo Centre, Edmonton May 3 & May 4, 2023

<b>EVENT:</b> Steamfitter/Pipefitter		LEVEL: Post-Secondary	
DURATION: 12hrs (Two Days)		LOCATION: Hall A, Edmonton EXPO Centre, Edmonton	
COMPETITION SCH May 3:	IEDULE:	May 4:	
ORIENTATION/	7:30AM	ORIENTATION/	7:30AM
COMPETITION	9:30AM	COMPETITION	9:30AM
BREAK	9:30AM - 9:45AM	BREAK	9:30AM - 9:45AM
COMPETITION	9:45AM - 11:30AM	COMPETITION	9:45AM - 11:30AM
LUNCH	11:30AM - 12:00NOON	LUNCH	11:30AM - 12:00NOON
COMPETITION	12:00NOON - 1:45PM	COMPETITION	12:00NOON - 2:00PM
BREAK	1:45PM - 2:00PM		
COMPETITION	2:00PM - 3:30PM		

#### 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, craft competency, and accuracy of work.

### SKILLS AND KNOWLEDGE TO BE TESTED

Day 1

- Applying mathematical concepts involving planning, measuring and layout of piping.
- Interpretation and application of blueprint specifications.

Fabrication of carbon steel fittings and offsets.

1. Using supplied templates measure, cut, fit, and assemble a True Wye and multi-piece miter. (Note: A tack welder will be supplied.)







- 2. Use fabrication tools & equipment to join pipe and fittings
- 3. Applying safe work practices

Note: Templates will be supplied for the True Wye, each competitor will field fabricate a multi-piece elbow using supplied tools.

#### Day 2

- Assemble and fabricate a multi-material piping system.
  - 1. Measure, cut, and assemble a tubing/piping assembly and related components
  - 2. Apply safe work practices

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

- Apply mathematical concepts involving offsets.
- Interpreting and applying the blueprint specifications
- Assembly of various pipe and fitting systems
  - 1. Carbon steel threaded / bolted / welded
  - 2. SS tubing
  - 3. Copper tube and fittings
- 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
Press-fit crimping tool	Press-fit depth gauge	Tube deburring tool
Oxy/Ace Brazing Torch/with attachments	Consumables	Permanent sharpie marker / calculators
Soap stone + holder	8", 12" Adjustable Wrench	Half-round bastard file
Master Pro-Dope, Brush top	Combination Wrench Sets (7/16-1-5/8")	Ball Peen Hammer
Striker	Copper Tubing Cutters 1/4"-1" OD	Teflon tape
Channel locks	6' step-ladder	Power cords
Welding gloves, Fitters glove	Non-prescription safety glasses	Face shields (Clear and brazing)
Hearing protection	Emery cloth/ fitting brushes	

\*\*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.



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#### JUDGING CRITERIA

POINT BREAKDOWN – Fabrication True Wye and Miter	/100
Correct measurements	15%
Alignment/centering	15%
Bevels (37.5 deg)	10%
Bevel lands and gap (3/32" or 2.5 mm)	10%
Angles of Wye	10%
Proper Fitting Sequence	10%
Use of grinder	10%
Misc – stray grinding marks etc	10%
Safe Work Practices	10%
Point deduction:	= 100%
Full points for dimensions within 2mm	
Half points for dimension within 3-4mm	
Zero points for dimension > 4 mm (+/-)	
Points deduction for each material item request (5% per request)	
Points deduction for each deviation from plan (5% per deviation)	





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POINT BREAKDOWN – Multi-material project	/100
Correct measurements	10%
Orientation/Square	10%
Offsets parallel	10%
Correct joint engagement(s)	20%
Pressure test	10%
Craft Competency	20%
Safe Work Practices	20%
Point deduction:	= 100%
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	

#### TIE BREAKING PROCESS

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

Tiebreaker #1: In the event of a tie the competitor with the highest score in the Correct Measurements (cumulative, both projects) criteria will be declared the winner. Tiebreaker #2: If a second tie occurs, the competitors with the highest score in the Alignment/centering (Project 1) criteria will be declared the winner. Tiebreaker #3: If a third tie occurs, the competitors with the highest score in the Craft Competency (Project 2) will be declared the winner.

#### 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
- Safety glasses-standard with side shields or prescription

#### 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

#### Lunch

Lunch for competitors will be provided by Skills Canada Alberta.

#### Parking & Venue Maps

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

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

Opening Ceremonies for the PSCC will take place on Tuesday May 2, 2023 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 Ceremony.

#### Awards Ceremony

The Awards Ceremony will take place on Thursday May 4, 2023 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 <u>http://skillsalberta.com/</u>

#### 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 24- 27, 2023 in Winnipeg MB.







It is recommended that competitors review the SCNC contest description to be familiar with the national contest description and project at <u>http://www.skillscanada.com/</u>.

During the PSCC Awards Ceremony on Thursday May 4, 2023 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 <u>javierad@skillsalberta.com</u> prior to the start of competition on May 3, 2023.

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

#### 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.

#### Questions?

Please contact Kennedy Mayer at <u>kennedym@skillsalberta.com</u> if you have any questions regarding the Contest Description.

#### COMMITTEE MEMBERS

Ryan Buhler	Darryl Magas	Glen Aspen
Brett Machtaler	Steven Mather	
David Johnston	Rob McCrea	
Brett Machtaler	Rob Elliot	

