



Contest Description

Edmonton Expo Centre, Edmonton

May 4 & May 5, 2022

EVENT: Steamfitter/Pipefitter	LEVEL: Post-Secondary
DURATION: 12hrs (Two Days)	LOCATION: Hall A, Edmonton EXPO Centre, Edmonton
COMPETITION SCHEDULE:	
May 4:	May 5:
ORIENTATION/ COMPETITION	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
ORIENTATION/ COMPETITION	7:30AM 9:30AM
BREAK	9:30AM - 9:45AM
COMPETITION	9:45AM - 11:30AM
LUNCH	11:30AM - 12:00NOON
COMPETITION	12:00NOON - 2:00PM

Please Note: Due to the uncertainty caused by COVID 19, the PSCC could be subject to change at any time based on the public health context. 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.

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BOSCH





- Interpretation and application of blueprint specifications.
- Assembling and fabricating a piping system
 1. measure, cut, braze and fabricate copper pipe 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, press-fit 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*

- Apply mathematical concepts involving offsets.
- Interpreting and applying the blueprint specifications
- Assembly of various pipe and fitting systems
 1. carbon steel threaded / bolted
 2. SS tubing
 3. copper /silver brazing / compression /Press-fit
 4. 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
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.

JUDGING CRITERIA

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





Hex-Plate Orientation	15%
Hanger length	10%
Alignment of supports	10%
Hardware and hanger installation	20%
Safe Work Practices	10%
Point deduction: 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	= 100%

POINT BREAKDOWN – PRESS-FIT 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	10%
Point deduction: 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	= 100%



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	10%
Point deduction: 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	= 100%

POINT BREAKDOWN – HEATING FABRICATION (brazed)	/100
Correct measurements	20%
Orientation/Square	20%
Joint Prep	20%
Brazing Procedure/Joint Quality	20%
Safe Work Practices	20%
Point deduction: 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	= 100%





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](#)

Competitors must be prepared to adhere to all public health measures in place at the time of the PSCC.

Lunch

Lunch for competitors will be provided by Skills Canada Alberta.



BOSCH





Parking & Venue Maps

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

Competitor Registration

Competitor Registration for the PSCC will take place on Tuesday May 3, 2022 from 9:00am-6:00pm outside Hall B of the Edmonton EXPO Centre. Please note you will be required to present your COVID-19 proof of vaccination.

Virtual Awards Ceremony

The Virtual Awards Ceremony will take place **Friday, May 6th at 6:30pm**. A link will be made available on the website with additional information prior to the ceremonies.

Team Alberta Information

Team Alberta (Post-Secondary) will be selected at the PSCC happening on May 4 - May 5, 2022. Top eligible medalists will compete at the Skills Canada National Competition (SCNC) May 24-28, 2022 in Vancouver, BC. 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/>.

If a competitor is not able to attend the SCNC, competitors MUST notify Victoria Anderson Victoriaa@skillsalberta.com prior to the start of competition. If a gold medalist is not able to attend the SCNC, the next top-ranking individual will be asked to participate.

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 Mike Sury Mikes@skillsalberta.com if you have any questions regarding the Contest Description.





COMMITTEE MEMBERS

Ryan Buhler	Daryl Magas	Chad Baron
Randy Desrochers	Steven Mather	Glen Aspen
David Johnston	Rob McCrea	
Brett Machtaler		

