

# 2025 South West Regional Skills Canada Competition

**Contest Description** 

Lethbridge Polytechnic (3000 College Drive South, Lethbridge)

March 8, 2025

| CHALLENGE EVENT: Plumbing Challenge     |                         | LEVEL: Secondary                             |
|---|-------------------------|--|
| DURATION OF CONTEST: 4.5 HOURS          |                         | LOCATION:<br>Lethbridge Polytechnic – TR1847 |
| CHALLENGE SCHEDULE:                     |                         | REGIONALIZED: NO - THIS IS A                 |
| CHECK IN (FOUNDERS' SQUARE              | 8:30 A.M.               | CHALLENGE EVENT THAT DOES NOT                |
| INTRODUCTION, ORIENTATION<br>AND SAFETY | 8:45 A.M.               | PROGRESS TO PROVINCIALS.                     |
| CHALLENGE BEGINS                        | 9:15 A.M.               |  |
| LUNCH                                   | 11:30 A.M. – 12:00 P.M. |  |
| CHALLENGE ENDS                          | 2:15 P.M.               |  |
| SKILLS DEMO                             | 2:30 P.M.               |  |

**AWARDS CEREMONY INFORMATION:** The awards ceremony will be held at 4:00 p.m. in the Swing Space (AN1804). It is open to the public; parents are encouraged to attend.

## **CHALLENGE INTRODUCTION**

To assess the competitor's knowledge and skills in the installation of a plumbing system with high regard to the aspects of quality workmanship, proficiency of pipe joining techniques and accuracy of work within a specified time frame.

## SKILLS AND KNOWLEDGE TO BE TESTED

- Interpreting and applying the blueprint specifications and managing material usage
- Assembly of NPT threaded connections and adapters
- Assembly of pex pipe with standard crimp fittings
- Assembly of copper tube with standard solder fittings
- Bending of 5/8" OD copper tube using mechanical benders
- Applying safe work practices

## **CHALLENGE DESCRIPTION**

Please see the Test Project so competitors can train leading up to the competition. Please note that the attached Test Project may change on the day of the competition.





## **EQUIPMENT & MATERIALS**

## **Equipment and Materials Competitors Must Supply:**

| CSA Approved footwear (must have | Suitable clothing/workwear (see | Calculator (no cell phone) |
|----------------------------------|---------------------------------|----------------------------|
| green triangle)                  | more information below)         |                            |

## Equipment and Materials Supplied by the Committee:

| RIDGID 150 copper cutter | RIDGID pipe benders model     | RIDGID tri-stand |
|--------------------------|-------------------------------|------------------|
|                          | 310/316 mm – cat. #36962      |                  |
| Soldering materials      | Soldering torch (B tank)      | Teflon tape      |
| Pex cutters & crimpers   | Cordless drill w #2 Robertson | Measuring tape   |
|                          |                               | (metric)         |
| Water pump pliers        | Adjustable wrenches           | Torpedo level    |
| Hammer                   | Combination square            | Chalk line       |
| CSA clear safety glasses | Nitrile gloves                | Foam ear plugs   |
| Pencil                   | Marker                        | Paper            |

## \*Tool demonstration will be provided if requested at orientation.

Competitors may supply and use their own hand tools as per the previous list. Competitor tools must be brought to the competition area in a toolbox. Any hand tool not brought in a toolbox will not be permitted within the competition area. During the competitor orientation at the beginning of the day toolboxes and tools will be inspected by the competition organizers to ensure they work properly, are safe to use, are equivalent to other tools provided by Lethbridge College, and have not been modified.

#### JUDGING CRITERIA

| Accuracy of Installation | 50%  |
|--------------------------|------|
| Quality of Workmanship   | 30%  |
| Piping Pressure Test     | 10%  |
| Safety                   | 10%  |
| Overall Total            | 100% |

#### **TIE BREAKING PROCESS**

In the event of a tie, the competitor who completes the project with the fastest time will be declared the winner. If no competitor has completed the project, judges will find additional measurements to break the tie.

## **CLOTHING REQUIREMENT**

Appropriate work clothing must be worn at all times to compete. Long hair must be tied back. All clothing must be neat and clean, and free of rips and tears. Casual wear such as shorts, and open toed shoes/sandals will not be permitted. No loose-fitting clothing or jewelry.

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### SAFETY

The health, safety and welfare of all individuals involved with South West Regional Skills Canada 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.

## **CONTEST AREA SPECIFIC SAFETY REQUIRMENTS**

CSA approved clear safety glasses and safety boots must be worn within the competition areas. Competitors must wear long sleeve shirts and gloves while soldering.

#### **ADDITIONAL INFORMATION**

Lunch will be provided for all Challenge participants, judges and volunteers. Your lunch ticket will be in the back of your name tag. Unfortunately, all allergies may not be able to be accommodated for. Please contact the local Regional Coordinator for more information.

#### **PARKING INFORMATION & VENUE MAPS**

Please Park in Lot V – there is no charge. Overflow will also be allowed in Lot P. A printable parking map of Lethbridge Polytechnic can be found at: <u>https://lethpolytech.ca/document-centre/facilities-management/parking-map</u>

#### **REGIONAL REGULATIONS & POLICIES**

A copy of the Skills Canada Alberta Regional Regulations & Policies can be found at the following link: <u>http://www.skillsalberta.com/policies-and-procedures</u>

#### CHALLENGE AND TOUR SCHEDULE

| 8:30  | Challenge participants check in at Founders' Square       |  |
|-------|---|--|
| 8:45  | Introduction, Orientation and Safety                      |  |
| 9:15  | Challenge Begins  |  |
| 11:30 | Lunch Break – 30 minutes                                  |  |
| 12:00 | Challenge Resumes   |  |
| 2:15  | Challenge ends – Judging Begins                           |  |
| 4:00  | Awards Ceremony (Swing Space AN1804) – open to the public |  |

#### **COMMITTEE MEMBERS**

| Jeremy Bridge     | Lethbridge Polytechnic |
|-------------------|------------------------|
| Holly Lehbauer    | Career Transitions     |
| Judy Stolk-Ingram | Career Transitions     |



