

# 2025 North East Regional Skills Canada Competition

**Contest Description** 

Portage College (9531 - 94 Ave, Lac La Biche)

March 21, 2025

| EVENT: Welding               |                  | LEVEL: Secondary                                      |   |
|------------------------------|------------------|---|---|
| DURATION OF CONTEST: 5 HOURS |                  | LOCATION: Welding Shop, Portage College, Lac La Biche |   |
| COMPETITION SCHEDULE:        |                  |   | REGIONALIZED: YES                                   |
| ORIENTATION                  | 7:45AM - 8:15AM  |   | If YES, to compete at the Provincial Skills Canada  |
| COMPETITION                  | 8:30AM - 11:30AM |   | Competition students must qualify at their Regional |
| LUNCH                        | 11:30 - 12:00PM  |   | Skills Canada Competition.                          |
| COMPETITION                  | 12:00 - 2:00PM   |   |   |
|                              |                  |   |   |

**AWARDS CEREMONY INFORMATION:** Depending on the number of competitors, the ceremony will either be held in McGrane Theatre or Waniskah Room at Lac La Biche campus at 4:00PM

## CONTEST INTRODUCTION

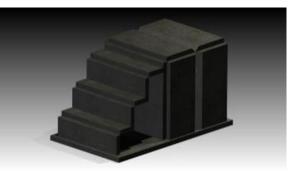
To enable competitors to demonstrate their knowledge and skills of welding principles. The competition will consist of a practical examination. Competitors will be expected to utilize their practical skills and knowledge in drawing interpretation of fitting and welding. The following processes are applicable: SMAW & GMAW. Safety procedures will also be evaluated.

## SKILLS AND KNOWLEDGE TO BE TESTED

The Regional competitors should be prepared to apply their theory knowledge in a layout and drawing interpretation to complete a 5-hour practical project which may include but not limited to the following tasks (please see the below isometric image and attached project drawing and weld procedures): SMAW 1G, 2G, 3G Butt Weld GMAW 1G, 2G, 3G Butt Weld SMAW or GMAW, 2F & 3F Welds SMAW- 1G on plate. Root E6010 1/8, E4310 3.2mm. Fill and cap E7018 3/32 or 1/8,E4918 2.5mm or 3.2mm Fillets- 2F, 3F, E7018 -1/8" and or 3/32", E6010 1/8", E4918 3.2 mm and or 2.5mm or E4310 3.2mm. GMAW- 1G & 3G on plate, 2F and 3F (vertical up and down)

## **PROJECT DESCRIPTION**

Please see the attached dimensional print and weld processes. Competitors that advance onto the Provincial Skills Canada Competition will also be provided the dimensional print with their contest description; however, the competition can be changed up to 30% on the day of the competition. This percentage change however, will not be implemented at the Regional competition level.







## **EQUIPMENT & MATERIALS**

## Equipment and Materials Competitors Must Supply:

| Work Boots (CSA Approved steel toe work boots)           | Welding Helmet |  |
|--|----------------|--|
| Side shields required for prescription glasses           | Safety Glasses |  |
| Appropriate clothing (100% cotton coveralls recommended) | Welding Gloves |  |
| Long Sleeve Denim Shirt or Jacket - 100% cotton          | Ear Plugs      |  |

### Competitor's tools will be limited to the following:

| Pipe liner files | Wire Brush | Vice Grips/Pliers            |
|------------------|------------|------------------------------|
| Magnets          | Tri Square | Imperial/Metric Tape Measure |
| Centre Punch     | Hammer     | Cold Chisel                  |
| Soap Stone       |            |                              |

\*Competitors are required to follow all industry standards during the competition.

#### Equipment and Materials Supplied by the Committee:

All materials and consumables needed to build the project.

#### JUDGING CRITERIA

| ASPECT    | The following aspects will be reviewed during the marking:  |
|-----------|---|
| A1        | GMAW fillet size-Are the GMAW fillet sizes according to prints?   |
| A2        | Are the GMAW welds free of surface porosity?  |
| A3        | SMAW fillet size-Are the SMAW fillet sizes according to prints?   |
| A4        | Are the SMAW welds free of surface porosity?  |
| A5        | SMAW penetration-Is the SMAW groove weld completely penetrated 0 to3mm  |
| A6        | SMAW reinforcement-Does the SMAW groove weld have excessive reinforcement 0 to 3mm  |
| A7        | GMAW penetration-Is the GMAW groove weld completely penetrated 0 to 3mm   |
| A8        | GMAW reinforcement-Does the GMAW groove weld have excessive reinforcement 0 to 3mm  |
| A9        | Weld cleaning-Is all weld spatter and slag removed?   |
| A10       | Overall appearance  |
| A 11      | Welding position – are the welds produced in the correct position and location?   |
| the incor | I any of the joint configurations on the projects (i.e. butt, fillet or outside corners) are welded with rect process or in the incorrect position, that joint configuration shall not be visually assessed and are awarded for that type of joint configuration. |





#### **TIE BREAKING PROCESS**

In the event of a tie, the competitor with the higher marks in categories A5, A7 and A11 will win.

#### **RELATED CAREER AND TECHNOLOGY STUDIES COURSES**

Descriptions of all modules are located at the following website: https://education.alberta.ca/media/160533/fab\_course\_summaries\_old.pdf

FAB 1040 FAB 2020 FAB 3048 101B 102A 103A FAB 1048 FAB 2030 FAB 3050 101C 102B 103B FAB 1050 FAB 2040 FAB 3060 101G 102C 103C FAB 2048 FAB 3170 1011 102D 103D FAB 2050 101F 103F,G&H FAB 2060 FAB 2070

#### **CLOTHING REQUIREMENT**

It is important that competitors present a professional image and appearance. Appropriate work clothing must be worn to compete. All clothing must be neat and clean and free of rips and tears. Casual wear such as shorts will not be permitted. No loose-fitting clothes or jewelry.

#### 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

Lunch will be provided for all competitors. Unfortunately, all allergies may not be able to be accommodated for. Please connect with the local Regional Coordinator for more information.

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

#### **COMMITTEE MEMBERS**

John Hunter

