



## Contest Description

Edmonton Expo Centre, Edmonton  
May 7 & 8, 2025

<b>EVENT:</b> Welding	<b>LEVEL:</b> Secondary												
<b>WORLDSKILLS TRADE #:</b> 10	<b>LOCATION:</b> Hall A, Edmonton EXPO Centre, Edmonton												
<b>DURATION:</b> 12 Hours Over 2 Days of Competition	<b>REGIONALIZED:</b> Yes Students must qualify through a Regional Skills Canada Competition (RSCC) to earn a position in the Welding competition at the Provincial Skills Canada Competition (PSCC).												
<b>COMPETITION SCHEDULE:</b> <div> <div> <b>May 7:</b> <table border="1"> <tr><td>ORIENTATION</td><td>7:30AM-8:00AM</td></tr> <tr><td>COMPETITION</td><td>8:00AM-3:00PM</td></tr> <tr><td>LUNCH</td><td>11:00AM-12:00PM</td></tr> </table> </div> <div> <b>May 8:</b> <table border="1"> <tr><td>ORIENTATION</td><td>7:30AM-7:45AM</td></tr> <tr><td>COMPETITION</td><td>7:45AM-2:45PM</td></tr> <tr><td>LUNCH</td><td>11:00AM-12:00PM</td></tr> </table> </div> </div>		ORIENTATION	7:30AM-8:00AM	COMPETITION	8:00AM-3:00PM	LUNCH	11:00AM-12:00PM	ORIENTATION	7:30AM-7:45AM	COMPETITION	7:45AM-2:45PM	LUNCH	11:00AM-12:00PM
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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 enable competitors to demonstrate their knowledge & skill of welding principles.

### SKILLS AND KNOWLEDGE TO BE TESTED

The competitors in this competition will need to demonstrate their knowledge & skill of Welding, Layout and Drawing Interpretation. They will be judged based on Weld Profiles, Weld Dimensions, Penetration & Tie ins and overall appearance.

### PROJECT DESCRIPTION

Please see the attached dimensional prints and weld processes for this year's Secondary competition. Please note that the attached project **may** be changed up to 30% on the day of the competition.





Provincial Skills Canada competitors should be prepared to apply their theory knowledge in layout and drawing interpretation to complete two 6-hour practical projects which may include **but not limited to** the following tasks:

SMAW 1G,2G and 3G on plate. Root E6010 1/8, E4310 3.2mm. Fill and cap E7018 3/32 or 1/8, E4918 2.5mm or 3.2mm

Filletts- 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,2G,3G on plate, 2F and 3F (vertical up and down)

Backing bars/plates and restraining devices

- No chill plates, ceramic backing tapes/bars or run off tabs are to be used in the Competition.
- Restraining devices shall not be used during welding of the any projects, such devices include:
  - Clamps, jigs, fixtures or steel plates.
- Only standard fixture or positioning aids (positioners), supplied by the competition organizer may be used.

All projects must be welded flat on welding table (cannot be flipped out of position).

Can only be moved out of the flat position for tacking of projects and cleaning of projects.

### Project Cut Files

If any trainers or competitors would like access to the digital project cutting files for training purposes, please feel free to email [TimC@skillsalberta.com](mailto:TimC@skillsalberta.com).

## EQUIPMENT & MATERIALS

### Equipment and Materials Competitors Must Supply:

Work boots (CSA leather steel toed work boots)	Welding Helmet	Appropriate Clothing (100% cotton coveralls recommended)
Side shields required for prescription eyeglasses	Welding Gloves	Long sleeve denim shirt or jacket, 100% cotton

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

\* Competitors **must** bring the listed safety requirements, or they will not be allowed in the competition area.



**Competitor Tools will be Limited to the Following** (Supplied by the competitor):

**Note:** No other tools than the tools listed below will be allowed into the skill area

Helmet, #10, 11 or 12 lens	Welding gauge	Wedges
Speed lenses (optional)	Dividers	Chipping hammer
Soap Stone / markers	Protractor gauge	Wrap-A-Round
Centre punch	Digital level	Hacksaw blade
12" combination square (45° / 90°)	Ball peen hammer	Trigger clamps
Scriber	All-purpose pliers / side cutters	Magnet bracket
Steel and stainless steel wire brushes	Vice grip AND C-CLAMPS	Files/ with handles
Cold chisel		
Grinders will be provided for fit up only		

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

Angle grinder 4 1/2" 10 amp'	Safety Glasses
Grinding disc 1/4", 1/8", 3/32"	Ear Plugs
Welding machines and accessories for Secondary competition: <b>262MP</b>	
All equipment can be viewed at <a href="http://www.lincolnelectric.ca/">http://www.lincolnelectric.ca/</a>	

#### JUDGING CRITERIA

GMAW fillet size-Are the GMAW fillet sizes according to prints?
GMAW porosity-Are the GMAW welds free of surface porosity?
SMAW fillet size-Are the SMAW fillet sizes according to prints?
Are the SMAW welds free of surface porosity?
GMAW penetration-Is the SMAW groove weld completely penetrated
SMAW penetration-Is the SMAW groove weld completely penetrated
GMAW reinforcement-Does the GMAW groove weld have excessive reinforcement
SMAW reinforcement-Does the SMAW groove weld have excessive reinforcement
GMAW undercut & overlap-Are the GMAW beads free of undercut & overlap?
SMAW undercut & overlap-Are the SMAW beads free of undercut & overlap?

GMAW Fillet joints are completely fused to the parent material?
SMAW Fillet joints are completely fused to the parent material?
Joints are free from Misalignment
Arc strikes-Is the project free of arc strikes?
Welding position-Are welds produced in the correct position?
Fitup-Are parts fitted as per drawing?
Weld cleaning-Is all weld spatter and slag removed?

## ADDITIONAL JUDGING CRITERIA INFORMATION

### Welding of the Projects

If any of the joint configurations on the projects i.e. butt, fillet or outside corners are welded with the incorrect process or in the incorrect position, that joint configuration shall not be visually assessed, and no marks are awarded for that type of joint configuration.

### TIE BREAKING PROCESS

In the event of a tie, the competitor that has the overall highest mark in the correct process in the project will determine the tie breaker.

### RELATED CAREER AND TECHNOLOGY STUDIES COURSES

Descriptions of all modules are located at the following website: <https://education.alberta.ca/career-and-technology-studies/programs-of-study/?searchMode=3>

FAB 1040	FAB 2030	FAB 2070
FAB 1048	FAB 2048	101B
FAB 1050	FAB 2050	101C
FAB 2020	FAB 2060	101G
102C	102A	101I
102D	102B	101F
103A	103B	103C
103D		

### 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](#)

### Project Change at the Competition

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

### Competitor Registration

Registration for regionalized events will open online on January 8, 2025 @ 8:30 AM. Please refer to this competitions event page for additional registration and competition information:

<https://skillsalberta.com/competition/>

### Lunch

Lunch for accredited competitors will be provided by Skills Canada Alberta.

### Parking & Venue Maps

Parking is FREE for all attendees.

Attendees **MUST** register for FREE parking by clicking the below link. Attendees can pre-register their vehicle at anytime prior to the PSCC, or register onsite at the PSCC.

<https://www.offstreet.io/location/81V8R1Z6>

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

### Opening Ceremonies / Competitor Registration

Opening Ceremonies for the PSCC will take place on Tuesday May 6, 2025, 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 8, 2025, 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 28- May 31, 2025, in Regina, SK. It is recommended that competitors review the SCNC contest description to be familiar with the national contest description and project at

<https://www.skillscompetencescanada.com/en/calendars/category/skills-canada-national-competition/>

During the PSCC Awards Ceremony on Thursday May 8, 2025, 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 individual 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 7, 2025.

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

**Please see this link for additional Team Alberta information:** <https://skillsalberta.com/team-alberta/>

### Questions?

Please contact Mike Sury [MikeS@SkillsAlberta.com](mailto:MikeS@SkillsAlberta.com)

### COMMITTEE MEMBERS

Brad Hollman	Falcon welding
Brandon Whitney	Lakeland College
Brian Dorn	SAIT
Brooke Peterson	ATCO
Cole Lewis	Jadler Industries
Craig Sheppard	SAIT
Dan Lynge	NAIT
Darren Trembecky	Edwin Parr Composite High School
Dave Heins	Lethbridge College
Jared Bradley	Boilermakers Apprenticeship
Jeremy Lauzon	Lethbridge College
Justin Meldrum	Stoney Education Authority
Ken Heather	WorldSkills Expert
Ken Lodwig	Government of Alberta





Kevin Vadori  
Lee Yasinski  
Lyle Kragnes  
Marcelo Mena  
Tom Suffern

Lincoln Electric  
Red Deer Polytechnic  
Lakeland College  
Alberta Apprenticeship & Industry Training  
Elk Island Public Schools

