

Contest Description Edmonton Expo Centre, Edmonton May 6 & 7, 2026

EVENT: Welding	LEVEL: Post-Secondary
WORLDSKILLS TRADE #: 10	LOCATION: Hall A, Edmonton EXPO Centre, Edmonton
DURATION: 12 Hours Over 2 Days of Competition	

COMPETITION SCHEDULE:

May 6:

ORIENTATION	7:30AM-8:00AM
COMPETITION	8:00AM-3:00PM
LUNCH	11:00AM -12:00PM

May 7:

ORIENTATION	7:30AM-7:45AM
COMPETITION	7:45AM-2:45PM
LUNCH	11:00AM-12:00PM

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. The competition will consist of a practical examination. Competitors will be expected to utilize their practical skills and knowledge in drawing interpretation, fitting and welding, SMAW, GMAW, GTAW and safety procedures will be evaluated.

PROJECT DESCRIPTION

Please Note:

Please see the attached dimensional prints and welding processes for this year's post-secondary competition. A dimensional print is released with this contest description for competitors to train and practice with prior to the competition. Please note that the attached projects 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 one 6-hour project and two 3-hour practical projects which may include **but not limited** to the following tasks:

- SMAW- Groove welds on Plate or Pipe, root E6010 1/8 and 3/32, (E4310 3.2mm and 2.5mm) fill and cap E7018 3/32 or 1/8, (E4918 2.5mm or 3.2mm) (no rod ovens)1G,2G,3G,4G,6G,
- Fillets 1F 2F, 3F,4F 5F E7018 3/32 or 1/8 (E4918 2.5mm or 3.2mm)
- GMAW- root down fill and cap up on Plate or Pipe Groove- 1G,2G,3G,4G,6G, & Fillet 1F,2F,3F,4F,5F
- GTAW- ER 70S 3/32 or 1/8 root/fill E7018 3/32 or 1/8 (4918 2.2mm or 3.2 mm) fill/cap 1G,2G,3G,4G,6G
- GTAW Stainless ER 308 1/16 or 3/32 2F,3F,4F,5F
- GTAW- Aluminum ER4043 3/32 or 1/8, 2F,3F,4,F,5F

Project Cut Files

If trainers or competitors would like access to the digital project cutting files for training purposes, please feel free to email <u>TimC@skillsalberta.com</u>. Cut files will be available upon request after Jan 15th, 2026.

EQUIPMENT & MATERIALS

Equipment and Materials Competitors Must Supply:

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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
Masking Tape		

Competitor Tools will be <u>Limited</u> 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
Steel and stainless-steel wire brushes	All-purpose pliers / side cutters	Magnet bracket
Cold chisel	Vice grip AND C-Clamps	Files/ with
		handles
Scriber	Tungsten, Cerium, E3 electrodes	
	(will also be supplied by Skills	
	Alberta)	
Grinding will only be permitted on Module 1 – Pressure Vessel		













Equipment and Materials Supplied by the Committee:

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Angle grinder 4 1/2" 10 amp'	Safety Glasses
Grinding disc 1/4", 1/8", 3/32" & wire wheels	Ear Plugs
Welding machines and accessories for post-secondary competition: Lincoln Power Wave® 300C	
Advanced Process, #8 GTAW Gas Cups will be provide. Ceriated 2.5 & 3.2mm E3 2.5 &3.2mm Tungsten	
All equipment can be view at http://www.lincolnelectric.ca/	

Competition Specific Rules

The following Competition Specific rules along with SCA's overall Policies and Procedures provide specific details in competition areas that may vary from one another. Any additional contest rules will be reviewed during the Competitor Orientation.

Topic/Task	Contest Specific Rule
Use of Technology	Competitors are not allowed laptops, tablets, cameras, cell phones, ear buds, calculators or other personal electronics in the competition area unless specified by the committee for certain tasks.
Use of Artificial Intelligence (AI)	Competitors cannot use AI to develop/generate any of the submitted work for any aspects of the competition.

JUDGING CRITERIA

Undercut-Are all the welds free of undercut?
Weld size-Are welds consistent in size per dwg requirement?
Crater fill-Are end craters filled in?
Weld profile-Are all weld profiles as per symbols?
Weld appearance-Are welds beads consistence in appearance?
Fitup-Are parts fitted as per drawing?
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 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?

SMAW reinforcement-Does the SMAW groove weld have excessive reinforcement?

GTAW fillet size-Are the GTAW fillet sizes according to prints?

Are the GTAW welds free of surface porosity?

GTAW penetration-Is the GTAW groove weld completely penetrated

ALL WELDS GTAW AND SMAW AND GMAW Corner weld bead widths uniform and regular?

Fitup-Are parts fitted as per drawing? GATW Projects

Crater fill-Are end craters filled in? (GTAW Aluminum project)

Joints are free from Misalignment

Arc strikes-Is the project free of arc strikes?

Cleanup-Is all weld spatter, fume residue and slag removed?

Overall appearance

ADDITIONAL JUDGING CRITERIA INFORMATION

Welding of the Pressure Vessel

If any of the joint configurations on the pressure vessel 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. If the vessel was tacked in the inside, competitor will take the vessel apart and remove those tacks. No extra time will be added.

Welding of the Aluminum or Stainless-Steel Structures

If any of the joints are welded in the incorrect position, no further inspection shall be carried out and no marks are awarded for the complete structure.

TIE BREAKING PROCESS

In the event of a tie, the competitor with the higher mark on the carbon project will break the tie.















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

Skillz & Thrillz Podcast

Check out our podcast – Skillz & Thrillz: Alberta's Trade & Tech Youth Podcast. Our talented alumni share tips and tricks on how to succeed in competitions and your career! Their insights can help you prepare for your Skills journey, and who knows, you might just be a future guest! https://skillsalberta.com/studentresources/skillz-thrillz-albertas-trade-tech-youth-podcast/

Test 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.

Lunch

Lunch for 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/events/CBLHM7U1

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

Opening Ceremonies / Competitor Onsite Registration

Opening Ceremonies for the PSCC will take place on Tuesday May 5, 2026, 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 7, 2026, 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 27- May 30, 2026, in Toronto, Ont. It is recommended that competitors review and become familiar with the SCNC contest description and project at https://www.skillscompetencescanada.com/en/event/skills-canada-national-competition-2026/

During the PSCC Awards Ceremony on Thursday May 7, 2026, 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 highest-ranking individual will be asked to participate. If a student is not able to attend the Awards Ceremony an email confirming the student's interest in Team Alberta participation must be emailed to javierad@skillsalberta.com prior to the start of competition on May 6, 2026.

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

COMMITTEE MEMBERS

Brad Hollman Falcon welding **Brandon Whitney Lakeland College**

Brian Dorn SAIT **Brooke Peterson ATCO** Cole Lewis **SAIT** Craig Sheppard SAIT **NAIT** Dan Lynge

Edwin Parr Composite High School Darren Trembecky

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

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Lee Yasinski Red Deer Polytechnic Lyle Kragnes **Lakeland College**

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Tom Suffern **Elk Island Public Schools**











