

2024 Calgary Regional Skills Canada Competition

Contest Description (Scope Document) SAIT, Main Campus (1301 – 16 Ave NW, Calgary) March 2, 2024

EVENT: Welding Senior			LEVEL: Secondary		
DURATION OF CONTEST: 5 HOURS			LOCATION: SAIT - Aldred Center CA217 Registration CA208 & CA209 Competition CA211 Judging		
COMPETITION SCHEDULE:		REGION	REGIONALIZED: YES		
ORIENTATION	7:30AM-8:00AM	If YES, 1	To compete at the		
COMPETITION 8:00AM-11:30AM		Provinc	Provincial Skills Canada Competition students must qualify at their Regional Skills		
LUNCH 11:30AM-12:30PM					
COMPETITION 12:30PM-2:00PM		qualify			
		Canada	Competition.		

AWARDS CEREMONY INFORMATION: An awards ceremony will be held at Heritage Hall once the competition and judging are completed.

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 & 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 skills 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
- 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

Competitors 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:

Materials and Consumables to build 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?	





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	101	B 102A	103A
FAB 1048	FAB 2030	FAB 3050	1010	C 102B	103B
FAB 1050	FAB 2040	FAB 3060	1010	G 102C	103C
	FAB 2048	FAB 3170	101	I 102D	103D
	FAB 2050		101	F 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: https://skillsalberta.com/policies-and-procedures

COMMITTEE MEMBERS

Adam Medrek	Albert White
Ralph Logullo	Ross Ingrilli
Nigel Peters	Andy Samek
Matt Lawrie	Shawn England
Mathew Romeike	Doug Sontag
Andrew Roach	Tanya Evans
Ken Clack	Craig Sheppard
Robert Hartley	

