

2012 South West Regional Skills Canada Competition

Scope Document

Lethbridge College

Thursday, April 19, 2012

EVENT: Welding	LEVEL: Secondary
TIMES: Check-in Time: 7:30 am Orientation/Registration: 7:45 am Competition Start Time: 9:00am Competition End Time: 2:30pm (30 minute lunch included)	LOCATION: Lethbridge College TR 1935
DURATION: 5hrs	REGIONALIZED: Yes
Number of Competitors That Will Qualify for the 2012 Provincial Skills Canada Competition: 2	

GENERAL DESCRIPTION

Purpose of Challenge:

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.

PROJECT DESCRIPTION

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 4 hour practical project which may include but not limited to the following tasks:

- SMAW 1G, Butt Weld
- GMAW 1G,3G Butt Welds
- SMAW, GMAW, 2F & 3F Welds

EQUIPMENT & MATERIALS

Equipment and Materials Competitors Must Supply:

- Work Boots (CSA Approved steel toe work boots)
- Side shields required for prescription glasses
- Welding Helmet
- Welding Gloves
- Needle nose pliers and vice grips
- Appropriate clothing (100% cotton coveralls recommended)
- Long sleeve denim shirt or jacket, 100% cotton
- Safety Glasses
- Ear Plugs

Competitor tools will be limited to the following:

- Pipe liner files
- Wire brush
- Tri square
- Imperial/metric tape measure
- Cold chisel
- Soap stone
- Vice grips/pliers
- Magnets
- Centre punch
- Hammer

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

Equipment and Materials Supplied by the Committee:

Materials and Consumables to build project.

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.

JUDGING CRITERIA

- Safety
- Strays Arcs
- Measurements
- Weld Size
- Undercut
- Dimensions
- Penetration
- Following Instructions
- Overall Appearance
- Fit-Up

RELATED CAREER AND TECHNOLOGY STUDIES COURSES

Descriptions of all modules are located at the following website:

<http://www.education.gov.ab.ca/cts> & <http://www.tradesecrets.gov.ab.ca>

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	101I	102D	103D
	FAB 2050		101F	103F,G&H	
	FAB 2060				
	FAB 2070				



SKILLS
COMPÉTENCES
CANADA

ALBERTA

ADDITIONAL INFORMATION

Event Schedule



7:30	Students check-in
8:00	Orientation & Safety
9:00	Competition Begins
11:30	Lunch Break – 30 minutes
12:00	Competition resumes
2:00	Competition ends – Judging Begins Competitors may proceed to the competitor lounge
3:30	Awards Ceremony (IB Theater) – open to the public

Parking Information

Parking Lot N is reserved for the Skills event. If you are coming by bus or van please park in Lot J.

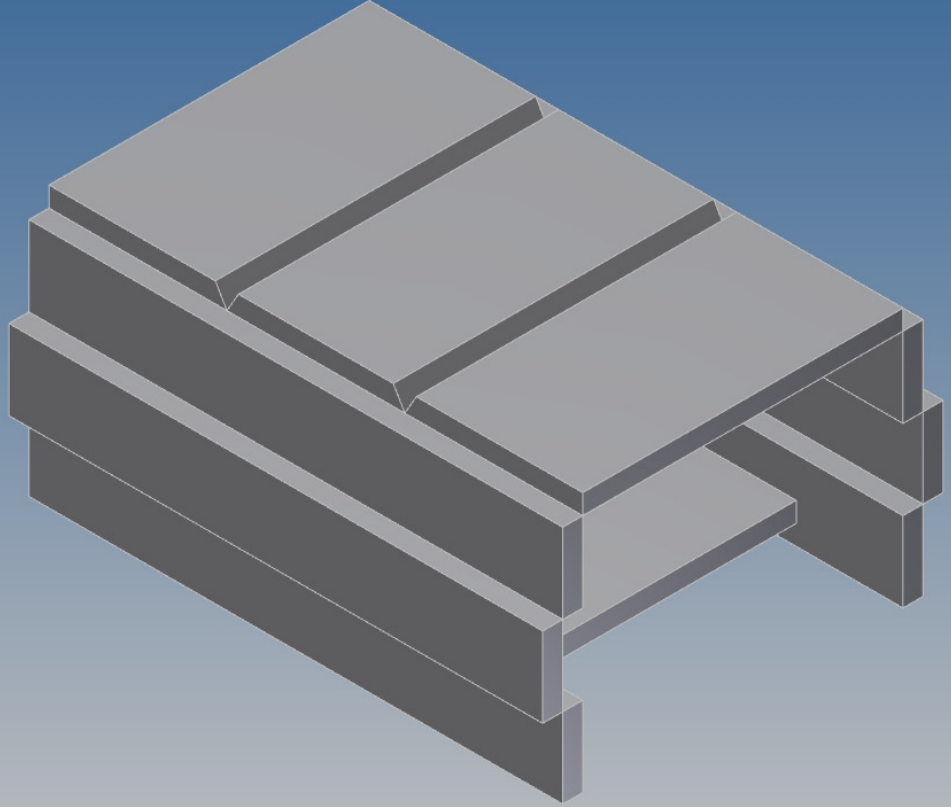
COMMITTEE MEMBERS

Dave Heins – Lethbridge College

Pat Bjorn – Lethbridge College

Alan Oudshoorn – Calvin Christian School

Margaret Vennard – Career Transitions





OCCUPATIONAL HEALTH AND SAFETY
 3000 College Dr. S
 Lethbridge Alberta T1K 1L6
 Tel. 403.394.7329
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Hazard Assessment Worksheet

Department/Welding	Job Description: Skills Canada Competition	
Skills Canada		Revision Date:

Type of Work/Activity	Hazard Type: (Physical, Chemical, Biological, Ergonomic, Environmental)	Risk (1-3) See below				Total	Controls in Place	Controls Needed
		Exposure Frequency	Severity	Probability				
List all types of work done in this work area or job	List the hazards for each work related activity						Engineered Administrative Personal Protective Equipment	List if any additional controls are required for that Hazard and the date they will be in place
Welding	Physical burns	2	2	2	6	-Use of PPE including fire resistant coveralls, gloves, welding helmet, and filter shade, leather steel toe boots, cuffs and pant legs not rolled up, boots fully fastened -Designated hot work areas: screens, booths, cutting tables -Signs on entry doors to shops outlining required PPE -If welding discouraged for internal plates/pins/ pace makers TR1925		
	UV Radiation eye injury hazard	2	2	2	6	-Use of PPE, including: welding helmets with filter shape lens, shared or clear safety glasses -Booth and screens used in welding & ARC cutting Arms		
	Electric Shock Hazard	2	2	1	5	-Proper grinding procedures, regular maintenance of cables and attachments		

						-Rubber sole work boots, steel toe not exposed, no jewelry, all PPE and work area surfaces must be dry	
	Fire Hazard	1	3	1	5	-All welding booth/areas constructed of non-flammable materials, all combustibles materials removed from shop areas Fire extinguishers in shop areas	
	Chronic exposure respiratory hazard	3	3	3	9	-Local and general mechanical ventilation. e -WHMIS labels and record MSDS book for all dangerous consumables, and air borne metallic fumes	
	Viral Transmission hazard	3	2	3	8	-Discourage sharing of PPE, Sani. -wipes available in shop for shared PPE/hands soap & water wash facility in adjacent washroom	
Grinding	Noise induced hearing loss hazard	2	2	2	6	-Disposable hearing protection	
	Respiratory hazard	2	2	2	6	-Mechanical ventilation	
	Physical eye injury hazard	2	2	2	6	-Face shields in grinding stations -Mandatory safety glasses in shop areas -Signs posted on entries to shop listing required PPE -Curtains/booth/ designated/ grinding areas	
	Flying debris hazard (abrasive disc failure)	1	3	2	6	-Face shields in grinding stations -Mandatory safety glass use in shop areas -Signage posted on entities to shop listing required PPE	
	Physical injury hazard / power tools	1	3	2	6	-Face shields in grinding stations -PPE	
	Viral Transmission Hazard	2	2	2	6	-Sani-wipes available for shared PPE, hand washing facility available in adjacent washroom	

Frequency Rating:

1. Low, less than 10% of work day
2. Medium, up to 65% of work day
3. High, over 66% of work day

Severity:

1. Minor, potential for minor injury
2. Moderate, potential for lost time injury
3. Severe, potential for severe injury

Probability:

1. Low, unlikely to happen
2. Medium, likely to happen
3. High, very likely to happen

Hazard Rating:

- 3-4 Low, requires monitoring
- 5-6 Moderate, requires attention
- 7-9 High, requires immediate attention