



2010 SW Regional Skills Canada Competition

Scope Document

Lethbridge College

Thursday, April 29, 2010

EVENT: Welding	LEVEL: Secondary
START TIME Check-in: 7:30 – 8:00 a.m. Orientation: 8:00 – 8:30 a.m. Competition: 8:30 – 12:30 a.m.	LOCATION: Lethbridge College TR 1935
THEORY EXAM: No	DURATION: 4 Hours
WORLDSKILLS TRADE #: 10	REGIONALIZED EVENT: Yes

GENERAL DESCRIPTION

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

RELATED CAREER AND TECHNOLOGY STUDIES MODULES

CTS Modules:

FAB 1040 FAB 2020 FAB 3048
 FAB 1048 FAB 2030 FAB 3050
 FAB 1050 FAB 2040 FAB 3060
 FAB 2048 FAB 3170
 FAB 2050
 FAB 2060
 FAB 2070

ILM Modules:

101B 102A 103A
 101C 102B 103B
 101G 102C 103C
 101I 102D 103D
 101F 103F, G & H

Descriptions of all modules are located at the following website:

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



SAFETY AND CLOTHING REQUIREMENTS:

Competitors will not be allowed into the competition area without the required safety equipment:

- Work Boots (CSA approved steel toe work boots)*
- Side shields required for prescription glasses
- Appropriate clothing (100% cotton coveralls recommended)
- Long sleeve denim shirt or jacket, 100% cotton
- Competitors are required to follow all industry standards during the competition
- Welding Helmet (supplied by committee, if needed)
- Welding Gloves (supplied by committee)
- Cutting Goggles # 4 or 5 lens (supplied by committee)
- Safety Glasses (supplied by committee)
- Ear Plugs (supplied by committee)

***Competitors are welcome to bring their own CSA approved work boots or shoes. Career Transitions will provide steel toe caps to any competitor who does not bring their own footwear.**

EQUIPMENT AND MATERIALS:

Supplied by Committee:

gloves	ear plugs	face shields
soap stone	fixed positioners	welding consumables
striker	welding helmets	safety glasses
chipping hammer	wire brush	cutting goggles #4 and #5 lens
tip cleaners	welding jackets/smocks	ear plugs
straight edge and/or centering angle (1" x 1" x 1/8" angle x 8" long for drawing quarter centre lines)		

The following tools will be supplied, but competitors may choose to bring their own:

pipe liner files	vice grips/pliers	cold chisel
tri square	hammer	

JUDGING CRITERIA:

*see attached

Safety	Stray Arcs	Measurements
Weld Size	Undercut	Dimensions
Penetration	Regularity of Kerf	Following Instructions
Overall Appearance	Fit-Up	



IMPORTANT GENERAL INFORMATION

SCHEDULE (Tentative)

7:30	Check in (Canbra Room)
8:05	Students are escorted to contest area
8:15	Orientation
8:30	Competition begins
12:30	Competition ends Competitors may go for lunch – obtain your lunch ticket from one of the judges
12:30	Judging begins Students should return to the competition area for further direction and feedback
3:30	Awards Ceremony

Please Note: Skills Canada Alberta has allocated two spots at the Provincial Competition for the gold and silver medalists from the regional competition. Should either medalist choose not to attend the Provincial Competition the spot would be offered to the bronze medalist. The provincials are scheduled for May 12 & 13 at the Northlands Agricom in Edmonton, Alberta. Travel expenses and preparation for the provincials are the competitor's responsibility. Please see www.skillsalberta.com for details.

ADDITIONAL NOTES

The Regional Skills competitors should be prepared to apply their theory knowledge in layout and drawing interpretation to complete a 4-hour practical project which may include, but is not limited to the following tasks:

- Oxy-fuel cutting
- SMAW 1G Butt Weld with E4310 3.2mm. Root & Fill & Cap with E4918 2.5mm or 3.2mm
- GMAW 1G Butt Weld with E 70S-6 (.035) Root & Fill & Cap
- SMAW GMAW & FCAW 1F, 2F & 3F Welds

COMMITTEE MEMBERS

Rick Beres	Lethbridge College
Pat Bjorn	Lethbridge College
Erick Stewart	Magrath High School
Stephen Giddings	Willow Creek Composite High School
Brent Malmberg	Cardston High School
Deanna Gonnely	Career Transitions



Welding – Judging Criteria

Name: _____

Competitor #: _____

Safety	Worth	Mark
Safety Glasses	1	
Cutting Goggles	1	
Helmet (Tracking)	1	
Work Boots	1	
Proper Clothing	1	
Oxy Acetylene Cutting		
Layout & Accuracy	5	
Drag Lines (Kerf)	5	
Final Appearance	5	
Fit Up		
Dimensions	10	
Squareness	5	
Sequence & Progression	5	
Welding		
Correct Process	15	
Correct Weld Size (Size and uniformity)	15	
Appearance & Contour (Weld)	15	
Final Presentation (Stray arcs, cold lap, undercut, spatter, etc)	15	
TOTAL	100	