



2012 Nova Scotia Skills Competition

Official Competition Name: **Welding**
Competition Level: **Post-Secondary**
Competition Location: **NSCC Akerley Campus**
Competition Date: **April 5, 2012**

Purpose of Challenge:

Assess the contestant's ability in the field of welding. Contestants must demonstrate their knowledge reading plans and interpreting welding symbols, and mastery of the main welding and cutting procedures used in the industry.

Skills and knowledge to be tested:

Based on technical drawings and welding procedures, contestants will be assessed on the assembly and welding of a project in all positions, safety and cutting exercises.

Prerequisites:

Contestants must have graduated from a recognized welding program or must be signed up to the welding apprenticeship program.

Equipment, tools, supplies, clothing:

The following tools must be supplied by the contestant

Measuring tape
Square
Welding apron
Soap stone
Center punch
Wire brush
Chipping hammer
Ball peen hammer
Flint lighter
Welding Shield

Fillet gauges
Safety glasses
Welding jacket
Welding gloves
CSA Approved steel toed boots
Anti-Spatter spray
Tip cleaners
Dividers
Vice clamps or pliers (for picking up hot metal only)
Coveralls (optional)

The following rules will apply during the Competition:

- ***CSA Approved steel toed work boots and safety glasses must be worn in the shop at all times.**
- Competitors are only allowed to discuss the project with the judges.
- All other people entering the shop must have safety glasses on and address proper personnel before entering.
- No grinders or grinding of welds or of the project are allowed.
- All competitors must exit the shop on lunch and coffee breaks.
- Extra time will be given if the competitor has problems with equipment (if it is an equipment problem).
- No magnetic squares or clamping devices are to be used on the project

Other Notes:

- Drawings for the competition will be sent out to the registered competitors before the competition (weld symbols not included).
- It is recommended that the competitors prepare their own plat and pipe materials before they come to the competition.
- There will be extra materials(already prepped) available at the competition.

- No layout lines or marking of any kind are to be on the materials before the competition.
- All materials will be inspected before the competition starts.

Point Breakdown:

Assembly of project (fit-up)	20%
Weld quality	40%
Safety	20%
Following proper welding procedure	20%

Technical Committee Member and Judges:

Technical support

Ron Noel, Welding Instructor Akerley Campus
 Gerard Grout, Welding Instructor Akerley Campus
 Stephen Stewart, Welding Instructor Akerley Campus

Judges

TBA

Welding processes and consumables used

FCAW – 045 Lincoln elite, 75 – 25 Shielding gas
 GMAW – 035 ER702-6, 75 – 25 Shielding gas
 SMAW-E48018, 1/8” or 3/32” Liquid Air
 SMAW – E6011 , 1/8” or 3/32”, Liquid Air
 GTAW – Electrode 1/8” – 2%thoriated
 GTAW – Filler Rod – ER70S-2 – Shielding Gas Argon

SCHEDULE FOR WELDING COMPETITION

7:30am Orientation
 8:00am Competition Begins
 9:30am Coffee Break
 9:45am Competition Resumes
 12:00pm Lunch Break
 12:30pm Competition Resumes
 2:00pm Competition ends - time for final marking