

DATE	LOCATION
April 23 2024	Building Trades Advancement College
Time	Task
8:30 am – 9:00 am	Orientation
9:00 am – 10:00 am	Project begins
10:00 am – 10:20 am	Break
10:20 am – 12:00 pm	Continue project
12:00 pm – 12:45 pm	Lunch (provided)
12:45 pm – 2:00 pm	Continue project
2:00 pm	Project ends
2:00 pm – 3:00 pm	Judging

1. Purpose of the Contest

To assess each contestant's competence in the welding trade. Competitors must demonstrate their ability to read plans, interpret welding symbols and display their expertise using the SMAW & GMAW welding processes.

2. Number of Stations / Allocations

There is a maximum of ten (10) spaces available with local exhaust.

3. Skills & Knowledge to be Tested

Students will be expected to:

- Check that the dimensions of the materials are in accordance with the material list and the print / drawings;
- Assemble the materials in accordance with the prints / drawings provided;
- Utilize their practical skills in prints / drawings interpretation, layout;
- Demonstrate an ability to read blueprints and interpret welding symbols and abbreviations;
- Have a working knowledge of electrode classification and identification. Safety Requirements:
- Safety awareness / requirements will be maintained within minimum industry standards at all times;
- A contestant will not be allowed to compete without the safety equipment listed in this document.

4. Prerequisites

SCNS Prerequisites

- Secondary level competitors must meet the following criteria in the current school year:
- Attend a public or private recognized secondary institute, or be enrolled in a registered home school program through the Nova Scotia Department of Education and Early Childhood Development (EECD);
- Be between 13 and 21 years of age on January 1 of the year of the Competition. Competitors are responsible for verifying this information, if requested.
- Have been earning junior or senior high school credits any time during the current academic year (September to June);
- Be registered as a competitor with Skills Canada – Nova Scotia;
- Possess Canadian citizenship or Landed Immigrant status and be a resident of Nova Scotia; or be a registered International Student. Competitors are responsible for verifying this information, if requested;
- Have completed and submitted a signed release form by a parent or guardian if under the age of 19.

5. Equipment & Clothing

What Will Be Supplied

- All Welding equipment, materials, and consumables
- All instructions and procedure sheets with drawings
- Ear plugs
- Materials for machine setup and practice beads

What Competitors Must Supply

- Welding Helmet w/ #10, #11 and / or #12 lens;
- Welding jacket
- Leather apron
- Safety glasses;
- Hat or beanie;
- CSA approved steel-toed boots;
- Coveralls;
- Leather gauntlet welding gloves;
- Fitters gloves.
- Tool box;
- Chipping hammer;
- Steel wire brush;
- Measuring tape;
- Soapstone / metal marker;
- Fillet weld gauge;
- 12" tri-square;
- All-purpose pliers (for G.M.A.W);
- Vice grips (for holding hot metal).

6. Evaluation & Judging Criteria

Task	Point Value / Percentage
Layout <ul style="list-style-type: none"> ● Sequence of steps followed as per instructions; ● Proper tools used for layout; ● Measurements meet prints / drawings specs. 	15%
Accuracy of Assembly <ul style="list-style-type: none"> ● Finished dimensions accurate; ● Pieces aligned squarely, as required. 	10%
Quality of Shielded Metal Arc Welding <ul style="list-style-type: none"> ● Are weld sizes as per drawing? ● Are welds correctly located? ● Consistent contour and weld profile; ● Absence of defects (porosity, undercut, arc strikes); ● Is all spatter removed? ● Is good fusion evident? ● Is welding consistent? ● Conforms to drawings. 	25%
Quality of Gas Metal Arc Welding <ul style="list-style-type: none"> ● Are weld sizes as per drawing? ● Are welds correctly located? ● Consistent contour and weld profile; ● Absence of defects (porosity, undercut, arc strikes); ● Is all spatter removed? ● Is good fusion evident? ● Is welding consistent? ● Conforms to drawings. 	25%
General Workmanship <ul style="list-style-type: none"> ● Has proper cleaning been done? ● Is distortion evident? ● Has pre-setting been done? 	15%
Safety - evaluated before, during and after work; Does the competitor: <ul style="list-style-type: none"> ● Wear suitable clothing? ● Have personal safety equipment? ● Wear eye protection at all times? ● Wear ear protection when required? ● Employ safe layout practices? ● Employ safe arc welding practices? 	10%
TOTAL	100%

7. Additional Information

- No butane lighters or matches allowed in the welding area;
- No talking to other students that may be in or watching the competition;
- No magnets allowed to hold metal in place;
- Breaks and Lunch provided
- During break times competitors must leave their project in their welding booth and not re-enter until competition resumes;
- The judges for the welding competition will include persons that work in the welding trade;
- Other shop rules will be reviewed prior to competition.

8. PTC Contact Information

Name	Employer	Email
Ashley Lavigne	Irving Shipbuilding	
Adam Bartlett	NSCC Akerley Campus	
Steve Stewart	NSCC Akerley Campus	steve.stewart@nsc.ca
Charles Colson	Memorial Composite High School	
George MacDougall	Ironworkers Local 752	
Neil Horne	Ironworkers Local 752	



Contest Description
Welding
Secondary