



SKILLS CANADA PEI PROVINCIAL COMPETITION

CONTEST DESCRIPTION	
Competition Date	March 2, 2017
Competition location	Holland College Georgetown
Trade Number	10
Trade Name	Welding
Level	Secondary

1. INTRODUCTION

1.1 Purpose of the Challenge.

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

1.2 Duration of contest.

6 Hours

8:00-8:30 Registration, Introductions and details of the competition

8:30 Competition begins

11:30-12:00 Lunch (To be provided)

2:30 Practical projects to be turned in

3:00 Judging

1.3 Skills and Knowledge to be tested.

Based on technical drawings and welding processes, contestants will be assessed on the assembly and welding of projects in all positions

2. CONTEST DESCRIPTION

2.1 Tasks that may be performed during the contest

Tasks that may be performed during the contest

PRACTICAL

Secondary

Shielded Metal Arc Welding (SMAW)

Gas Metal Arc Welding (GMAW)



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Oxy-Acetylene cutting (OAC)

Theory

The theory portion of the contest is limited to the knowledge required to complete practical work. These knowledge requirements are included in the contest for assessment purposes and involve the following:

reading drawings

interpreting welding symbols

knowledge of basic metals and filler metals

adjusting welding machines

safety regulations

Secondary

Fitting and welding on mild steel structures

SMAW

1G, 2G, 3G plate

Root, fill and cap: E4310, 3.2mm or E4311, 3.2mm

Fill and cap: E4918, 2.4 and 3.2mm

Fillets: 1F, 2F, 3F, E4918, 2.4 and 3.2mm

GMAW:

Purpose of Challenge:

Assignment:

1G, 2G, 3G (vertical up & vertical down) plate Root, fill and cap

Fillets: 1F, 2F and 3F (vertical up),

3. ESSENTIAL SKILLS

Essential skills are used in nearly every job and at different levels of complexity.

They provide the foundation for learning all other skills and enable people to evolve with their jobs and adapt to workplace change. Good Essential Skills means you will understand and remember concepts introduced in technical training. The level of Essential Skills required for most trades is as high or higher than it is for many office jobs.

4. EQUIPMENT, MATERIAL, CLOTHING

4.1 Each competitor will bring the following:

Helmet, #10 and/or #11 and/or #12

lensSpeed lenses (optional)

Measuring tape, millimetres

Soap stone



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Centre punch
Scriber
Cold chisel
12" Combination square (45° / 90°)
Fillet weld gauge
Chipping hammer
Steel and stainless steel wire brushes
Needle point compass
Protractor
Torpedo level
Ball peen hammer
All-purpose pliers/side cutters
Vice grips (standard)
Magnet(s)
Files
No power tools allowed
No aerosols permitted

4.2 Equipment and material provided by the competition site

Welding machines and accessory
All contestants will use Lincoln Electric 350MP welding machines
Oxy-Acetylene torch systems
Low carbon steel
Plate Thicknesses: ¼" – 3/8"
Filler material
SMAW = E4918, 2.4, and 3.2mm
SMAW = E4310, 3.2 mm or E4311, 3.2mm
GMAW = ER49S-6, 0.9mm
Shielding gases
GMAW= bluesheild 7

4.3 Required clothing (Provided by competitor)

Appropriate work clothes and safety gear(gloves, glasses, footwear, etc)

Note: Competitors will not be allowed to compete if the above items are not brought and used



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5. ADDITIONAL INFORMATION

5.1 Competition rules

Please refer to the competition rules for all general PSC information.

6. CONTACT INFORMATION

Name	Email address
Kent Morrison Instructor, Holland College Georgetown Centre	kmorrison@hollandcollege.com 902.652.2055
Tawna MacLeod – Executive Director, Skills Canada PEI	tmacleod@hollandcollege.com