



Project

Welding

POST-SECONDARY

1 INTRODUCTION

1.1 Tasks that may be performed during the contest.

1.1.1 Theoretical elements

The contest's theoretical portion is limited to the knowledge required to execute the practical work. These elements are integrated into the contest for evaluation purposes, and include the following skills:

- Interpretation of plans (engineering drawing)
- Interpretation of welding symbols
- Knowledge of base metals and filler metals
- Adjustment of welding machines
- Workplace safety rules

Notes:

- All measurements are shown in metric
- All instructions and plans will be provided in English and French.

1.1.2 Practical tasks

- Shielded metal arc welding (SMAW, mild steel)
- Gas metal arc welding (GMAW, mild steel)
- Flux cored arc welding (FCAW, mild steel)
- Gas tungsten arc welding (GTAW, mild steel, stainless steel and aluminum)

1.1.3 Tasks

The following types of joints and positions **may** be included.

Assemble and weld mild steel structures:
SMAW, GMAW, FCAW
Plate: 1G, 2G, 3G, 4G Fillet Weld: 1F, 2F, 3F, 4F, 5F Pipe: 1G, 2G, 3G, 5G,6G
Assemble and weld stainless steel, carbon steel and aluminum structures: GTAW / GTAW Pulse
Plate: 1G, 2G, 3G, 4G Filet: 1F, 2F, 3F, 4F, 5F Pipe: 1G, 2G, 3G, 5G,6G

