CONTEST DESCRIPTION / DESCRIPTION DE CONCOURS

SPRINKLER SYSTEMS
RESEAUX D'EXTINCTEURS AUTOMATIQUES

POST-SECONDARY /
NIVEAU POSTSECONDAIRE

SkillsCompétences Canada
Winnipeg2017

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1 THE ESSENTIAL SKILLS FOR CAREERS IN THE SKILLED TRADES AND TECHNOLOGY

SCC is currently working with Employment and Social Development Canada (ESDC) in order to bring awareness to the importance of Essential Skills that are absolutely crucial for success in the workforce. Part of this ongoing initiative requires the integration and identification of Essential Skills in contest descriptions, projects, and project documents. The next phase and very important aspect of our Essential Skills (ES) initiative is to provide an ES report card to each competitor at the Skills Canada National Competition. The purpose of the ES report card is to inform the competitor about their current level of essential skills based on their competition scores. With this knowledge, the competitor will be made aware which essential skill may require improvement. Full implementation is expected in the 2017 Skills Canada National Competition.

The following 9 skills have been identified and validated as key essential skills for the workplace in the legend below:

[1]Numeracy, [2]Oral Communication, [3]Working with Others, [4]Continuous Learning, [5]Reading Text, [6]Writing, [7]Thinking, [8]Document Use, [9]Digital

These essential skills have been identified with in section 2.3 and/or 3.2 of your Contest Description. The top three Essential Skills for your area of competition have been identified on your Project and all other supporting project documents.

2 CONTEST INTRODUCTION

2.1 Purpose of the Challenge.

To assess the contestant's knowledge and skills in the fabrication and installation setup, operation and troubleshooting of a fire sprinkler system and components with high regard to the aspects of quality of workmanship, proficiency of piping/system component installation and accuracy of work within a specified time frame.

2.2 Duration of contest.

12 hours

2.3 Skills and Knowledge to be tested.

- Applying mathematical concepts involving planning, measuring, layout and installation of a piping system. [1]
- Interpretation and application of blueprint specifications. [8]
- Recognition of types of systems, setup and troubleshoot with use of manufacturer's data[7]
- Assembling and fabricating a piping system
  - Measure, cut, and fabricate steel pipe and fittings [1]
  - Use tools & equipment to join pipe, fittings and system components
  - Applying safe work practices and strong positive work ethic

Essential Skills – [1]Numeracy,Thinking (Problem Solving), [8]Document Use

3 CONTEST DESCRIPTION

3.1 List of documents produced and timeline for when competitors have access to the documents.

DOCUMENT	DATE OF DISTRIBUTION VIA WEBSITE
Project	April, 2017

3.2 Tasks that may be performed during the contest

- Interpreting and applying the blueprint specifications[8]
- Assembly of various pipe and fitting systems (4 hours)
- Carbon steel grooved pipe. Apply safe work practices. All dimensions will be taken from the designated centerline or benchmarks unless directed otherwise
- Setup/Activation/Troubleshooting of Dry, Deluge, and Preaction Valves:
  - Reliable Model: DDX
  - Tyco Model: DV-5
  - Viking Model: G2000P
  - Viking Model: F-1
  - Victaulic Model: Firelock NXT S/768
  - Victaulic Model: Firelock NXT S/769
- Tool inspection prior to event or the evening before competition
- There will not be any onsite pipe joinery technique instruction
- Proper insertion for all pipe joint is mandatory
- It is to be understood that throughout the competition, safety and project judging will be ongoing
- No project specific aids, tools allowed

Essential Skills – [1]Numeracy, [8]Document Use

4 EQUIPMENT, MATERIAL, CLOTHING

4.1 Equipment and material provided by Skills/Compétences Canada

- Benches and/or tables
- Chain Vices
- Pipe Stands
- 9” level – Stanley / DeWalt
- Paint markers
- Pencil/paper/calculator
- Power cords (GFI)
- Pipe cutters - Ridgid
- Roll groovers
- Air groovers – Ridgid
- Tape measure – Stanley/Dewalt model: 33-716
- Bastard half round file - Stanley/DeWalt
- 10” channel lock pliers - Stanley/DeWalt
- 10” crescent wrench - Stanley/DeWalt
- #460 Tri Stand Vise or Equivalent - Stanley/DeWalt
- Half Round Bastard file - Stanley/DeWalt model : 22-099
- Torpedo level - Stanley/DeWalt model: 42-465
- Channel lock pliers - Stanley/DeWalt model: 84-553
- Adjustable wrench - Stanley/DeWalt model: 95-874
- Pipe marker - Stanley/DeWalt model: 47-316
- Tool Box - Stanley/DeWalt model: STST24113

COMPETITORS WILL BE REQUIRED TO USE THE MATERIAL AND EQUIPMENT PROVIDED BY SCC. ALL OTHER MATERIAL AND EQUIPMENT WILL BE REMOVED FROM THE SKILL AREA.

4.2 Equipment and materials provided by the competitor

- No equipment and material will be provided by the competitor

4.3 Required clothing (Provided by competitor)

- Full Length Pants (Denim or Equivalent)
- No jewellery
- Long hair must be tied back and concealed
- No cell phones or electronic devices allowed

5 SAFETY REQUIREMENTS

5.1 Safety workshop

Upon arrival at the Skill area, Competitors will participate in a Safety workshop and they will be expected to work and maintain a safe working area during the competition. Any Competitor breaking any health, safety and environment rules, may be required to undertake a second safety workshop, this will not affect the Competitor's competition time.

5.2 List of required personal protective equipment (PPE) provided by Skills/Compétences Canada.

- Safety Glasses - McCordick
- Polyester Gloves - McCordick

5.3 List of required personal protective equipment (PPE) provided by competitor

- CSA approved safety shoes
- Gloves (cut resistant, i.e. Mechanix)

6 ASSESSMENT

6.1 Point breakdown

POINT BREAKDOWN	/100
Piping Fabrication and Installation	20
Setup/Activation/Troubleshoot Valve 1	10
Setup/Activation/Troubleshoot Valve 2	10
Setup/Activation/Troubleshoot Valve 3	10
Setup/Activation/Troubleshoot Valve 4	10
Setup/Activation/Troubleshoot Valve 5	10
Setup/Activation/Troubleshoot Valve 6	10
Setup/Activation/Troubleshoot Valve 7	10
General Safety	10
Point deduction: Full points for dimensions within 1/8" Half points for dimension within ¼" Points deduction for wasted material Points deduction for safety infractions Points deduction for failure during Setup/Activation/Troubleshooting portion	

7 ADDITIONAL INFORMATION

7.1 Consecutive translation

If consecutive translation is required on site, the Skills/Compétences Canada Provincial/Territorial offices must advise Skills/Compétences Canada National Secretariat a minimum of 1 month prior to the competition or this service might not be guaranteed.

7.2 Tie (No ties are allowed)

In the event of a tie, the competitor with the highest score in the Safety criteria will be declared the winner. If there is still a tie the competitor with the highest objective score in Pipe Fabrication and Installation will be declared the winner.

7.3 Test Project change at the Competition

Where the Test Project has been circulated to Competitors in advance, NTC shall change a maximum of 30% of the work content. Please refer to the Competition Rules.

7.4 Competition Rules

Please refer to the competition rules of the Skills Canada National Competition.

8 NATIONAL TECHNICAL COMMITTEE MEMBERS

Member Organization	Name	Email address
Saskatchewan	Michael Chriest	
Ontario - Chair	Nicholas Smirnov	nsmirnov@ualocal853.org
Alberta	Lorin Bates	
British Colombia	Rob Dhensaw	
Nova Scotia	James Brightman	
New Brunswick	Joe Howe	