



2013 Provincial Skills Competition

Scope Document

Event: Plumbing	International Trade: 15	LEVEL: Post-Secondary (PS)
Numbers of Competitors: 6	Competition Location: UA Pipe Trades Training Center 334 Robin Way, Saskatoon SK	
Competition Date: April 25, 2013		
Competition Duration: 8 hours		
COMPETITION SCHEDULE		
ACTIVITY	TIME	LOCATION
Orientation	7:30 AM to 8:00 AM	Classroom 1
Theory Exam	8:00 AM to 9:00 AM	Classroom 2
Break	9:00 AM to 9:15 AM	Classroom 1
Competition	9:15 AM to 11:30 AM	Piping Shop
Lunch	11:30 AM to 12:30 PM	Classroom 1
Competition	12:30 PM to 2:30 PM	Piping Shop
Break	2:30 PM to 2:45 PM	Classroom 1
Competition	2:45 PM to 3:30 PM	Piping Shop
Clean-Up	3:30 PM to 4:00 PM	Piping Shop (individual area)
POST COMPETITION SCHEDULE		
Competition Judging	4:00 PM to 5:30 PM	Boardroom (judges only)
Banquet, Closing Ceremonies, Medal Presentations	6:00 PM to TBD	SIAST Kelsey Campus Idylwyld & 33 rd Saskatoon SK

PURPOSE OF THE CHALLENGE

To assess the Competitors knowledge and skills in the installation of a plumbing system with a high regard to the aspects of safety, quality of workmanship, proficiency of pipe jointing techniques, and accuracy of work within a specified time frame.



2013 Provincial Skills Competition

SKILLS AND KNOWLEDGE TO BE TESTED

- 100 question theory exam; tools, materials, jointing methods, blueprint reading, rigging, safety, Plumbing Code, hydronic heating
- Interpretation and application of blueprints, detail drawings and project specifications
- Application of mathematical concepts involving parallel equal spread offsets for 45 degree, 22 ½ degree configurations, fitting deductions for copper, PVC, malleable iron, piping elevations.
- Proper jointing of threaded, soft soldered, hard soldered, and PVC solvent welded pipe systems
- Bending of soft copper tubing using Swagelok mechanical type benders
- Application of safe work practices and proper piping practices

SKILLS ASSESSMENT/POINT AWARDS

POINT BREAKDOWN/1600 POINTS	
MARKING CATEGORIES	POSSIBLE POINTS
Safe work practices	400
Quality of workmanship	400
Accuracy of installation	400
Air/water Test	400
ADDITIONAL MARKING NOTES	
➤ Full marks for dimensions within 2 mm of drawing measurement	
➤ 20 point deduction for each measurement over 3mm	
➤ 25 point deduction for each deviation from competition drawings and specifications	
➤ 50 point deduction for each safety related/unsafe work practice	
➤ Point deduction of 10 points per extra material request	
➤ Ties will be decided by the actual completion time of the Competitors	
➤ All decisions by the Competition Judges are final	
➤ Contestants will not be given specific final scores	
➤ Contestants will be provided and overall ranking based on points awarded	
➤ There shall be no sanding/wiping of completed copper soldered joints	



2013 Provincial Skills Competition

CLOTHING AND PPE REQUIREMENTS: (COMPETITOR MUST SUPPLY)

Contestants must wear the appropriate long sleeved clothing and approved personal protective equipment; CSA approved safety boots, safety glasses (worn at all times), side shields for prescription glasses, hearing protection and work gloves (for hot work). The contestant must address the dangers of long hair, jewelry, etc.

Jewelry such as rings, necklaces, bracelets, or any item deemed unsafe by competition judges shall be removed. Competition Judges shall have final authority on all matters of safety.

COMPETITION SAFETY RULES AND REQUIREMENTS

- PPE must be worn in the Competition Area at all times.
- There will be no tolerance for horseplay, alcohol/drug use, practical jokes
- Work to be done in accordance with all safety rules and industry best practices
- All safety concerns shall be immediately reported to the Competition Judge(s)
- Tools and equipment shall be used only for their intended purpose
- Each Competitor shall be responsible for maintaining a clean work area while the Competition is going on
- Each Competitor shall be responsible to clean work area upon completion of their project(s)

COMPETITION DISCIPLINARY ACTION

- Competitors found willfully and knowingly in violation of health and safety rules will be removed from the competition
- Competitors found in violation of health and safety rules without willful knowledge will face the following:
 1. First infraction-verbal warning
 2. Second infraction-written warning
 3. Third infraction-removal from competition

All infractions will be documented and recorded



2013 Provincial Skills Competition

TOOLS, EQUIPMENT, AND MATERIALS

SUPPLIED BY THE COMMITTEE	SUPPLIED BY THE COMPETITOR
➤ Acetylene B tank, torch and striker	➤ Pocket calculator
➤ Pipe threaders (hand and Ridgid 300 power vise, oiler/oil will be available)	➤ Measuring tape in millimeters & standard (1" wide recommended)
➤ Tripod, work bench, bench vise	➤ Steel meter stick with accurate measurement (recommended)
➤ Drill bits as required	➤ 10 inch channel lock pliers
➤ Teflon tape, solder paste(s), adhesives, acid brushes, pipe joint compound, sand cloth, wiping rags	➤ 9 inch and 24 inch levels
➤ Silver solder (Bcup-5)	➤ 8 inch vice grips
➤ 95-5 solder or Silverbrite	➤ Assorted adjustable wrenches (8 inch and 12 inch recommended)
➤ all thread rod shear tools	➤ hacksaw with spare blades
➤ copper, steel, PVC pipe	➤ combination wrench set (3/8 to 3/4 inch)
➤ copper, steel, PVC fittings	➤ assorted flat head screwdrivers
➤ Cordless drill/batteries	➤ Number 8 Robinson screw driver
➤ 18/24 inch pipe wrenches	➤ 16 oz. carpenter's hammer and 16 oz. ball peen hammer
➤ 2 foot square	➤ assorted Phillips screwdrivers, in various sizes
➤ PVC hand saw	➤ Tube/tubing cutters for 1/2" to 3/4" diameter copper pipe ➤ Ridgid #101 mini pipe cutter or equivalent
➤ Mechanical tube/tubing benders	➤ Ridgid 12 inch pipe wrench
➤ Tube/tubing Deburring tool	➤ Ridgid 14-inch pipe wrench
➤ Full face shield	➤ cordless drill (2-battery)
➤ ear plugs	➤ 1/2 round steel file
➤ Pencils/paper	➤ Plumb bob with string
➤ Clean up stations	➤ Assorted nut drivers
➤ No project specific aids, jigs, un approved tools will be allowed in the competition area	



2013 Provincial Skills Competition

PROVINCIAL TECHNICAL COMMITTEE MEMBERS			
Name	Position	Email	Phone Number
Ken Busch	Chairman	ken.skppin@sasktel.net	(306)-651-3737
Chris Henricksen	Member	chris.skppin@sasktel.net	(306)-651-3737

ADDITIONAL INFORMATION

- Skills Saskatchewan has a web site that provides additional information for each Competitor. Please follow the link below.

<http://skillscanadasask.com/>

LUNCH AND BREAKS

- Lunch for registered Competitors will be provided. Each Competitor must ensure they clean up after themselves.
- Bottled water shall be supplied during competition and lunch and breaks

PARKING AND VENUE MAP

- Parking space is provided. Facility map will be provided

SPECTATOR VIEWING AREA

- There is limited seating capacity Employers, family, friends etc. There shall be no communication between any spectator and any Competitor during the Competition.
- No spectator shall be allowed into the lunch, break area, or test areas

AWARDS CEREMONY

- It is encouraged that all competitors, employers, family and friends etc. attend the awards ceremony
- Awards ceremony times to be announced

ADVANCEMENT TO NATIONAL SKILLS COMPETITIONS

The winner of this competition will advance to the National Skills Competition held in Vancouver June 5 to 8, 2013