



Contest Description

Edmonton Expo Centre, Edmonton

May 7 & 8, 2025

EVENT: Industrial Mechanic/Millwright	LEVEL: Post-Secondary
START TIME: May 7: REGISTRATION: 8:00 am - 8:15 am ORIENTATION: 8:15 am – 8:30 am COMPETITION: 8:30 am May 8: COMPETITION: 8:00 am	LOCATION: Hall A, Edmonton Expo Centre,
DURATION: 12 Hrs. (Two Days)	WORLDSKILLS TRADE #: 01

Please Note: This document is subject to change as competition information is updated. Competitors are responsible for staying up to date with the most recent information. Check the footer for last updated date. Changes will be highlighted in yellow.

CONTEST INTRODUCTION

To test the knowledge and skills of each competitor in the areas of: blueprint reading, fluid power (pneumatics) ISO schematics, precision hand layout, precision fitting skills, use of hand tools, hand drills etc., installation of power transmission mechanical components, MIG welding and fabrication, shaft alignment using dials and laser (Fixture Laser NXA Pro).

SKILLS AND KNOWLEDGE TO BE TESTED:

Welding, alignment and leveling, hand tool operation, layout, tube bending, knowledge of imperial and ANSI measuring.

TASKS THAT MAY BE PERFORMED DURING THE CONTEST

- Perform hand tool operations
- Perform precision hand layout operations
- Read and interpret blueprints
- Install supplied pneumatic components and build the required circuit as per given instruction
- Perform laser shaft alignment and cross dial alignment
- Knowledge of Imperial measurement and ANSI symbols
- Installation of SKF spherical roller bearings
- ISO Fluid Power (pneumatic) schematic drawings standards
- Perform MIG welding and fabrication



safety



EQUIPMENT & MATERIALS

Equipment and Materials Competitors Must Supply:

CSA Approved Steel Toed Footwear	CSA Approved Safety Glasses (Option for personal glasses)	CSA Approved Hearing Protection
Shop Coats/Coveralls	Welding Jackets and gloves (Optional)	Welding Helmet (Optional)

Equipment and Materials Supplied by the Committee:

Fixturlaser NXA Pro will be supplied and will be used for the alignment challenge.	All hand tools needed will be provided.
Welding equipment and PPE	

JUDGING CRITERIA: Points Breakdown

TASKS	/100
Fabrication: MIG welding, tube bending, precision layout, use of hand tools.	25
Spherical roller bearing installation	25
Shaft alignment	25
Pneumatics	25

TIE BREAKING PROCESS

- Tiebreaker #1: Competitor with highest score in alignment will be declared the winner.
- Tiebreaker #2: If a second tie occurs the competitor with the highest score in fabrication portion will be declared the winner.

CLOTHING REQUIREMENTS

Competitors are expected to be dressed in an appropriate manner with their own safety glasses, ear plugs, safety footwear and appropriate work clothing such as coveralls or a shop coat. All clothing must be safe for





work, as well as neat, clean and free of rips and tears. Casual wear such as shorts will not be permitted. No loose-fitting clothes or jewelry.

SAFETY

The health, safety and welfare of all individuals involved with Skills Canada Alberta are of vital importance. Safety is a condition of participation with Skills Canada Alberta and shall not be sacrificed for the sake of expediency. At the discretion of the judges and technical committees, any competitor can be denied the right to participate should they not have the required proper safety equipment and/or act in an unsafe manner that can cause harm to themselves or others.

ADDITIONAL INFORMATION

Skills Canada Alberta Regional and Provincial Rules and Regulations

[Regional and Provincial Rules and Regulations](#)

Test Project change at the Competition

Where a Test Project has been circulated to competitors in advance, the PTC can change the project up to a maximum of 30% of the work content for the competition.

Lunch

Lunch for competitors will be provided by Skills Canada Alberta.

Parking & Venue Maps: <http://edmontonexpocentre.com/attend/parking/>

Parking is FREE for all attendees.

Opening Ceremonies / Competitor Registration

Opening Ceremonies for the PSCC will take place on Tuesday May 6, 2025, at 6:00 pm in Hall D of the Edmonton EXPO Centre. Admission is free, and everyone is welcome to attend. It is important to note that competitor registration will open immediately following the Opening Ceremonies.

Awards Ceremony

The Awards Ceremony will take place on Thursday May 8, 2025, at 6:30 pm in Hall D of the Edmonton EXPO Centre. Admission is free and everyone is welcome to attend. The Awards Ceremony will be shown live at <http://skillsalberta.com/>

Team Alberta Information

Team Alberta will be selected at the PSCC Awards Ceremony. Gold medalists will then be eligible to participate at the Skills Canada National Competition (SCNC) on May 28- May 31, 2025, in Regina, SK. It is recommended that competitors review the SCNC contest description to be familiar with the national contest description and



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project at <https://www.skillscompetencescanada.com/en/calendars/category/skills-canada-national-competition/>

During the PSCC Awards Ceremony on Thursday May 8, 2025, gold medalists will be given their Team Alberta information package and will confirm their participation in the SCNC. Students must be present at the Awards Ceremony to claim their position on Team Alberta. If the Gold medalist is not able to attend SCNC, the next top ranking individual will be asked to participate. If a student is not able to attend the Awards Ceremony a letter confirming the student’s interest in Team Alberta participation must be emailed to javierad@skillsalberta.com prior to the start of competition on May 7, 2025.

Please prepare your students in advance to accept a position on Team Alberta and review how your school will support their participation.

Please see this link for additional Team Alberta information: <https://skillsalberta.com/team-alberta/>

Questions?

Please contact Mike Sury MikeS@SkillAlberta.com

COMMITTEE MEMBERS

- | | | |
|------------------------|-----------------|-------------------|
| Roger Tokay – Co-Chair | Wade Nicks | David Thompson |
| Jason Parnell – Chair | Nathalie Drouin | Jonathan Siblagan |

