



Contest Description

Edmonton Expo Centre, Edmonton

May 8 & 9, 2024

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| EVENT: Industrial Mechanic/Millwright | LEVEL: Post-Secondary |
| START TIME: May 8: REGISTRATION: 8:00 am-8:30 am ORIENTATION: 8:30 am-9:00 am COMPETITION: 9:00 am May 9: COMPETITION: 8:00 am | LOCATION: Hall A, Edmonton Expo Centre, |
| DURATION: 12 Hrs. (Two Days) | WORLDSKILLS TRADE #: 48 |

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., install mechanical components, MIG welding and fabrication, predictive maintenance and laser shaft alignment (Fixturlaser SMC & NXA Pro).

SKILLS AND KNOWLEDGE TO BE TESTED:

Welding, alignment, hand tool operation, layout operation, 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
- ISO Fluid Power (pneumatic) schematic drawings standards
- Perform MIG welding and fabrication



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EQUIPMENT & MATERIALS

Equipment and Materials Competitors Must Supply:

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| CSA Approved Steel Toed Footwear | CSA Approved Safety Glasses | CSA Approved Hearing Protection |
| Shop Coats/Coveralls | Welding Jackets and gloves | Welding Helmut |

Equipment and Materials Supplied by the Committee:

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| Fixturlaser NXA Pro & Fixturlaser SMC Balancing Tool will be supplied and will be used for the predictive maintenance and alignment challenge. | All hand tools needed will be provided. |
| Welding equipment | |

JUDGING CRITERIA: Points Breakdown

| TASKS | /100 |
|--|------|
| Fabrication & MIG welding, precision layout, use of hand tools, fluid power (pneumatics), mechanical component installation. | 75 |
| Laser shaftalignment and cross dial alignment | 25 |

TIE BREAKING PROCESS

- Tiebreaker #1: Competitor with highest score in laser alignment will be declared the winner.
- Tiebreaker #2: If second tie occurs the competitor with the highest score in welding 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, work boots and coveralls or shop coat. All clothing must be neat and 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 the Test Project has been circulated to competitors in advance, PTC can change a maximum of 30% of the work content.

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 / On-site Provincial Competitor Registration

Opening Ceremonies for the PSCC will take place on Tuesday May 7, 2024, 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 9, 2024, 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/>



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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 27- June 1, 2024, in Quebec City, QC. It is recommended that competitors review the SCNC contest description to be familiar with the national contest description and project at <http://www.skillscanada.com/>.

During the PSCC Awards Ceremony on Thursday May 9, 2024, 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 individuals 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 8, 2024.

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

Questions?

Please contact Whitney Koop at whitneyk@skillsalberta.com if you have any questions regarding the Contest Description.

COMMITTEE MEMBERS

Roger Tokay – Chair
Jason Parnell
Nathalie Drouin
Brandon Graf
Megan Clark
Lane Lisitza
Omar Rouissi

