

CAREER PROFILES

Construction Millwrights and Industrial Mechanics:

Construction Millwrights and **Industrial Mechanics** install, maintain, troubleshoot, overhaul, and repair stationary industrial machinery and mechanical equipment. **Millwrights** typically perform installations, while **Industrial Mechanics** perform maintenance and adjustments. Some workers in these trades do both jobs and other specialize in just one.

Wage/Salary Information:

\$54,500 is the starting annual salary commonly found in local job-postings.

\$30.94/hour is the median wage reported locally.

Commonly Listed Skills in Job Postings:

- Troubleshooting
- Detail oriented
- Blueprint reading
- Maintenance
- Teamwork
- Oral and written communication
- Problem solving
- Forklift driving
- Work independently
- Self-motivated
- Computer use

- Microsoft Office
- Critical thinking
- Organizational skills
- Manual dexterity
- Creativity
- Leadership
- Interpersonal
- Time management
- Customer service oriented
- Machine operation
- Heavy equipment operation

Job Duties:

Construction Millwrights and Industrial Mechanics read blueprints, diagrams, and schematic drawings to determine work procedures. Construction Millwrights and Industrial Mechanics install, align, dismantle, and move stationary industrial machinery and mechanical equipment according to layout plans using hand and power tools. They operate hoisting and lifting devices

such as cranes, jacks, and tractors to position machinery and parts during the installation, setup, and repair of machinery. Construction Millwrights and Industrial Mechanics also inspect and examine machinery and equipment to detect and investigate irregularities and malfunctions.

Construction Millwrights and Industrial Mechanics know how to operate machines such as lathes and grinders to fabricate parts during overhaul, maintenance, or set-up of machinery. They are responsible for maintenance work on machinery, such as cleaning and lubrication, and constructing foundations for machinery or directing other workers to construct foundations.

Working Conditions:

Millwrights and Industrial Mechanics typically work 40 hours per week. Shift work is common and employees may need to work on call in order to respond to machinery breakdowns. In addition, workers may be required to temporarily relocate to remote locations.

Millwrights and Industrial Mechanics work inside manufacturing facilities, where the environment is often noisy and dirty. They may also work outside, where workers are exposed to weather. As well, workers may work at heights from ladders and scaffolds or in cramped spaces.

Workplace hazards include moving machinery, falling objects and potential falls from heights. As a result, Millwrights and Industrial Mechanics must be fully trained in safety procedures.

Career Pathways:

Millwrights and Industrial Mechanics mainly work inside manufacturing facilities, but may also work outside. Construction Millwrights can also upgrade their skills by becoming qualified through an apprenticeship, or through obtaining required work experience.

Most Millwrights work in the wood product manufacturing industries, however, employment also occurs in construction and metal fabrication and machinery operations, as well as in a wide range of other industries. Industrial Mechanics are employed by manufacturing plants, utilities, and other industrial establishments. Below are potential career paths for Construction Millwrights and Industrial Mechanics:

- Card Grinder
- Construction Millwright
- Industrial Mechanic
- Industrial Mechanic Apprentice
- Knitting Machine Mechanic
- Loom Technician
- Maintenance Millwright
- Open-End Technician
- Plant Equipment Mechanic

- Spinning Fixer
- Textile Fixer
- Treatment Plant Maintenance Mechanic



Education and Training Pathways:

If you're interested in becoming a Construction Millwright or Industrial Mechanic, you can begin your apprenticeship or attend a local training/education program.

Apprenticeship Details:

Construction Millwright

- Certification: Voluntary (not required to practice this profession in Ontario)
- Red Seal: No
- Training: 8,000 hours of combined on-the-job and in-class technical training
- In-class training: Three 8-week technical sessions

Industrial Millwright Mechanic

- Certification: Voluntary (not required to practice this profession in Ontario)
- Red Seal: No
- On-the-job training: 7,280 hours

• In-class training: Three 8-week technical sessions

Individuals interested in pursuing an apprenticeship pathway, should follow these steps:

- 1) Get hired by an employer/sponsor/union
- 2) Apply online to register as an apprentice at <u>www.ontario.ca/page/start-apprenticeship</u>
- 3) Sign a training agreement with your employer/sponsor and the Employment Ontario apprenticeship office.
- 4) Become a Member of the Ontario College of Trades Apprentices Class at <u>www.collegeoftrades.ca/membership</u>
- 5) Keep a record of the hours you work
- 6) Achieve the competencies listed in your training standard if required in your trade
- 7) Complete all of the training requirements in your trade and you will receive a Certificate of Apprenticeship (CoA).
- 8) Write the Exam for the Certificate of Qualification if required in your trade

If you are currently in high school and would like to begin an apprenticeship, visit <u>oyap.com</u> for more information about the Ontario Youth Apprenticeship Program.

Individuals unsure about whether to pursue an apprenticeship or not, can learn more by visiting <u>www.ontario.ca/page/prepare-apprenticeship</u>.

St. Clair College:

Mechanical Engineering Technician – Industrial

Admission/Eligibility Requirements:

- OSSD with the majority of courses at the College (C), University (U), University/College (M), or Open (O) level
- Grade 12 Match (C), or (U)
- Senior level physics: (C) or (U) is recommended

Academic Credential: Two Year - Ontario College Diploma

Professional Certification: Unknown

Attendance: In-person

Full-time or Part-time: Full-time

Program Length: 2-year diploma

Program Cycle: Unknown

Program Cost:

- Year 1: \$3,991.61
- Year 2: \$3,854.05
- Total: \$7,845.66 (2017/18)

OSAP Eligible: Yes

Location: 2000 Talbot Road West, Windsor, N9A 6S4

For more information on this program, please visit:

http://www.stclaircollege.ca/programs/postsec/mech_ind/

Disclaimer: The educational institution reserves the right to change information without notice, and may result in discrepancies between their information and the information presented above. If any errors are found, please report them to <u>info@workforcewindsoressex.com</u>.