

Construction Millwrights and Industrial Mechanics

Description

Construction millwrights and industrial mechanics install, maintain, troubleshoot, overhaul and repair stationary industrial machinery and mechanical equipment. This unit group includes industrial textile machinery mechanics and repairers. Construction millwrights are employed by millwrighting contractors. Industrial mechanics are employed in manufacturing plants, utilities and other industrial establishments.

Duties:

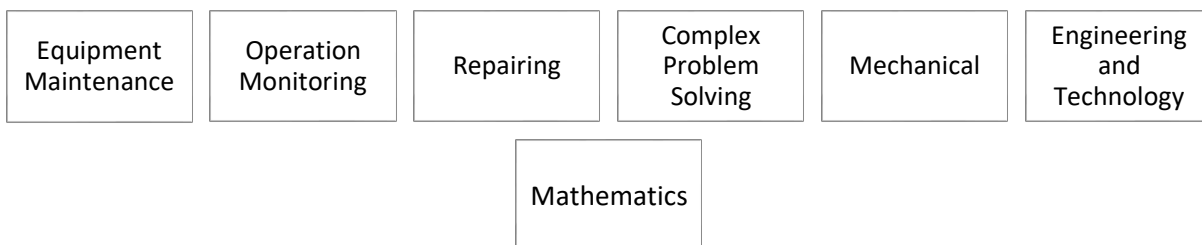
- Read blueprints, diagrams and schematic drawings to determine work procedures
- Install, align, dismantle and move stationary industrial machinery and mechanical equipment, such as pumps, fans, tanks, conveyors, furnaces and generators according to layout plans using hand and power tools
- Operate hoisting and lifting devices such as cranes, jacks and tractors to position machinery and parts during the installation, set-up and repair of machinery
- Inspect and examine machinery and equipment to detect and investigate irregularities and malfunctions
- Install, troubleshoot and maintain power transmission, vacuum, hydraulic and pneumatic systems, and programmable logic controls
- Adjust machinery and repair or replace defective parts
- Operate machine tools such as lathes and grinders to fabricate parts required during overhaul, maintenance or set-up of machinery
- Clean, lubricate and perform other routine maintenance work on machinery
- Construct foundations for machinery or direct other workers to construct foundations
- Assemble machinery and equipment prior to installation using hand and power tools and welding equipment.

Other titles:

- Industrial Mechanic
- Loom Setter
- Card Grinder
- Textile Fixer
- Knitting Machine Mechanic
- Loom Fixer
- Open-End Technician
- Millwright
- Treatment Plant Maintenance Mechanic
- Industrial Sewing Machine Mechanic

(Government of Canada National Occupation Classification)

Skills



Education/Training Requirements

Ontario Secondary School Diploma (OSSD)

- Completion of secondary school and training courses or a vocational program is usually required

Post-secondary diploma/degree

- Completion of a three-to-four-year apprenticeship program or a combination of over five years of work experience and industry courses in industrial machinery repair or millwrighting is usually required to be eligible for trade certification

Certification

- Textile machinery mechanics hired from other industries may require additional training in textile processes and experiences as a textile manufacturing machinery operator
- Industrial mechanic (millwright) trade certification is available, but voluntary, in Quebec and Ontario
- Industrial sewing machine mechanic trade certification is available, but voluntary, in Quebec
- Red Seal endorsement is also available to qualified industrial mechanics or millwrights upon successful completion of the interprovincial Red Seal examination

Potential Earnings in Durham Region

The average and median wages and salaries for individuals employed as construction millwrights and industrial mechanics are as follows. Place of Residence (POR) is defined as individuals who reside within the Durham Region. Place of Work (POW) is defined as individuals who are employed within the Durham Region.

Median Wages and Salaries (POR)	Average Wages and Salaries (POR)	Median Wages and Salaries (POW)	Average Wages and Salaries (POW)
\$74,938	\$74,430	\$89,784	\$91,241

Employment Prospects

Industry (NAICS)	Jobs in Durham Region (POW)	Durham Region Residents Employed (POR)
2211 Electric power generation, transmission and distribution	330	210
3361 Motor vehicle manufacturing	145	130

(Ministry of Advanced Education and Skills Development 2016 data in Durham Workforce Authority's 2017 Sector Report)

Additional Resources

- The Red Seal Program: <http://www.red-seal.ca/w.2lc.4m.2-eng.html>