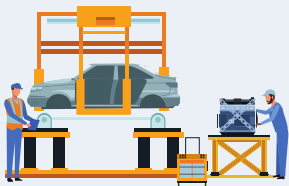


Industrial Instrument Technicians and Mechanics

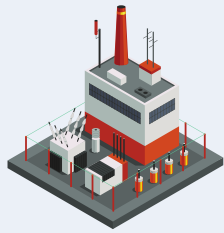


The technology used in modern manufacturing, material refinement, and energy production requires standardized, regulated processes for safety and product conformity. This is enabled by industrial control instruments. Industrial Instrument Technicians and Mechanics manage the installation, repair, and calibration of these tools, from nuclear energy production to mining. FOCAL projects a large recruitment gap for this profession over the next decade, with growth opportunities in the automotive sector.

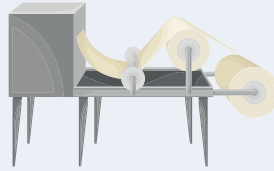
Where do Industrial Instruments Technicians and Mechanics work?



Vehicle Assembly and Body Parts Manufacturing



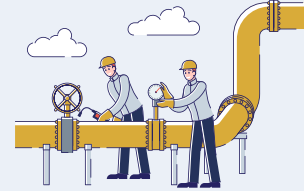
Power Generation Transmission and Distribution



Pulp, Paper and Paperboard Mills



Architecture Engineering & Related Services



Oil and Gas Extraction

What do Industrial Instruments Technicians and Mechanics do?

Industrial instrument technicians and mechanics work with instruments and measures that regulate and monitor flow, pressure, temperature, chemical composition and many other properties of goods used in manufacturing and processing. Below are some of the common tasks that Industrial Instrument Technicians and Mechanics perform in their daily work.

- Inspect and test operation of instruments and systems to diagnose faults using pneumatic, electrical and electronic testing devices and precision measuring instruments
- Calibrate components and instruments according to manufacturers' specifications
- Install control and measurement instruments on existing and new plant equipment and processes
- Perform scheduled preventive maintenance work and complete test and maintenance reports

Career pathways & potential earnings of Technicians and Mechanics

With adequate skill and experience, industrial instrument technicians and mechanics can progress to other roles and positions, including in supervisory and management:

Industrial Technicians Mechanics



Technicians and Mechanics are skilled trade workers, earning entry wages of \$23/hr, that can scale to \$58/hr.

Mechanic Trade Supervisors



Supervisors in mechanic trades earn up to \$58/hr, but experience and further training can lead to opportunities in upper management.

Manufacturing Manager



Manufacturing managers oversee the production activities of an entire department or plant, and earn wages up to \$72/hr.

Industrial Instrument Technician or Mechanic can also apply their skills and expertise in other occupations such as the following:

- Contractors and Supervisors, Mechanic Trades
- Construction Millwrights and Industrial Mechanics

How do I become an Industrial Instrument Technician or Mechanic?

There are several requirements to become an Industrial Instrument Technician or Mechanic. Some requirements may vary by province or company. Below are the most commonly required qualifications to work as an Industrial Instrument Technician or Mechanic:

- **Minimum Education:** Two-to-three-year college program or equivalent in industrial engineering, manufacturing technology or a related discipline for technologists. Completion of a one-to-two-year college program in industrial engineering or a related discipline is required for industrial engineering and manufacturing technicians.
- **Certification, Licensing, Training and other requirements:** Available and optional through provincial or territorial associations of applied science/engineering technologists and technicians. Requires two years of supervised work experience.

Education & Training



What are important skills to have as a Technician or Mechanic?

Industrial Instrument Technicians and Mechanics acquire knowledge of mechanics and production, as well as hone their skills and abilities through their apprenticeships and formal education and training. Below are skills, knowledge and abilities which help Mechanics and Technicians succeed in their work.

Technical Knowledge and Skills

- Operations Monitoring
- Production and Processing
- Quality Control and Operations Analysis
- Technology Design
- Public Safety and Security

Soft Skills

- Troubleshooting
- Manual Dexterity
- Problem Sensitivity
- Written Expression and Comprehension
- Inductive and Deductive Reasoning

Future of Technicians and Mechanics in Canada

Industrial Instrument Technicians and Mechanics do important work for Canada's industry, but are a smaller occupational group. In 2021, more than 8,500 Technicians and Mechanics were employed across Canada's sectors and industries. FOCAL projects 50 job openings in Canada's automotive manufacturing sector between 2021 and 2030. FOCAL also forecasts that during the same period, all new positions will require additional workers to fill recruitment gaps in the sector.

Jobs and Recruitment



Learn more about the job market for industrial instruments technicians and mechanics, as well as about many other developments and new technologies in Canada's automotive manufacturing by visiting our website futureautolabourforce.ca.

You can also check our social media by following these links:

 [/focalinitiative](https://www.instagram.com/focalinitiative)

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 [/focal-initiative](https://www.linkedin.com/company/focal-initiative)