

Petroleum, Gas and Chemical Process Operators

Description

Central control and process operators in this unit group monitor and operate petroleum, petrochemical and chemical plants and monitor, adjust and maintain processing units and equipment in these plants. They are employed by petroleum and natural gas processing, pipeline and petrochemical companies and industrial, agricultural and specialty chemical and pharmaceutical companies.

Duties:

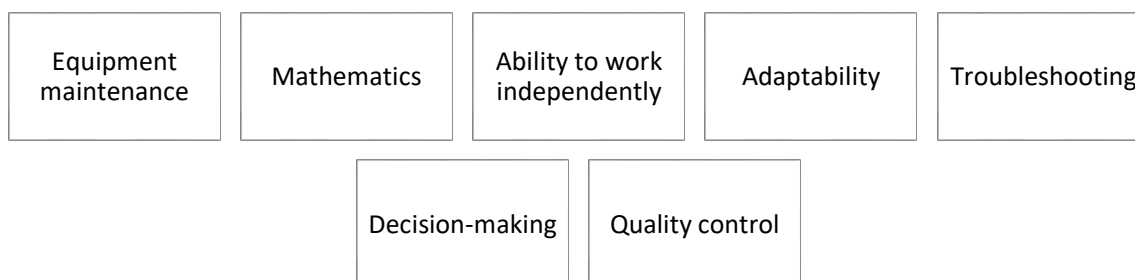
- Operate electronic or computerized control panel from a central control room to monitor and optimize physical and chemical processes for several processing units
- Control process start-up, shut-down and troubleshooting
- Monitor outside process equipment
- Adjust equipment, valves, pumps and controls and process equipment
- Authorize or co-sign maintenance work orders
- Shut down, isolate and prepare process units or production equipment for maintenance
- Sample products, perform tests, record data, carry out statistical process control on process operations, and write production logs
- Develop operating procedures for normal operation, start-up or shut-down of unit
- Participate in safety audits and programs and provide emergency response when required
- Ensure adherence to safety and environmental regulations
- May rotate between different processing units during shift cycles
- May work in a team with shared supervisory responsibilities and participate in training other workers
- May be cross-trained in a skilled trade and work in the trade during shift cycles.

Other titles:

- Acid plant operator
- Pharmaceutical processing operator
- Refinery process technician
- Panel operator – chemical processing

(Government of Canada National Occupation Classification)

Skills



Education/Training Requirements

Ontario Secondary School Diploma (OSSD)

- Completion of secondary school is required
- Most college programs in Ontario require an OSSD or Mature Student Status

Post-secondary diploma/degree

- College diploma in process operation, sciences, or a related subject may be required for some positions.

Certification

- Petroleum and chemical process operators and process technicians must complete several years of formal company training
- Experience as a petroleum or chemical process operator in all the operating units that the central control room controls is required for chief operators
- Company certification as a petroleum process operator or technician may be required
- A provincial power engineer license, compressor operator or refrigeration certificate may be required when certain kinds of equipment are included in the process.
- Certification in the transportation of dangerous goods (TDG), first aid, firefighting, or workplace hazardous materials information system (WHMIS) may be required.

Potential Earnings in Durham Region

The average and median wages and salaries for individuals employed as central control and process operators 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 (POW)	Average Wages and Salaries (POW)	Median Wages and Salaries (POR)	Average Wages and Salaries (POR)
\$61,956	\$64,140	\$50,087	\$52,488

Employment Prospects

Industry (NAICS)	Jobs in Durham Region (POW)	Durham Region Residents Employed (POR)
3254 Pharmaceutical and medicine manufacturing	20	65

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

Additional Resources

- Transportation of dangerous goods, WHMIS certification: <https://canadasafetycouncil.org/>
- Power engineer licensing, compressor operator and refrigeration certification: <https://www.tssa.org/en/operating-engineers/training-and-certification.aspx>