

MINERAL PROCESS ENGINEER

Mineral Process Engineers use sophisticated processes and new technologies to extract and refine valuable minerals from raw ore. They also create new products from waste materials, clean up the work environment and promote economic growth.

Job Description

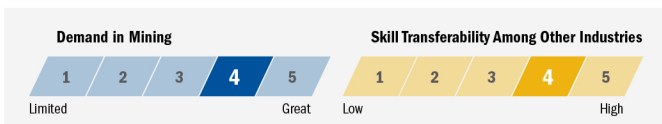
- Organize and supervise the extraction of metals and minerals from ore at underground or surface mines
- Monitor the conditions of the various processes and the flow of material through the mill
- Monitor and control the mine feed, operating parameters and the addition of chemical substances to ensure maximum mineral extraction, to create stable, high-quality concentrates
- Conduct on-site testing and research to identify ways to improve systems
- Troubleshoot operational inefficiencies
- Implement cutting-edge processes and safety practices
- Write reports, attend meetings and exchange, record and store information in compliance with legislation, regulations and company policies
- Work cooperatively with other departments to optimize production, reduce costs, solve problems and meet deadlines
- Supervise junior engineers and technicians and assist supervisors in building an efficient work force
- Plan for equipment wear and create proactive maintenance procedures

Compensation



(Source: Canadian Mine Salaries, Wages & Benefits: 2018 Survey Results InfoMine USA, 2018).

Job Prospects



Why are People Attracted to this Career?

Mineral Process Engineers seek challenging and rewarding technical work. Possessing strong analytical skills, they enjoy finding creative solutions to problems, and are well compensated for their efforts. They utilize new technologies, working both independently and with a team.

What is it Like to Work as a Mineral Process Engineer in Mining?

Note: conditions vary according to employer and region.

Mineral Process Engineers work in an office in a mill or in a research lab. They are exposed to challenging working conditions, including confined spaces, at heights and near open holes. They must be willing and able to climb ladders and steel ramps.

Success Profile

- ☒ Creative
- ☒ Embraces new techniques and technologies
- ☒ Enjoys working with math, science, computers and machinery
- ☒ Goal-oriented
- ☒ Understands and respects safety procedures, legislation and regulations
- ☒ Patient, flexible, adaptable and resilient
- ☒ Strong communication and time management skills
- ☒ Team player

Job Entry Requirements

Note: The requirements listed below illustrate what it takes to start the career and do not take into account on-the-job training given to new employees.

Fixed Requirements

- Bachelor's degree in engineering (e.g. metallurgical, chemical, mechanical or mining)
- Eligible for Registration as Engineer in Training
- Must be able to pass a medical test
- Must be able to pass a drug test
- Willingness to work in a diverse environment
- Proficiency in language of operation

May be Required

- Professional Registration, PEng.
- Specialized software skills

Assets

- Master's degree
- Proficiency with word processing, spreadsheet and email software
- Willingness to relocate
- Other languages