



Manufacturing Worker

Bio-economy Skills At-a-Glance



Building skills for Canada's bio-economy

About BioTalent Canada™

Helping Canada's Bio-economy thrive globally

Canada is a world leader in biotechnology—the application of living organisms to industrial, agricultural, medical and other processes and products. To maintain and build on this leadership, the sector needs highly skilled, job-ready people.

By acting as a national hub and central resource for employers, job seekers, students, educators and government agencies, BioTalent Canada helps make this happen.



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About the Bio-economy

The bio-economy involves the research, development, manufacturing and commercialization of technologies and products for such areas as:

- Agriculture
- Aquaculture
- Bioenergy
- Bioinformatics
- Bioproducts
- Biosciences
- Environment
- Food Processing
- Forestry
- Genomics
- Human and Animal Health
- Industrial
- Life Sciences
- Medical Devices
- Natural Resources
- Nanotechnology
- Nutraceuticals
- Pharmaceuticals

Components of the Bio-economy Skills At-a-Glance

The *Bio-economy Skills At-a-Glance* are built around *Key Competencies*. They are *not* complete *Bio-economy Skills Profiles*. They capture the key hard and soft skills required to successfully function in this position. Those key competencies require specific tasks be accomplished in order to attain the desired outcome. More often than not, those key activities are functional in nature and require the application of specific knowledge acquired by education, training or practical experience. In bio-economy companies, those functional competencies may be very broad and diversified, encompassing both scientific and business expertise. Some may refer to functional competencies as hard skills of the position.

The *Bio-economy Skills At-a-Glance* have been developed through secondary research and have NOT been validated by industry. As a result, industry feedback will be greatly appreciated. Please send any feedback to portfolios@biotalent.ca.

The *Bio-economy Skills-At-a-Glance* are useful for such activities as recruiting, professional development, coaching, self-assessment, and many other purposes.

Occupational Description

Manufacturing Workers perform material handling, work space clean-up, packaging and other routine production activities. They assist machine operators in the set up and operation of manufacturing equipment. They may move material using equipment such as forklift trucks and mechanized hoists.

Potential Professional Background and Education/Bio-economy or Relevant Experience

Education/Certification

- A High School diploma is required

Professional Experience

- Workplace Hazardous Information Materials System certificate (WHIMS)
- Transportation of Dangerous Goods
- First Aid training
- Experience operating material handling equipment such as forklifts, front-end loaders and scissor-lifts
- Able to lift/push/pull up to 60 lbs

Competencies and Tasks

A Manufacturing Worker must be able to:

A. Gather Information

TASKS
1. Prepare work order paperwork
2. Read work orders to determine required specifications
3. Review production information reports / shift logs

B. Operate Machines

TASKS
1. Assist in machine operations
2. Operate mixing equipment
3. Feed materials to the machinery
4. Adjust machinery valves/pumps as required

C. Maintain Machines

TASKS
1. Assist in maintaining machinery and equipment
2. Assist in repairing machinery and equipment
3. Clean and lubricate machinery and equipment
4. Advise Maintenance department of any issues arising during operation

D. Operate equipment, vehicles and/or mechanized devices

TASKS
1. Operate cranes or hoists as required
2. Operate material handling equipment such as forklifts as required
3. Operate scales as required

E. Monitor processes, materials, or surroundings

TASKS
1. Monitor machinery and equipment performance during operation
2. Monitor temperature and pressure readings
3. Monitor output quality

F. Handle materials

TASKS
1. Perform manual tasks
2. Load and unload vehicles
3. Move materials and finished goods
4. Package goods
5. Measure raw materials

G. Document, record and report information

TASKS
1. Enter data into production report
2. Take pressure readings
3. Take temperature readings

H. Document and comply with policies and procedures

TASKS
1. Contribute to the development of policies and procedures
2. Contribute to the development of safety and security procedures
3. Follow standard operating procedures and work instructions
4. Comply with regulatory requirements
5. Comply with current Good Manufacturing Practice (cGMP)

I. Use computers

TASKS
1. Use email software as appropriate
2. Use Microsoft Office as appropriate

J. Demonstrate personal competencies

TASKS
1. Demonstrate teamwork
2. Exhibit sensitivity to cultural and social diversity
3. Be customer service focused
4. Work in a fast-paced environment
5. Follow company's policies and procedures
6. Demonstrate time management skills
7. Manage stress
8. Be a quick learner
9. Communicate effectively and clearly

Strong Board of Directors

The Board of Directors is composed of experts in the field of HR, CEOs, CFOs and CSOs from across Canada with extensive financial and industry experience representing companies and organizations in Canada's bio-economy. BioTalent Canada is not a membership organization and therefore relies on the guidance provided by its dedicated volunteer Board of Directors.

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