

Manufacturing Worker

National Occupational Standard Summary



BIOTALENT CANADA

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Definition of occupation | **Manufacturing Worker**

The Manufacturing Worker performs various duties within the manufacturing sector. They may oversee or assist in running machinery and various machine work processes, including the assembly of various electro-mechanical components, in order to create products or value throughout various levels of the supply chain. They set up, run, or assist in running and/or maintaining various machines within their plant.

The Manufacturing Worker must follow established standard operating procedures (SOPs) and specifications to make products, optimize output, and maintain control in order to ensure quality. They may also troubleshoot problems and then either apply corrective actions or inform maintenance and/or other cross-functional staff of bigger issues in order to resume production as quickly as possible.

Level of education, training or designations requirements

Typical Education Required	Secondary	College	Bachelor	Master	PhD
Typical Starting Experience	0-5 yrs.	5-10 yrs.	10-15 yrs.	15-20 yrs.	20+ yrs.

- High School diploma or General Educational Development (GED) Certification plus on-the-job training is the minimum
- College certificate/diploma or bachelor's degree required for certain positions
- Apprenticeship of a year or more may be required to ensure the candidate can properly read and understand SOP instructions, operate the machine, and understand the basics of a production line
- Co-op program participation often preferred
- Completion of post-secondary (e.g., Polytechnics) pre-employment training in machining or a machine operator technical certificate may be required

Manufacturing Worker

National Occupational Standard Summary

- First Aid and Safety training may be required
- Must be able to lift heavy objects (over 20 kg), stand for eight hours, and work shift work (24/7 operation at certain companies)
- Aptitude for math, problem-solving, mechanics, electronics, and computer literacy is an asset

This role works in the following subsectors:

Applicable To	Bio-Health	Agri-Bio	Bio-Industrial	Bio-Energy
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The level of complexity of the role is:

Span of Complexity Levels	Foundational	Operational	Specialist/ Management	Expert/Executive
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MANUFACTURING WORKER COMPETENCY SUMMARY

Competencies	Complexity Level Required			
	1 Foundational	2 Operational	3 Specialist/ Manager	4 Expert/ Executive
Core				
Document Management				
Machine Operation				
Technical				
Execute Production Orders				
Continuous Improvement				
Materials Handling				
Equipment Use				
Preventative Maintenance (PM)				
Corrective Maintenance (CM)				
Quality Assurance				
Health and Safety Procedures				
Reporting				
Waste/Scrap Control				
Industry Regulatory				
No specific competencies identified				
Personal and Professional				
Accuracy				
Adaptability				
Communication				
Teamwork				
Attention to Detail				

Core competencies

Document Management

Reviews, completes, and maintains all required documentation (cleaning logs, maintenance records, production records, product specifications, etc.), ensuring that they are complete, accurate, up-to-date, legible, and accessible for appropriate stakeholders.

Machine Operation

Sets up, operates, and changes over machine(s) in accordance with established procedures and guidelines in order to ensure efficient and safe operation and consistent high-quality production. Monitors processes and multiple pieces of equipment during operation, and reviews information from materials or the environment to detect/assess problems and ensure quality production.

Technical competencies

Execute Production Orders

Assists in the operation of the machine by supporting setup and change over activities and loading/unloading materials and products, etc., in order to ensure efficient and high-quality operations.

Continuous Improvement

Participates in initiatives to improve current metrics in safety, productivity, expected costs, quality levels, and production time in order to meet customer requirement dates and manufacturing targets.

Materials Handling

Moves, stores, controls, and protects the materials to reduce unit costs of production, maintain/improve product quality and working conditions, reduce damage, promote safety, productivity, and use of facilities, and control inventory.

Equipment Use

Uses appropriate equipment (PPE, forklifts, hand-jacks, mobile wrapping stations, etc.) to aid in carrying out own and others' work in order to ensure that workflow and employee safety are maintained and/or enhanced.

Preventative Maintenance (PM)

Conducts Preventive Maintenance (PM) to lessen the likelihood of machine breakdowns, accidents, and the costs associated with each, as well as to prolong the life and proper operation of the machine.

Manufacturing Worker

National Occupational Standard Summary

Corrective Maintenance (CM)

Uses discretion and carries out minor corrective maintenance after a machine failure is detected, aiming to restore it to full operations (within the established tolerances or limits) quickly and safely.

Quality Assurance

Performs quality inspections at multiple points during production to ensure the products meet standards for quality and specifications.

Health and Safety Procedures

Ensures own and others' safety by following safety policies and procedures in order to reduce and/or eliminate workplace hazards and maintain a safe work environment.

Reporting

Takes information and presents it in an objective and succinct manner in order to inform colleagues, supervisors, and other specific target audiences about daily production, machine operation progress, accident/incident, quality inspection, maintenance (PM/CM), safety, etc.

Waste/Scrap Control

Ensures that SOPs, internal policies, and external requirements, are being followed in relation to waste/scrap reduction and handling and provides input for a structured approach to handling waste that may pose a threat to human health and/or the environment.

Industry regulatory competencies

No specific Regulatory Competencies were identified.

Personal and professional competencies

Accuracy

Ensures accuracy of own and others' work by following all policies and procedures and checking work prior to, during, and after work is completed in order to ensure all requirements and specifications have been met to acceptable standards.

Manufacturing Worker

National Occupational Standard Summary

Adaptability

Fits into a constantly changing work environment by adapting to changes in tasks, assignments, and changing production priorities in order to ensure that high-quality products are delivered in a timely manner.

Communication

Positively direct outcomes by delivering communication that results in a better understanding of goals and objectives, captures interest, direct actions, and gains support.

Teamwork

Interacts with supervisors/lead hands and colleagues by participating actively and contributing to the capability of the team in order to achieve shared goals in a safe and efficient manner.

Attention to Detail

Applies mental focus to their duties to ensure that work is accurate and error free and consistently pays attention to detail to ensure consistency of work and results in order to improve decision-making and achieve results or accomplish tasks/objectives.

USE NATIONAL OCCUPATIONAL STANDARDS TO:

- ✓ Build a job description
- ✓ Plan professional development
- ✓ Map career progression and succession planning
- ✓ Benchmark compensation

View the full National Occupational Standards at biotalent.ca/NOS

Funded by the Government of Canada's Sectoral Initiatives Program. 

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