



*Alliance for Batteries Technology, Training and Skills*

*2019-2023*

## **Machine Operator in Battery Industry**

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Co-funded by the  
Erasmus+ Programme  
of the European Union



## Machine Operator in Battery Industry

A battery machine operator is responsible for the operation of equipment used in the production of batteries. They work in battery manufacturing plants and are responsible for ensuring that the equipment is operating efficiently and effectively to produce high-quality batteries. They need to have a strong understanding of mechanical, electrical and control systems, as well as experience with operating and maintaining manufacturing equipment.

### ESCO Occupations - [ESCO - Occupations - European Commission \(europa.eu\)](http://data.europa.eu/esco/isco/C8)

ID	NAME	Concept URI
C8	Plant and machine operators and assemblers	<a href="http://data.europa.eu/esco/isco/C8">http://data.europa.eu/esco/isco/C8</a>

### Context

<b>Minimum EQF</b>	3/4/5
<b>Value Chain</b>	Raw Materials and Processing Cell and Components Manufacturing Modules and Packs Battery Integration
<b>Departments</b>	Production and Maintenance Logistics Quality RnD
<b>Specialisations</b>	Laboratory and validation laboratory operators Production Assembly Operator Automation / Process Operator Process Operator - Upstream Machine Operator Operator

### Cross-sectoral Specific Competence

Name	Type (S/K)	Description/Context	Level	ESCO
Equipment and Tools	S	- Use of hand tools, electric tools and machines - Control the equipment used in production	Practitioner	Equipment and Tools Handling

Handling		<ul style="list-style-type: none"> <li>- use machines to fabricate components</li> <li>- responsible for some routine maintenance of the machines</li> </ul>		
Inspect Quality of Product / Sampling	S	<ul style="list-style-type: none"> <li>- Makes visual quality checks</li> <li>- problem identification and minor troubleshooting</li> <li>- Conduct sampling to ensure material is not contaminated</li> <li>- Comply with all company policies, in particular those relating to safety, quality and performance</li> </ul>	Practitioner	inspect quality of product
Analysis Methods	K	<ul style="list-style-type: none"> <li>- Conducting root cause analysis on various issues</li> <li>- issue permits according to routines</li> <li>- Analyse the situation and take proper actions when facing failures and deviations affecting the production</li> <li>- Analysis and estimation of workload</li> </ul>	Expert	analysis methods
Hazardous Materials	K	<ul style="list-style-type: none"> <li>- Controls the equipment and process materials used in production</li> <li>- Assure safe operations</li> <li>- Take proper actions when handling hazardous material</li> </ul>	Expert	handling of dangerous goods
Material Operation & Handling	S	<ul style="list-style-type: none"> <li>- Handling the materials according to the safety protocols</li> </ul>	Practitioner	operate material handling equipment
Risk Management	K	<ul style="list-style-type: none"> <li>- Assure safe operations. Daily safety improvement work to reach in safety for example when doing repairs or inspections of equipment</li> <li>- Perform risk analysis</li> <li>- Actively partake in Safety, Quality, Environment and Improvement work</li> </ul>	Expert	risk management
Operate Machines	S	<ul style="list-style-type: none"> <li>- Operates and drives the machines</li> <li>- Maintenance procedures</li> <li>- Control the equipment and process materials used in production</li> <li>- Observe machine operation for defects and deviations and take appropriate action</li> </ul>	Expert	work safely with machines
Production Processes	K	<ul style="list-style-type: none"> <li>- Control the equipment and process materials used in production</li> <li>- Responsible for putting together many different parts</li> </ul>	Practitioner	production process
Equipment Maintenance	S	<ul style="list-style-type: none"> <li>- Perform visual inspections and equipment maintenance</li> <li>- Responsible for some routine maintenance of the machines</li> </ul>	Practitioner	ensure equipment maintenance
Safety Procedures	K	<ul style="list-style-type: none"> <li>- Complying with all company policies, in particular those relating to safety, quality and performance</li> <li>- Assure safe conditions through Lock Out Tag Out Try Out according to routines</li> <li>- Partake in Safety, Quality, Environment and Improvement</li> </ul>	Awareness	safety engineering

		work		
		- Daily safety improvement work to reach world class in safety		
Parts Fitting	S	- Positioning and fitting parts in a specific relationship to each other - Bonding, clamping, screwing, joining, soldering or other similar activities in order to connect and secure assembled elements	Practitioner	

### Sector Specific Competence

Name	Type (S/K)	Description/Context	Level	ESCO
Battery Industry	K	- Understands the importance of battery industry and overall value chain	Awareness	

### Soft Competence

Name	Type (S/K)	Description/Context	Level	ESCO
Communication	K	- Support managers and colleagues in creating a good working environment through inclusion, motivation, engagement, creativity, good communication and high ambitions - Report failures and deviations	Awareness	communication
problem solving & troubleshoot	S	- problem identification and minor troubleshooting - reporting any problems to supervisor	Awareness	problem solving & troubleshoot

### General Transversal Competence

Name	Type (S/K)	Description/Context	Level	ESCO
English	K	- Follow written and verbal instructions in a multicultural/international environment	Awareness	English
Reporting	S	- Report failures and deviations on equipment as well as conducting root cause analysis on various issues.	Practitioner	follow reporting procedures
Written	S	- Perform risk analysis - Report failures and deviations on equipment orally or in written form	Practitioner	written skills
Health and Safety Standards	K	- Assure safe operations. Daily safety improvement work to reach world class in safety for example when doing repairs or inspections of equipment - Perform risk analysis	Expert	health and safety in the workplace

		<ul style="list-style-type: none"> <li>- Actively partake in Safety, Quality, Environment and Improvement work</li> <li>- A safe operation production line is a priority and will therefore be a crucial part of any task</li> <li>- Conduct sampling to ensure material is not contaminated</li> </ul>		
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### Academic Competence (can be taken from University programme)

Name	Type (S/K)	Description/Context	Level	ESCO
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