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Alliance for Batteries Technology, Training and Skills

2019-2023

Automotive Repair and Inspection

Personel



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Automotive Repair and Inspection Personel

Electric vehicle (EV) repair and maintenance personnel are responsible for the repair and maintenance of electric vehicles. They work in EV repair shops and dealerships and are responsible for ensuring that the vehicles are operating efficiently and effectively. They need to have a strong understanding of electrical and mechanical systems, as well as experience with EV repair and maintenance.

They are responsible for performing regular inspections and preventative maintenance on the vehicles, identifying and resolving issues that arise during operation, and making necessary repairs or modifications to improve vehicle performance. They also need to be able to work closely with other technicians and mechanics, and with EV owners to ensure that the vehicles are safe and reliable to operate. They may also be responsible for troubleshooting and diagnosing problems with EV systems, such as the battery, power electronics, and drivetrain, as well as for replacing or repairing faulty components. They also need to be familiar with the regulations and standards related to EV repair and maintenance.

ID	NAME	Concept URI
2141.8	maintenance and repair engineer	http://data.europa.eu/esco/occupation/615920c5- 4f63-4eb3-8b60-afaaed3ab1ff
7231.10	vehicle technician	http://data.europa.eu/esco/occupation/4ad4024e- d1d3-4dea-b6d1-2c7948111dce
7543.3	battery test technician	http://data.europa.eu/esco/occupation/43eb6228- 8241-47d6-875e-7ccc214291d5

ESCO Occupations - ESCO - Occupations - European Commission (europa.eu)

Context

Minimum EQF	4/5/6
Value Chain	Operation, Repair, and Maintenance



	Second Life
Departments	Production and Maintenance
	Quality
	Intellectual/Legal
	Recycling
Specialisations	Battery Repair Engineer
	Electric Battery Repairer
	Technician for Battery Analysis
	Cell Inspection Technician
	Electrical battery storage inspector
	Inspection engineer

Cross-sectoral Specific Competence

Quality of Product / SamplingImage: functionality of the overall product - Inspect for discontinuities, Visual identification, damages. - Perform visual and mechanical control activities - Determine malfunctionQuality productAnalysis MethodsK- Create analyzes and report to management on quality issues and root causes of batteries.Practitioneranalysis methodAuditsS- Perform visual and mechanical control activities and root causes of batteries.Practitioneranalysis methodEquipment and toolsS- Perform visual and mechanical control activities with proper equipment - Use the relevant quality tools/systems to analyze data and deal with non-conformances - Maintains and cares for the shop tools and equipment.PractitionerIdentify methodsProcess ImprovementS- Improvement of working procedures and processes other componentsAwareness improvementIdentify process improvementRemove Defective ProductS- removes, replaces, and repairs tires, undercarriages, and other componentsPractitioner PractitionerRemove effective product	Name Typ		Description/Context	Level	ESCO
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Procedures	devices on equipment, and make adjustments.	
	- Insures safe work and procedures	

Sector Specific Competence

Name	Туре (S/K)	Description/Context	Level	ESCO
Battery charge/discharge	К	- changes or recharges batteries	Practitioner	Repair battery components

Soft Competence

Name	Туре (S/K)	Description/Context	Level	ESCO
Communication	k	 Together with the rest of the team, act as a key player to develop and maintain a safe work environment. Participate in teams focused on delivering quality improvements. 	Expert	communication
Problem Solving/Troubleshooting	S	- Perform inspections and troubleshoot cause of physical testing failures, when appropriate.	Expert	problem solving & troubleshoot
Teamwork	К	 Participate in teams focused on delivering quality improvements. Exchange experience with other battery analysis departments across locations within the company work closely with production 	Practitioner	teamwork

General Transversal Competence

Name	Туре (S/K)	Description/Context	Level	ESCO
Reporting	S	 complete daily reports report findings Report accomplishments and roadblocks 	Practitioner	Follow reporting procedures
Documentation	S	- Establish and maintain documentation	Practitioner	use technical documentation; observe documents
Computer Literacy / Office	S	 Knowledge on regular office suite and used applications 	Awareness	Have computer literacy

Academic Competence (can be taken from University programme)

ne Type Description/Context	Level	ESCO
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	(S/K)			
Mechanical Engineering	К	 Perform manual and machine assembly and disassembly of serial, pre-serial and prototype parts of the traction battery 	Practitioner	mechanical engineering
Electrical Engineering	К	 have previous experience of working in electricity 	Practitioner	Electrical engineering

