

BATTERY DISMANTLING, RECYCLING AND REPURPOSING

Electric vehicles (EVs) offer significant potential business opportunities for decarbonising transport and improving air quality. In order for both the UK and other European/Global Governments to meet legislative and targeted carbon reduction emissions, households will need to switch to EVs ahead of planned bans on the sale of new petrol/diesel vehicles; in the case of the UK, that being 2035. However there are many challenges that lie ahead – but for every challenge, lies an opportunity. One such challenge is the need to manage the projected volumes of automotive Lithium-Ion batteries in their End of Life (EOL) that will need dismantling for recycling (raw material recovery) or repurposing (second life applications).

In order to dismantle a battery, you will have received into your facility/depot, an industrial electric vehicle battery pack. That battery pack will consist of battery cells (anode and cathode), electronic components, bus bars (metal strips), wiring and final casing. As a dismantler, there is a need to isolate the battery pack (health and safety high voltage training a pre requisite to undertake the isolation step), check the state of charge, disassemble the component parts (skilled labour intensive mechanical process) such as the battery cells which contain high value rare metals e.g. Nickel, Manganese, Cobalt, Lithium. Additionally, Copper metal is incorporated in the bus bars and wiring. The main electronic component is the battery management system (BMS) which when separated is of value in a battery repurposing context.

This 2 day course is provided by REVAMP Training Limited from its dedicated training centre at North Seaton, Ashington, Northumberland. All prices available upon request via: info@revamptraining.co.uk or by contacting +44 1642 220778.

Introduction and Sector Overview.
Recycling and Repurposing.
Health and Safety considerations of Lithium-Ion Batteries.
Manual and Safe Handling.
Dismantling of a Battery Pack.
Transportation of Lithium-ion Batteries.
Assessment.