

**Your Innovative Partner for
Electric Vehicle Solutions**

The Company



Autocraft EV Solutions Limited is an independent, innovative leader in the repair, remanufacture and assembly of Electric Vehicle (EV) battery packs for the automotive OEMs.

Part of the Autocraft Solutions Group, Autocraft EV Solutions was formed in 2019 following 3 years of development work by its sister company, Autocraft Drivetrain Solutions. Autocraft Solutions Group is a leading provider of engine and EV manufacturing and engineering services, including the assembly and modification of new engines for special and niche engine applications, remanufacture of engines and EV battery packs, plus the supply of EV power electronics.

We are also a Tier 1 and Tier 2 supplier of complex machined and assembled components. Autocraft is a pioneer of PTWA/RSW Plasma Spray technology, and cylinder head and block machining. Over £6m has been invested in the facility over the last 5 years

ensuring we have the latest technology and processes to further enhance our class-leading market offering.

Autocraft has been privately owned by the senior management team since 2010, and has a very strong balance sheet. The company has seen massive growth in the past few years; our workforce has doubled to over 200 people and our turnover has trebled and we have added 2 further facilities in the UK since the MBO.

We have a proven track record in new technologies, and environmental sustainability is at the core of everything we do. Our extensive understanding and knowledge of remanufacturing and assembling drivetrain components for over 40 years makes Autocraft EV Solutions the perfect partner for your Electric Vehicle (EV) battery and hybrid system needs.

Our Facility



Autocraft Solutions Group provides electric vehicle (EV) battery, powertrain and engineering solutions to a global market. Our EV Solutions division in Grantham, Lincolnshire provides EV battery remanufacturing and new battery assembly, with capacity of up to 2,000 vehicle sets per year.

Assembly of new packs, remanufacturing of failed modules and full testing and warranty is available from Autocraft's **EV Battery Service Centre** in Grantham where we offer our unique '5R' programme:

Recover → Repair → Remanufacture → Reuse → Recycle

This is a complete supply solution for new or used EV battery requirements, and provides global EV battery repair solutions for OEMs.

Our EV Battery Service Centre is a scalable facility providing the following services:

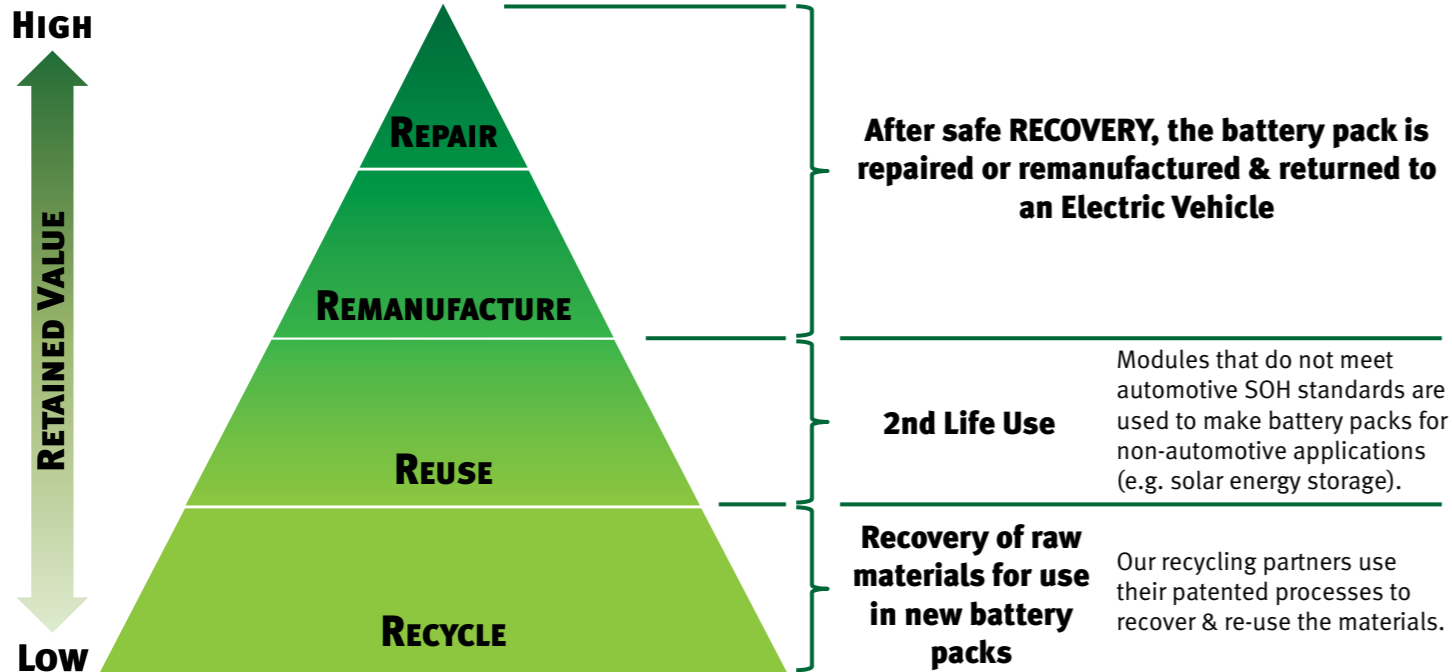
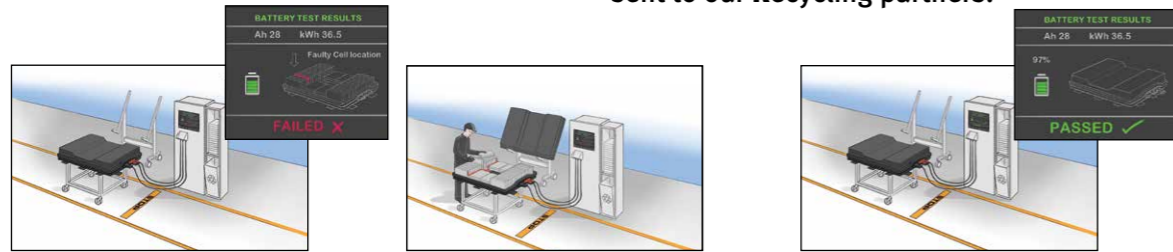
- » Interfacing with battery packs and accessing pack data
- » Diagnosing battery pack faults
- » Conditioning new modules and cells ready for fitment into packs with failed cells
- » Rebuilding packs
- » Replacing modules and cells
- » Replacing electronic modules and components
- » Testing and grading pack capacity
- » Cycling and ageing packs
- » Load testing packs
- » Safely dismantling and recycling packs, modules and cells with our partners to recover materials and value

Electric Vehicle (EV) Batteries: Our '5R' Solution

The Process

Battery packs can be collected from the customer or the customer can deliver to our EV Battery Service Centre in Grantham. Even the safe Recovery of damaged packs can be achieved. Faulty cells are located on Autocraft EV test rigs and the affected modules are fully discharged and safely disassembled by highly trained EV engineers.

Modules are matched and replaced with **Repaired** or **Remanufactured** modules and the whole battery pack is re-tested. Modules dropping below the Automotive State-of-Health (SOH) standards are assessed and where applicable, sent to our 2nd Life **Reuse** partners for inclusion in non-automotive applications. Battery cells that cannot be reused are safely decommissioned and sent to our **Recycling** partners.



REDUCE WARRANTY COST | MINIMISE ENVIRONMENTAL IMPACT | GENERATE EXTERNAL REVENUE



The Service Centre identifies, grades and produces different grades of packs:

- » Grade A packs (Repair) for use in vehicle within original new spec
- » Grade B packs (Reman) for use in vehicle to a lower capacity spec
- » Grade C packs (Reuse) for use in alternative markets
- » Grade D packs (Recycle) made safe for material recycling partners



In-Market EV Battery Repair



We have designed our EV capability to be a global solution to avoid sometimes costly and difficult return logistics for failed packs.

Our technologies and processes are built into a **Mobile EV Battery Repair Centre** inside a shipping container for ultimate portability. Mobile EV Battery Repair Centres can be located to give global coverage at a local level, with fixed or mobile solutions available:



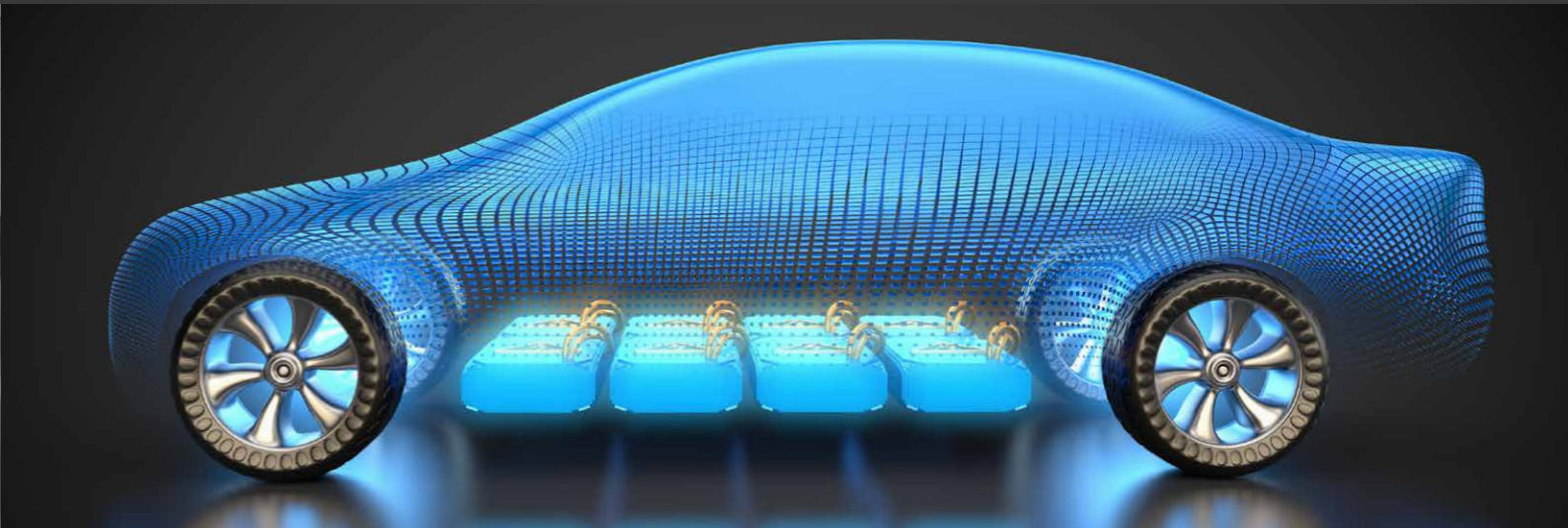
1. **In Super Dealerships** that specialise in EV battery repairs for each region
2. **On a trailer transported by HGV** and driven between dealerships

Each Mobile EV Battery Repair Centre has the capability to fully repair EV battery packs including:

- » Pack integrity safety check using our patented State of Health (SoH) test equipment
- » Fault identification & repair planning
- » Pack discharge and disassembly
- » Module replacement and pack re-assembly
- » Pack charge / discharge and SoH testing confirming the pack is ready for use and can be returned to the vehicle

All our Mobile EV Battery Repair Centres are designed and built in the UK.

EV Solutions for Your Application

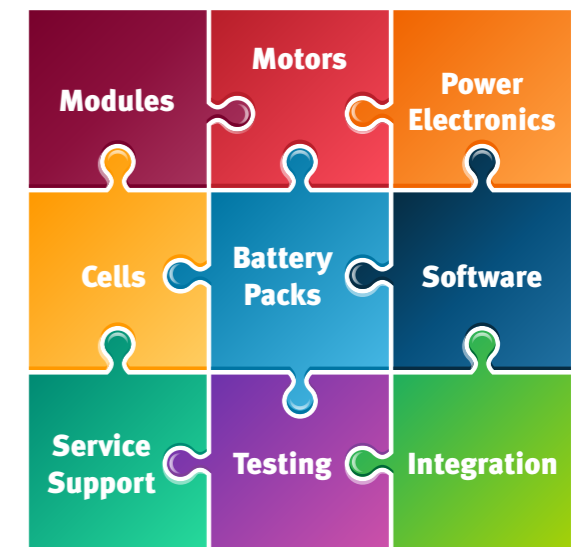


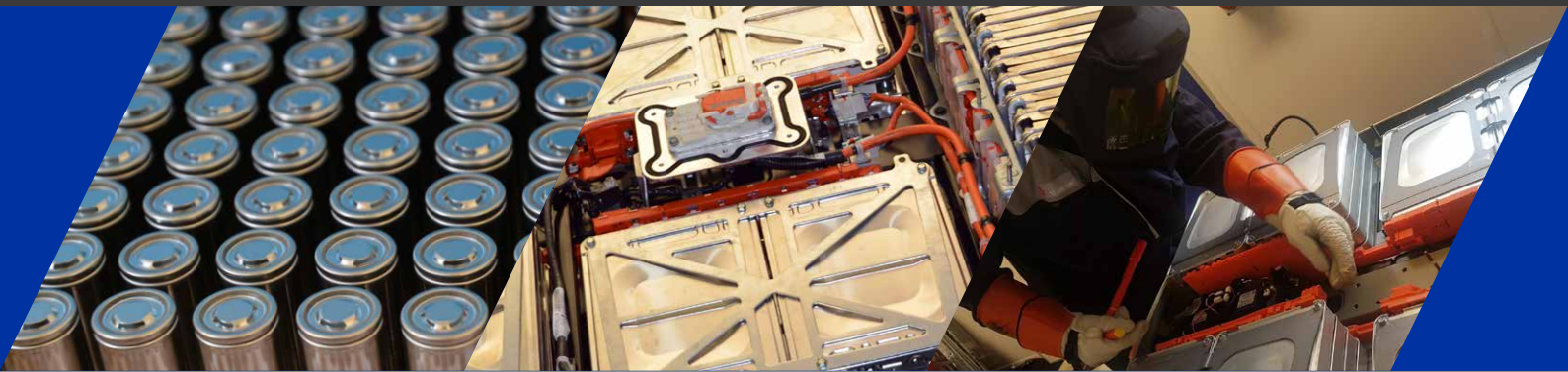
Autocraft EV Solutions is more than just EV battery repair and remanufacture. If you're a niche or low volume vehicle builder and require an electric solution for your range, we can assist with the design, manufacture and assembly of your electric propulsion system.

Firstly we identify the specification you require, coupled with any constraints you may have in your vehicle such as size, weight etc. Through our global supply network of battery manufacturers, we source the cells and design the modules to fit the chassis in the most compact and productive way.

We identify the correct battery chemistry for your application, whether it be high power or long, consistent range, to ensure the battery packs will meet the needs of the vehicle's end user. In doing this, we consider variables such as vehicle weight, application, running time and duty cycle.

Autocraft EV Solutions also manufactures a range of Power Electronics, to provide a full integration service:





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