RE: BUILD MANUFACTURING

OVERVIEW



BATTERY SOLUTIONS

US-Based Battery Manufacturing is a Competitive, High Quality, and Cost-Effective Reality

Re:Build Manufacturing provides product innovation, industrial automation, system-level production, and factory design and construction. We focus on the design and development of lithium-ion battery (LiB) modules and packs and battery management systems (BMS), as well as on building the factories that produce these products. Re:Build uses structural, thermal, and electrical modeling to develop packs that withstand impact, vibration, shock, pressure, and extreme temperature. We also validate these products utilizing rigorous third-party testing programs.

Our packs are constructed with cells from several leading LiB suppliers, ensuring supply chain flexibility. Our engagement with suppliers enables us to provide pack production at innovative companies that design battery-based products for personal, commercial, recreational, automotive, stationary energy-storage, and defense applications. Re:Build and these companies may jointly seek Department of Energy battery infrastructure funding to support the construction of factories for those products.

Prototype Development:

Re:Build's battery pack prototype assembly lab is a 2,000 sq. ft. facility, located at Re:Build DAPR's operations in Nashua, New Hampshire. Our prototype and process-development space supports the assembly and testing of high-quality LiB packs up to several kWh in size. We assemble 18650- and 21700-type cylindrical cells via programmable wirebonding and spot welding. Pouch and prismatic cell processing are in development. Re:Build's designs include all typical LiB cell chemistries, including lithium iron phosphate (LFP), nickel manganese cobalt (NMC), and lithium nickel cobalt aluminum oxides (NCA). Our operation can also simultaneously assemble 15 MWh/yr of high-mix battery packs and those with different cell and size requirements. These prototyping operations enable us to turn around custom lithium-ion battery pack prototypes in weeks, rather than months. We have a 16-channel pack tester with fully serialized data collection. The prototype work we conduct gives Re:Build valuable know-how on the design and layout of high-automation manufacturing lines, which are built to suit customers' pack requirements.

MARKETS SERVED:

- Electric Mobility
- Stationary Storage
- Aviation
- National Defense

LOCATION:

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MANUFACTURING

Re:Build Offers Comprehensive Solutions in BMS, Modules, and Packs

Re:Build's comprehensive approach to battery pack design, development, construction, use, and refurbishment is supported by reliable access to core system components and standard modules. We offer collaborative design, modeling, and analysis, and the assembly, qualification, and testing of prototypes and high-volume packs. We also offer factory design and build.



LEARN MORE ABOUT **OUR CAPABILITIES:**



We'll fit in where you need us or work with you across the full development process.

Key Differentiators:

Design & Model

- Power Profile
- Connectivity
- Thermal Management Advanced Structure
- Safety and Protection Thermal Analysis
- . Durability
- Data Collection
- Testing Program

- Assembly
- Prototype to High Volume Production
- AI-Driven Quality Control
- Line Automation
- Factory Design and Build

Management System

- Customizable Approach
- Configurable BMS Systems
- Current and Voltage Protection
- Data Logging
- State of Charge (SoC)
- State of Health (SoH)
- Rigorous Certification

Our packs are designed with refurbishment and reuse in mind, including the testing and reuse of recovered components, the replacement of degraded components, and the testing and secondary use of retired cells/modules for new applications, thus reducing the cost of cell replacement and offering an alternative to disposal and recycling.



