



WF Bifrost for Battery Manufacturing

A WireFlow Battery Solution

The WF Bifrost for Battery Manufacturing system is purpose-built for modern production lines where consistency, efficiency, and safety are essential.

It combines charging, configuration, and functional testing into one automated platform ensuring every battery leaving the line meets exact performance and safety criteria.

The WireFlow Bifrost systems are robust and equipped with a user-friendly interface, making them ideal for demanding production environments. Built for high-volume throughput, we deliver consistent, accurate, and repeatable results on every battery pack.



Figure 1 - WF Bifrost Battery Tester

With its modular architecture and intuitive operator interface, Bifrost brings laboratory-grade precision to industrial-scale operations. Each test is automatically configured, executed, and documented, minimizing operator input while maximizing reliability and throughput. The system executes a complete functional test protocol, verifying key battery functions beyond charging. This provides an extra layer of quality assurance, ensuring every battery leaving the factory meets the highest performance and reliability standards.

Integrated into your production line

Seamless communication with factory IT systems enhances efficiency and quality:

- Automatic programming and configuration per battery pack
- Full traceability of results and data logging
- Minimized human error and increased process reliability



Figure 2 - WF Bifrost for Battery Manufacturing

This integration ensures uniformity across the production line, saving time and reducing cost per unit.

Comprehensive production capabilities

The WF Bifrost system supports a wide range of end-of-line operations, including:

- Automatic identification and configuration of each battery via serial or machine number scan.
- CAN-based communication for validation of firmware, parameters, and communication integrity.

- Functional testing of key subsystems such as charging, load behaviour, and heaters.
- Charging to specified State of Charge (SOC) — typically for transport or pre-assembly readiness.
- Verification of safety and thermal performance, ensuring cell balance and temperature stability during charge.
- Automated reporting and traceability, with logged results linked to factory databases for full production documentation.

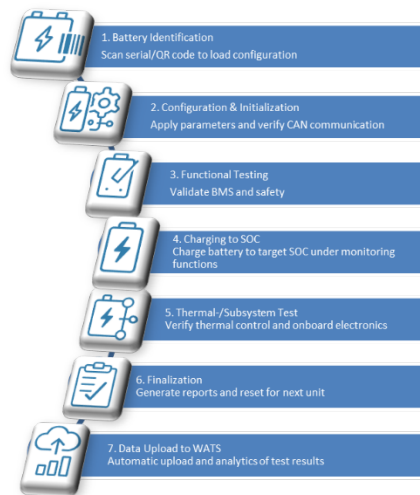


Figure 3 - Battery manufacturing test process

Integration with WATS for Test Data Management

Bifrost integrates seamlessly with WATS Test Data Management, enabling instant access to test and repair data across all production sites. Test results are automatically uploaded where engineers can visualize performance, yields, and failure trends in real time.

With customizable dashboards and AI-assisted analysis, WATS turns test data into actionable insights helping identify root causes faster, improve first-pass yield, and drive continuous process improvement. Full traceability ensures every battery can be tracked from initial configuration to final shipment, supporting quality assurance and compliance across global operations.

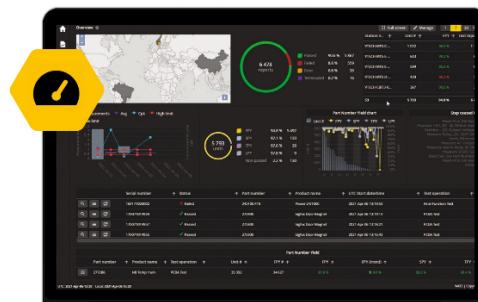


Figure 4 - WATS analytics platform