Module testing for Inlyte Energy

Case Study Overview

HORIBA MIRA provided module testing support for Inlyte Energy – a US company delivering breakthrough iron-sodium battery technology to enable safe, sustainable, and domestically produced long-duration energy storage.

Tests conducted in HORIBA MIRA's Battery Abuse Test Facility evaluated the modules performance under realistic cycling scenarios over a period of 30 days. During the 30 days the module was cycled 24/7 with the BMS data being fed directly back to Inlyte HQ.

Additionally, HORIBA MIRA conducted a sequence of cell level nail penetration and crush tests on the same product, providing a bespoke testing solution to achieve successful penetration of the cells.

Successes and Benefits

- Successfully validated innovative iron-sodium battery technology, achieving over 80% round-trip efficiency in cycle testing.
- Out of hours running allowed for the cycles to be completed around the clock, safely and efficiently.
- The safety and integrity of the cells has been proved in real world abuse scenarios, demonstrating it's ability to withstand crush and penetration without only minor temperature rises measured.
- Live data feed allowed the customer to monitor BMS performance throughout the testing period.

"Real energy solutions need to be rigorously tested at scale. HORIBA MIRA's 3rd party testing of our iron-sodium battery demonstrates readiness for the next frontier – field deployment."
- Antonio Baclig, CEO – Inlyte Energy