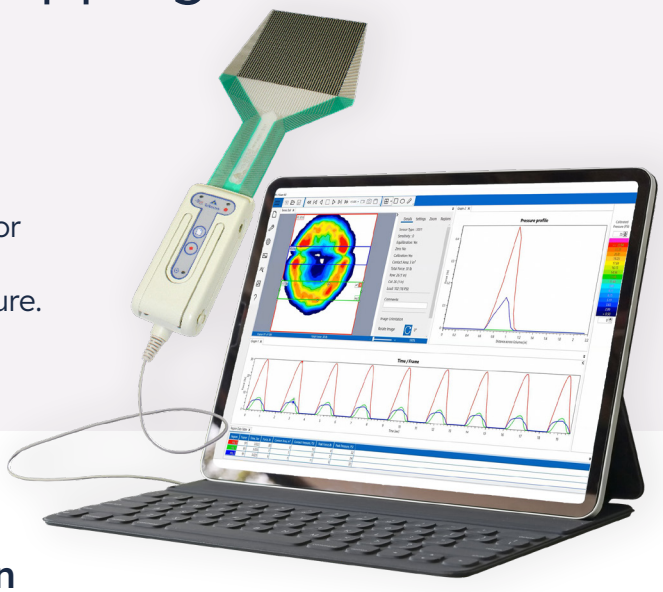
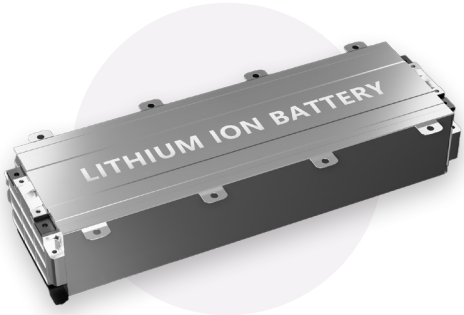
Tekscan™

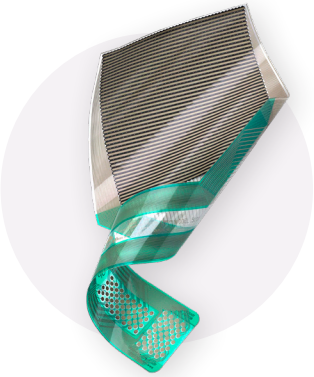
Maximize Battery Performance, Lifespan, and Safety with Pressure Mapping

I-Scan™ is a powerful tool that accurately measures and analyzes interface pressure between two surfaces, utilizing a thin and flexible sensor. The system is comprised of data acquisition electronics, sensors, and software. Measuring both force and pressure, the exceptionally thin tactile sensor provides minimal interference between the objects being measured, which allows you to obtain true interface pressure.



I-Scan™: The Industry Standard for Characterizing Battery Pressure Distribution





Thin, Flexible Sensor

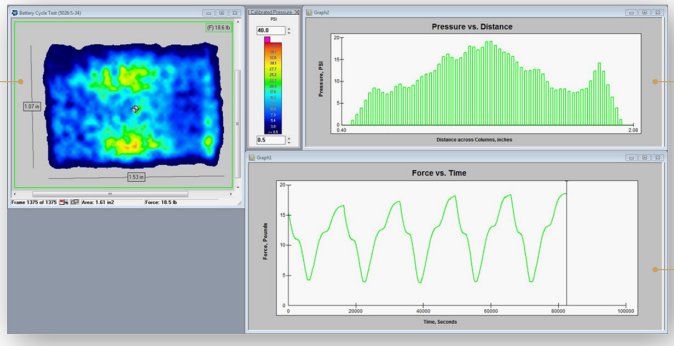
- Provides 360° view of battery (easily fits around cell & between layers)
- Measures forces from adjacent cells in stack
- Identifies regional high-pressure points as potential failure spots
- Available in a variety of form factors and pressure ranges. Can also be customized

Software & Electronics

- Collects data over time, allowing you to:
  - Run multiple charge & discharge profiles to compare battery performance
  - Correlate pressure-build to capacity & impedance
- Useful for Lithium-ion & Solid State
  - Identify deformation of layers
  - Pinpoint stress locations where cracks can propagate in solid electrolyte

Degree of Pressure Across the Sensing Area

Average Pressure Across the Sensing Area



Average Change of Pressure Over Time

How Industry Leaders Ensure Optimal Battery Performance with Pressure Mapping & Force Measurement

R&D

Study battery swell during long term cyclic charging/discharging

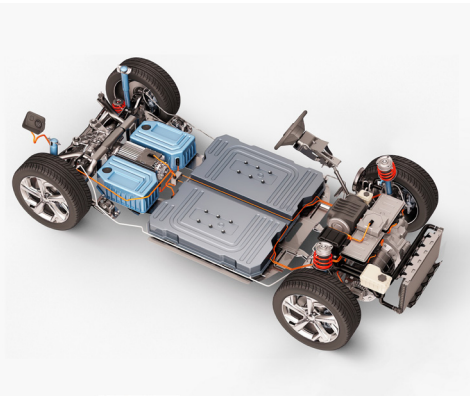
Evaluate housing durability

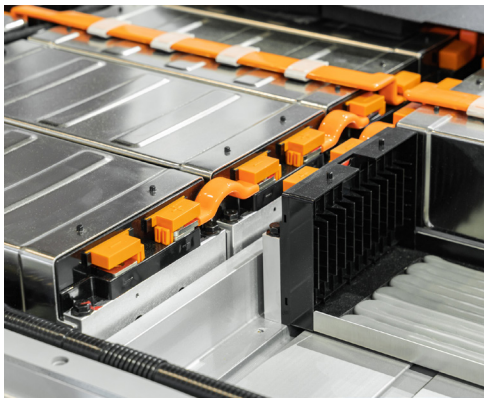
Manufacturing & Quality Control

Ensure proper battery stack assembly

Battery Management System Force Feedback

Small FlexiForce™ sensor(s) embedded into assembly can monitor for impedance/alert for pressure changes over time





proof of concept rendering for alerting user of excessive force within the battery housing

Call Today for a Demonstration!

Tekscan™

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Scan for More Information

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