

Inspection of Prismatic Lithium Ion Batteries for the Automotive Industry

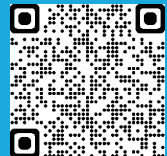
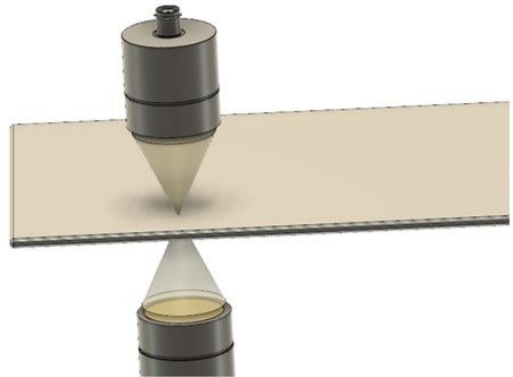
Ultran has performed non-contact ultrasonic analysis on large prismatic battery cells for the automotive industry.

The primary objective was to detect gas voids in the battery cells in between certain production process steps. The analysis conducted shows clear distinction between areas with gas voids and those without.

Ultran further developed the application to be used in high throughput inspection during manufacturing.

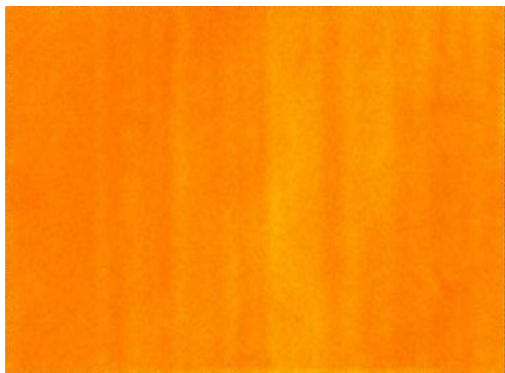
Variation in ultrasound transmissivity may be caused by:

- Distribution of electrolytes
- Charge level
- Gas voids

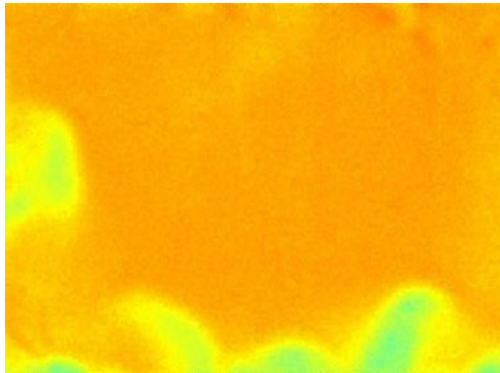


Prismatic Battery Cells for the Automotive Industry

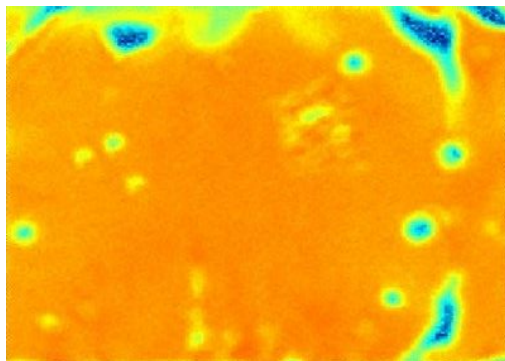
Functional Unit with Uniform Properties



Functional Unit with Some Variation in Electrolyte Distribution



Failed Unit with Gas Voids



Failed Unit with Extreme Gas Voids

