



Measurement Solutions,
Global Leader.

APPLICATION STORY

BATTERY PACK

INDUSTRY

- Automotive
- Medical
- E-Mobility
- Consumer Electronics
- Appliances
- Automation

Volume	120 L
Cycle Time	NA
Pressure	0.3 - 0.4 psi
Leak Rate	1.0 E-01/E-03 atm*cc/sec

MD490S DG - SMART CHARGE IV



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Challenges

Battery packs, especially those utilized in automotive vehicles, are pivotal in ensuring the smooth and efficient operation of electric and hybrid vehicles. Ensuring the absolute integrity of these battery packs is crucial, as any leak could potentially compromise the performance, safety, and lifespan of the battery. The challenge for manufacturers lies in conducting meticulous leak tests on these battery packs, using a method that not only accurately identifies leaks but also allows them to determine whether a unit with a leak can be repaired or if it needs to be replaced. Utilizing hydrogen gas for leak testing is a method that can pinpoint leaks with high precision, providing valuable data to manufacturers.

Solutions

In response to this, ATEQ has developed a specialized leak testing solution that utilizes hydrogen gas to perform accurate and reliable tests on battery pack units for automotive vehicles. The customer's request to focus on identifying leaks and determining the reparability of the unit is addressed by providing a detailed analysis through the leak test. Hydrogen gas, being the smallest and lightest molecule, provides a highly sensitive means of detecting leaks, even those that are not discernible through conventional methods. ATEQ's solution is designed to be both precise and efficient, ensuring that each battery pack is thoroughly tested, and the results are utilized to make informed decisions regarding the reparability of the units.

Benefits

Implementing ATEQ's hydrogen gas leak testing solution for battery packs brings forth a multitude of benefits for manufacturers. Firstly, it ensures the delivery of high-quality, reliable battery packs to the market, enhancing customer trust and satisfaction. Secondly, the precision of the hydrogen gas leak test allows manufacturers to make informed decisions regarding whether a unit can be repaired or needs to be replaced, optimizing resource utilization and minimizing waste. Lastly, the efficiency of the testing process ensures that it can be seamlessly integrated into the production line, ensuring that every unit is tested without compromising production timelines, thereby aligning with market demands and maintaining the manufacturer's reputation for quality and reliability.

