

LOCTITE ESB 5100

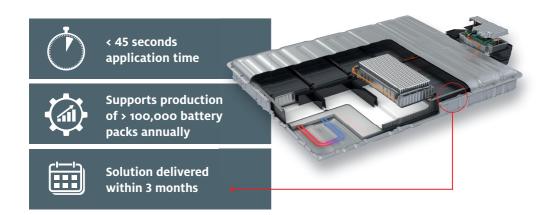
Secure and Serviceable Protection for EV Battery Systems

1 CUSTOMER CHALLENGES

- » Major automotive OEM required a material to seal lithium-ion battery pack lids to housings, protecting battery modules from environmental impact.
- » Material had to allow serviceability for easy battery repair in dedicated repair shops.
- Fast prototyping and validation process was critical.

2 RECOMMENDED TECHNOLOGY

- » Henkel developed a gasketing material, LOCTITE ESB 5100, allowing rapid production integration and fulfilling environmental testing criteria.
- » The hot-applied elastomer has unique tackiness, stays soft and is easily removable for battery serviceability.
- » The formulation is a silicone-free, corrosionresistant material with excellent adhesion to plastics and aluminum and has self-healing properties.





Europe // Marvin Romberg marvin.romberg@henkel.com // Phone +49 211 7979 594

APAC // Chunrong Hou (Jeffrey) jeffrey.hou@henkel.com // Phone +86 138 1811 8785

North America // Pradyumna Goli pradyumna.goli@henkel.com // Phone +1 951 288 1177





LOCTITE ESB 5100

Secure and Serviceable Protection for EV Battery Systems

3 MASS PRODUCTION PROCESS SET-UP

- >> Working in collaboration with the OEM and the dispensing equipment partner, the solution was delivered in less than three months and is in use for > 100,000 packs per annum.
- The material is automatically dispensed in a continuous 8-meter bead around the flange of the battery tray or lid within 45 seconds.
- » Material allows pre-application at Tier suppliers.

CUSTOMER BENEFITS

Elastomer technology allows battery packs to be reopened with low force Immediate handling after automated dispensing

Tight and reliable seal with excellent adhesion to aluminum



TO FIND OUT MORE ON HOW WE CAN HELP YOU DRIVE E-MOBILITY, VISIT: www.henkel-adhesives.com/emobility



The information provided herein, especially recommendations for the usage and the application of our products, is based upon our knowledge and experience. Due to different materials used as well as to varying working conditions beyond our control we strictly recommend to carry out intensive trials to test the suitability of our products with regard to the required processes and applications. We do not accept any liability with regard to the above information or with regard to any verbal recommendation, except for cases where we are liable of gross negligence or false intention. The information is protected by copyright. In particular, any reproductions, stantations, storage and processing in other media, including storage or processing by electronic means, enjoy copyright protection. Any exploitation in whole or in part thereof shall require the prior written consent of Henkel AG & Co. KGaA, 1820 and 1820 an