

LOCTITE PE 1000LV

E-Motor Stator Ring Potting Protection and Streamlined Production

1 CUSTOMER CHALLENGES

- » A leading automotive supplier required a reliable potting solution for the stator of its new hybrid electric motor.
- The material had to protect the ring's internal coils from physical damage, electrical shorts, moisture, automotive fluids and thermal shock.
- The application process had to be optimized by removing the need for vacuum de-airing before dispensing and curing.

2 RECOMMENDED TECHNOLOGY

- » Henkel developed a new potting formulation, LOCTITE PE 1000LV, which passed thermal shock testing without any cracks, exhibits excellent resistance to automatic transmission fluids and provides robust vibration endurance.
- The rheology of the potting material strikes the right balance between self-levelling and thixotropic behavior.
- » As a result, it provides optimized filling of all spaces with deep penetration of the coils without any voids.



Enables time saving of 40 minutes to one hour per shift



Supports production of > 100,000 e-drive systems per year





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3 MASS PRODUCTION PROCESS SET-UP

- » Henkel formulated Loctite PE 1000LV with significantly less bubbles, eliminating the need for vacuum de-airing before dispensing.
- » This new optimized application process allows to save approximately 40 minutes to one hour per shift.
- The material allowed the Tier 1 supplier to increase the yield and successfully produce > 100,000 electric motors annually.

CUSTOMER BENEFITS

Reliable potting material performance

Complete coverage of the coils and filling of all gaps



Process optimization by removing need for vacuum de-airing

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 westrictly 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, translations, storage and processing in other media, including storage or processing by electronic means, enjoy copyright protection. Any exploitation in every exploitation in the professing the tentor consent of Henkel AG & Co. KGaA, AS. Except as otherwise noted, all marks used in this document are trademarks and/or registered trademarks of Henkel and/or its affiliates in the US, Germany, and elsewhere. & Penkel AG & Co. KGaA, AS/20200