



Bonding solutions for electric mobility

The electric vehicle industry has come a long way but the architecture of an EV powertrain still produces a number of issues around efficient thermal management, integrating electric systems, miniaturisation, total vehicle weight reduction, and ensuring safe and reliable vehicle performance, among others. Advanced adhesives can offer effective solutions to many these challenges, according to Lohmann, the Germany-based leader in adhesive tape technology. Beatrice König-Platt, Head of Transportation at Lohmann and Nicole Ehrmann, Senior Market Manager Transportation, highlight that in the field of functional tapes in particular, the company has been using its inventiveness to introduce innovations that play a considerable role in developments in the electromobility sector.

Lohmann has over 1,800 employees worldwide, 29 international sites, and exclusive sales partners in

over 50 countries all around the world. The company serves a variety of industry verticals, and is particularly successful in the automotive industry. "We are headquartered in Germany, close to many of the world's leading OEMs and suppliers," Ms. König-Platt points out. She points out that the automotive industry sets standards and innovations that spread to other industrial markets later on. "As such, our partnership with automotive customers is a driver for new developments and applications – in our case for bonding solutions." Lohmann has a long history of innovation, and operates its own Technology-Center where their "Bonding Engineers" can develop the ideas of tomorrow. On that note, Ms. Ehrmann emphasises that their product portfolio not only includes functional tapes, but also in-house developed adhesives, highly sophisticated die cuts and assembly



solutions. "Bonding solutions, especially in automotive electronics, serve not only for bonding but also for thermal or electrical management or other functions, such as sealing, damping, shielding, and light shielding."

The company sees electromobility as a growing market for their bonding solutions. In many areas, electric vehicles have unique requirements when compared to conventional cars. Lohmann's AS (antistatic) range, for example, offers electric display protection against dust, scratches and electrostatic discharge. Their DuploCOLL® AS product helps to protect the function of lenses, TFT and LCD modules as well as optically bonded touch displays. Lohmann's "Bonding Engineers" have also found diverse thermal conductive solutions for the application fields of LED, power transistors, heat sinks or PCB heating parts – only to name a few. In addition, as manufacturers in the automotive and electronics sector are increasingly demanding silicone-free bonding solutions

for parts and components, Lohmann has developed the DuploCOLL® HCR range. The adhesive solutions are silicone-free, highly chemical- and temperature-resistant and resistant to all kinds of environmental influences. The double-sided PE foam adhesive tape DuploCOLL® G, which is equipped with a customised activator, is particularly suitable for the assembly and permanent fixation of mounting parts on large glass surfaces, which are often used in the construction of electric vehicles.

The developments in the field of electromobility and digitisation with the integration of stationary and portable modules continually require new, revolutionary bonding solutions. "Lohmann sees a far-reaching potential for electromobility in the future and wants to position itself clearly in this sector," says Ms. König-Platt.