

Application Case: Bonding add-on parts

Bonding add-on parts for the automobile exterior – anything but superficial.

The search for our customers' perfect bonding solution begins at the workstation in the Bonding Arena®. In doing so, it is not only the surface to be bonded that is important but the tape's task within the respective application, too: Does the bond have to withstand extreme heat or cold, does it need to fulfill sealing or electrically conducting functions or dampen sounds?

During customer meetings, our Bonding Engineers ask these questions precisely – and are able to make an initial selection of eligible adhesive tapes on that basis as well as test them on the substrate surface provided.

Our partners in the automotive industry always bring new challenges into the Bonding Arena®. So-called "new paints", complex paint systems, are not only meant to be a visually pleasing part of the body design but to allow for protection against external influences. The role of our adhesive tapes: permanent bonding of plastic add-on parts like side trims, roof trims, sill board covers, kick plates, emblems or letterings.

The specific requirements for the bonding solution quickly become clear during the testing at the workstation.

For the demanding paints with low surface energy, a special high performance adhesive needs to be developed. It shall allow for an excellent final adhesion and shear strength while being able to flexibly and elastically react to different component tolerances (adjustment) and thermal expansion (compensation). To this end, the Bonding Engineers designed a compressible, permanently elastic foam carrier, which is sealing as well. The



advantage of this special combination of adhesive and foam carrier: an optimal surface wetting. The dimensionally stable construction allows for an easy and quick processing within the customer process and the vehicle design is also taken into account: The adhesive tape's black color makes it almost invisible in the application.

The result: a bonding solution that meets all standards and ageing tests of the automotive industry and guarantees a constant performance. Along the customers' wishes, the Bonding Engineers developed double-sided PE foam adhesive tapes for the DuploCOLL® 911XX NP ("new paint") range – for bonding on almost all common paint systems.

This sounds familiar to you? In the last issue of *Bonded*, we introduced the DuploCOLL® 911XX NP range in detail. Via https://www.lohmann-tapes.com/en/site__1330/ you can learn more about bonding solutions for new paints for the automotive industry. Comprehensive data sheets are available for download.

Product recommendations:

- DuploCOLL®91106 NP
- DuploCOLL®91108 NP
- DuploCOLL®91111 NP
- DuploCOLL®91115 NP