

SIKA AT WORK

AUTOMATION IN CARAVAN BY SikaForce® Powerflex

In line with innovative and lightweight design trends, German Caravan producer Knaus Tabbert invested in their new FibreFrame concept, shifting away from conventional motorhome building methods to a self-supported structure, which resembles a space frame grid. SikaForce® Powerflex enabled not only the durable, structural, but still flexible construction, it also allowed the automation of the bonding process.



KNAUS's FibreFrame allows unique flexibility in layout and room design of caravans. The high strength fiber reinforced foam frame results in a self-supporting structure, enabling ultra-lightweight design with increased crash performance. In combination with SikaForce®, the efficiency of the assembly process was increased and automated, resulting in higher production output.

Sika provided a groundbreaking solution to meet the needs of our customer: The awarded SikaForce® Powerflex technology, a unique combination of high stiffness of structural adhesives with the flexibility of elastic ones, featured with a snap cure effect, which shortens fixture time while extending working time. This blend allows the necessary strength for high mechanics bonds and the elasticity which the bonding joint faces at low temperatures. Superior performance and durability are achieved through the whole service temperature range.

Knaus Tabbert is using SikaForce® products since March 2018 for the assembly of the sandwich panels and the frame components of the KNAUS Deseo and the KNAUS Travelino models. Here they tell us more about their experience with Sika's solution.

After the employment of SikaForce® Technology, what has changed in your process?

Sika's technology enables a standardized, accelerated bonding process for the frame components and serves as the main pillar for the automation of the bonding process.

What was the experience of Knaus Tabbert with the SikaForce® Powerflex?

SikaForce® fulfilled our requirements, and we experienced the following advantages:

- From a material perspective, the increased flexibility in cold conditions combined with high remaining strength at higher service temperature fit very well with our requirements.
- From a process view, the snap cure effect of the technology maintains low viscosity until curing and allows precise definition of curing and short fixation time under constant temperature conditions.



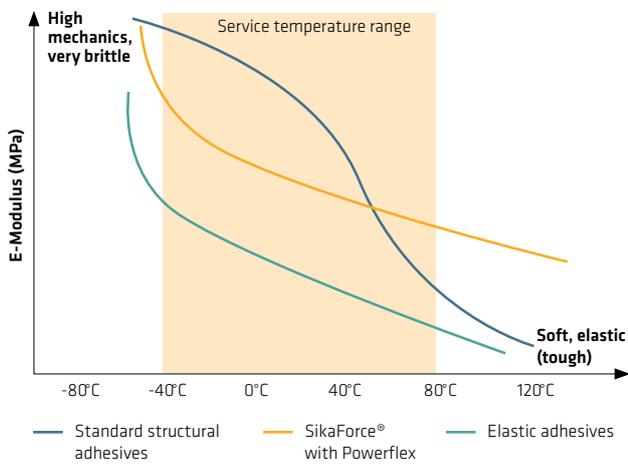
**WATCH VIDEO
ABOUT
FibreFrame®**



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ABOUT SikaForce® Powerflex

The Powerflex technology provides the highest levels of strength combined with lasting elasticity even at low temperatures. With the unique performance characteristics, SikaForce® Powerflex adhesives outperform the state-of-the-art 2C structural adhesives designed to bond lightweight materials. They are designed to create long-lasting bonds throughout the service life of bonded components, no matter what climate conditions they face. The Powerflex Technology represents a new generation of SikaForce® structural adhesives making them the ideal solution for new design concepts resulting in highly structural lightweight components.



ABOUT KNAUS TABBERT

Knaus Tabbert is one of the three leading manufacturers of motorhomes, caravans and camper vans in Europe. Our company stands for first-class quality, innovations and many years of experience. Our motorhomes, caravans and camper vans from our brands KNAUS, TABBERT, WEINSBERG, T@B and MORELO offer recreational vehicles for every taste and in every price category. Those interested can easily try this form of travel through the rental service RENT AND TRAVEL.

Thanks to its brand diversity, we have the right offer for every customer, ranging from compact entry-level models to the absolute luxury class; either for hire or to purchase.

ABOUT SIKA

Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing, and protecting in the building sector and motor vehicle industry. Sika has subsidiaries in 100 countries around the world and manufactures in over 300 factories. Sika employs more than 25,000 people and generated sales of CHF 8.1 billion in fiscal 2019. At the end of 2019 Sika won the Swiss Technology Award for a groundbreaking new adhesive technology.

LEGAL NOTE

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the products suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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