

STRUCTURAL BONDING BEYOND THE EXPECTED BATTERY ASSEMBLY BONDING SOLUTIONS

BUILDING TRUST



SIKA STRUCTURAL BONDING SOLUTIONS

IMPROVED ASSEMBLY PROCESS WITH SIKA BONDING SOLUTIONS

As electric vehicle design evolves, so to does the variety of materials used in the construction of electric power trains. Thanks to deep experience and knowledge from the automotive industry and an extensive range of products, Sika helps manufacturers successfully manage these changing material demands.

THE PERFECT SOLUTIONS WITH SIKA:

Sika offers the broadest range of products in the industry and continually develops new bonding solutions that overcome challenges such as adhesion to unrelated metals, plastics and composites while offering heat and glycol resistance. These include one-component, two-component and boosted PUR, silicone, STP, MMA, epoxy, hybrids, hot-melts, and PSA technologies. The products offer flexibility in the manufacturing process, the potential for increasing throughput, as well as industry-leading performance.

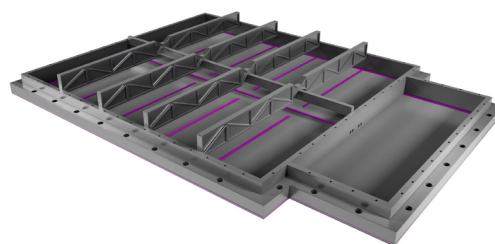
With over 100 years of experience, Sika offers to their customer a global production footprint which enables to create reliable supply chains and deliver high quality adhesives all over the world. Further, Sika is also able to support their customers locally with technical knowledge collected and refined during the years.

“SIKA’S RESPONSE TO THE NEED OF TECHNOLOGIES FOR SEALING AND BONDING IN THE NEW ENERGY VEHICLES DRAWS ON OVER 100 YEARS OF EXPERIENCE AND INNOVATION, RESULTING IN OUR VAST PRODUCT RANGE SERVING THE GLOBAL MARKETS.”

Kai Paschkowski, Global Product Manager E-Mobility



Structural bonding of side walls to cell



Structural bonding of the battery tray

Product Family	Structural Application		Key Benefit
	Technology	Typical Bonding of	
SikaForce®	2C PU	Tray	Curing-by-Design and Powerflex technology
SikaPower®	2C EP	Tray	Broad adhesion range and crash resistant
SikaFast®	2C Acrylate	Tray	Broad adhesion range and very fast curing
SikaForce®	2C PU	Module	High strength and elasticity
SikaPower®	2C EP	Module	High strength and self-extinguish

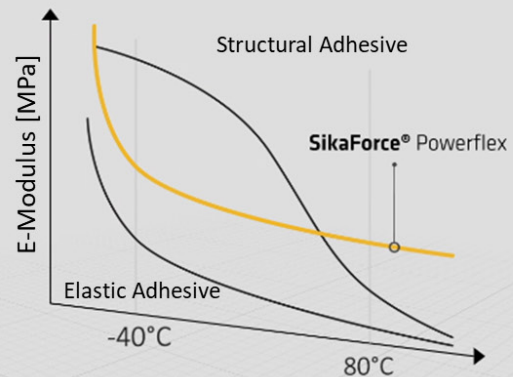
INNOVATION IN STRUCTURAL BONDING

ENHANCE MANUFACTURING PROCESSES AND IMPROVE MECHANICAL STABILITY

The new SikaForce® Powerflex makes it possible to combine the advantages of both structural and elastic adhesives to optimally meet the requirements for lightweight designs. Powerflex technology provides the highest levels of structural properties combined with long lasting elasticity in all climatic conditions. In addition, the Curing-by-Design technology allows adjustable pot life followed by immediate curing, resulting in drastic reductions in production cycle time.

SikaForce® Powerflex

- » **Combines** high strength of structural – with flexibility of elastic adhesives
- » Very **stable** mechanical strength throughout service temperature

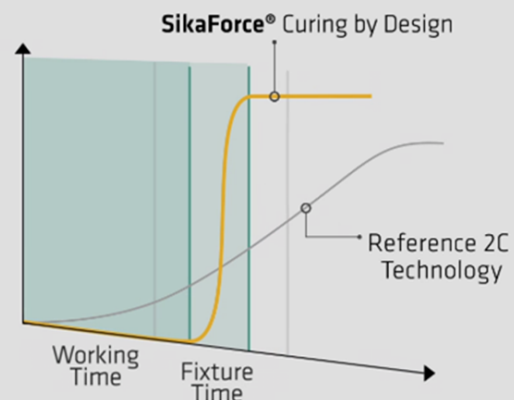


Powerflex technology explained

In addition, the Curing-by-Design technology allows adjustable pot life followed by immediate curing, resulting in drastic reductions in production cycle time.

SikaForce® Curing by Design

- » Unmatched **snap cure effect** to reduce fixture times
- » **Variability** in working and **open times** (short - long)
- » Unique **intellectual property** of Sika

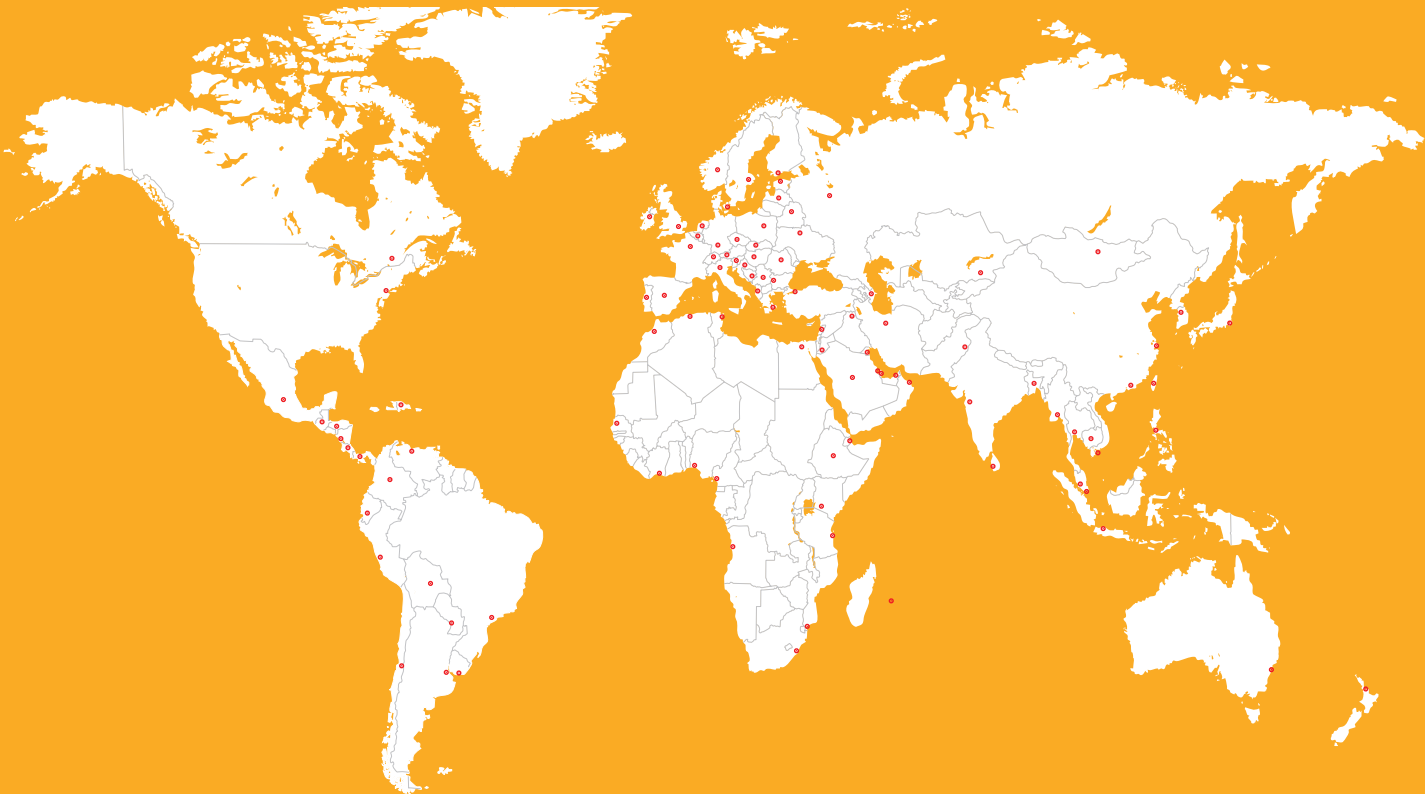


Curing-by-Design technology explained

SIKA - THE PARTNER OF CHOICE:

As design moves forward the introduction of new and innovative materials is a by product of development in battery design. This demands that engineers who design batteries widen their scope for new joining methods. With increasing regulations on safety and crash integrity, Sika structural bonding solutions are the ideal option for increasing battery safety along with optimizing manufacturing processes reducing cost in production and placing less demand on service and maintenance.

GLOBAL REACH BUT LOCAL PARTNERSHIP



FOR MORE INFORMATION:



automotive.sika.com

Our most current General Sales Conditions shall apply.
Please consult the Data Sheet prior to any use and processing.



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