



BASF's New Creation Centers Focus on Collaboration

One early result is the VisionVenture 'camper van of the future'

By Robert Grace

BASF SE's Performance Materials Division restructured and rebranded its product design and development efforts under what it now calls Creation Centers. The materials and chemicals giant in 2019 opened new Creation Centers in China, Japan, India, and at its headquarters in Ludwigshafen, Germany. It plans to open another such facility in Wyandotte, Mich.



BASF's new Creation Center atop an old air-raid bunker on its campus in Ludwigshafen, Germany. The so-called "innovation factory" is designed to stimulate collaboration. Courtesy of BASF

The company has also embedded its established designfabrik® facilities in the new centers. Designfabrik was created to help designers develop new products together with customers on the basis of material samples.

“For customers,” notes Guiscard Glück, the company’s vice president for new markets and products, “the Creation Center is a kind of app store equipped with our expertise. It is not a showroom, but offers open and creative ways of working together.”

Linking Materials and Digitalization

BASF built its new German innovation factory on the roof of an old air-raid shelter, as a cuboid structure with an area of 1,000 square meters on two floors. Its curtain wall consists of organic shapes and features interesting visual interplay between light and shadow. The façade is said to reflect the concept of networking and the world of plastic materials.

The core of the idea, the firm says, is to link the real world of materials with the latest possibilities of digitalization. To that end, BASF is leveraging its own simulation technology, called Ultrasim®, to help spur the virtual development of real solutions. The company claims that “the combination of computer-aided methods with the latest visualization technologies and 3D-manufactured sample components paves the way for a new dimension of cooperation.”

BASF, whose Performance Materials division reported global sales in 2018 of €7.65 billion, says its new Creation Centers (www.creation-center.basf.com)—in Shanghai, Yokohama, and Mumbai, in addition to Ludwigshafen—are equipped with world-class workshop facilities and interactive material showcases, giving customers a “hands-on” opportunity to explore materials, use interactive digital tools, and participate in ideation and material consultancy workshops.

Customers will also have access to trend reports, material demonstrations, and design events. Working with BASF experts, they can collaborate from design development to advanced simulations through computer-aided engineering through to advanced prototyping—all in one place.

Collaboration in Action

One of the most significant results of the Creation Center’s customer collaboration commanded the spotlight on BASF’s stand at last fall’s K 2019 trade fair in Dusseldorf, Germany. The company showcased a concept vehicle dubbed the VisionVenture—a joint project between BASF and Hymer GmbH & Co. KG (www.hymer.com/en), a German maker of motorhomes and caravans.

BASF calls the vehicle “a near-production glimpse into



Last May, BASF announced it was opening three Creation Centers in Asia, including this one in Shanghai. The others are in Japan and India. Courtesy of BASF

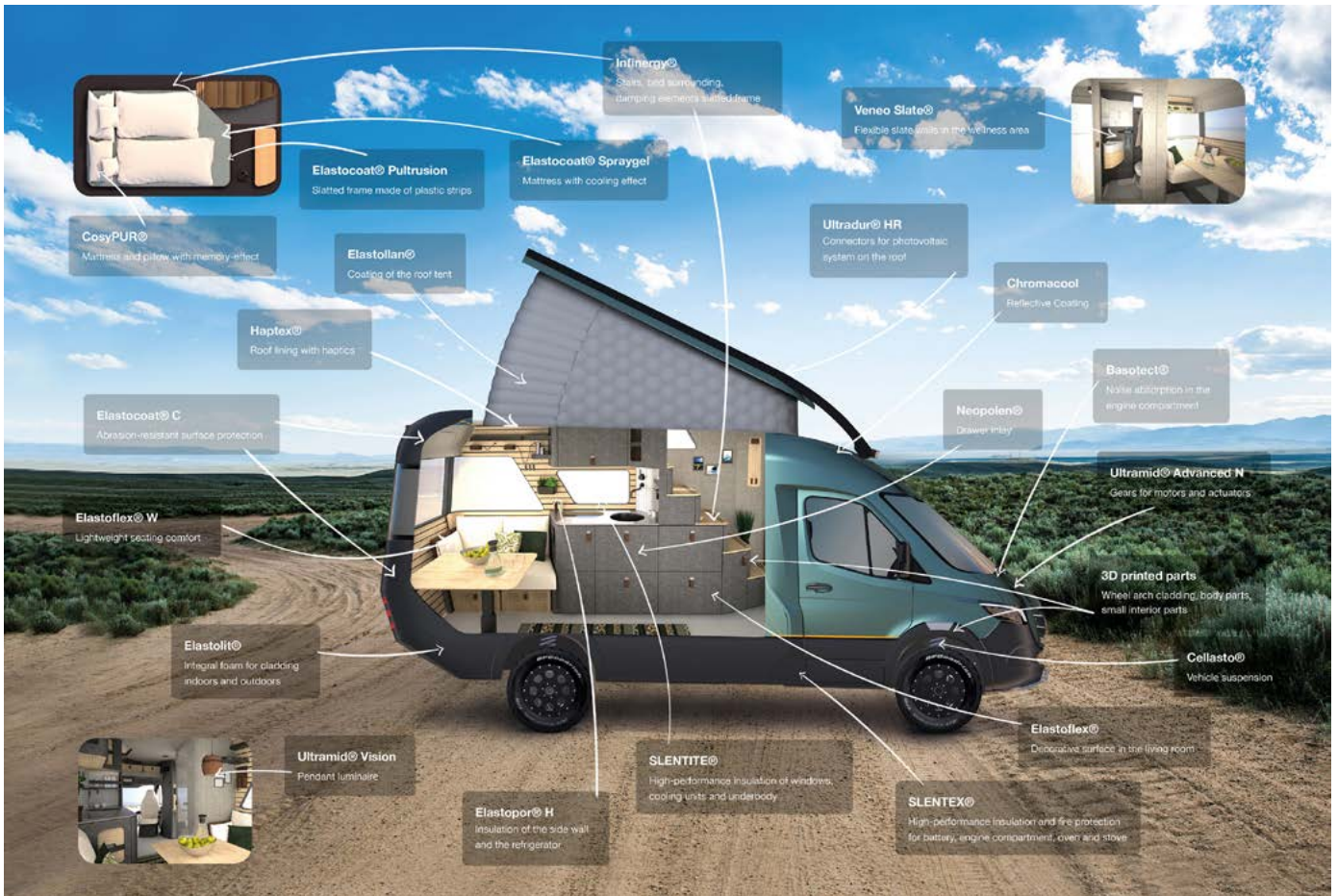
the future of van life,” while proclaiming that a new class of van has been created “that blazes a trail in lightweight construction, independence, travel experience and design.” The camper van features more than 20 of BASF’s plastics and a new painting technology, and just about every modern convenience one can imagine.

“The VisionVenture offers an outlook of what a Hymer camper van could look like in 2025. As with all concept cars,” notes Glück, “not all innovations presented in the VisionVenture will make their way into series production simultaneously, but gradually and some could be realized depending on the specific model and market demands. It’s a technology demonstrator, not a 1:1 blueprint for a commercial model.”

Martin Jung, head of Performance Materials at BASF, adds: “Our products give the designers unprecedented new options and functionalities for the VisionVenture.”



Guiscard Glück, BASF’s vice president for new markets and products, says “the Creation Center is a kind of app store equipped with our expertise.” Courtesy of BASF



Dubbed a “million-dollar van” by one reviewer, the Hymer VisionVenture camper is a concept vehicle that aims to demonstrate the features a luxury camper van could have in 2025. As illustrated here, the camper van features more than 20 of BASF’s plastics and a new painting technology, along with just about every modern convenience one can imagine. All camper photos courtesy of Hymer GmbH & Co. KG

A Luxury ‘Tiny Home’ on Wheels

The vehicle—basically a luxurious, tiny mobile home built on a Mercedes-Benz Sprinter chassis—aims to show what travel could be like by 2025, using modern technology to increase its self-sufficiency. One reviewer called it “a Mercedes camper van that looks like a live-in lunar rover but aspires to live like a townhome.”

BASF says the VisionVenture “sets new benchmarks when it comes to design and offers new solutions for energy management, thermal insulation and electrical components, a tailored package of measures for preventing noises and vibrations.” Additionally, the vehicle includes more than 100 3D-printed components, including such robust parts as the wheel-arch panel.

The company outlined the following as just some of the vehicle’s innovations:

- » A self-inflating, pop-top roof—claimed to be a world first—is one of the van’s most striking features. It inflates in less than 60 seconds, creating more living space. It has a 7 centimeter-thick honeycomb wall for insulation, can be inflated with cooled or heated air, and is photovoltaic like a solar panel. BASF’s Elastollan® coating on the roof creates an outer wall that is resistant to water as well as wind while moderating the internal living temperature.
- » The temperature-regulating effect of BASF’s Elastocooat® C Spray Gel helps to keep cushions and mattresses in the VisionVenture cool on even on the hottest days.

- » Haptex®, BASF’s polyurethane system for imitation leather, spans the entire interior, offering a soft feel while also being available in a range of colors and textures. The company notes it also is easy to clean and does not contain organic solvents.
- » By combining plastics with natural materials such as hemp and slate to produce cupboard doors and kitchen fronts, the concept van eliminates the need for heavy alternatives such as wood or chipboard.
- » For functional reasons, camper-vans are usually cream or white to avoid overheating during the summer. BASF’s Chromacool temperature-management paint technology has enabled the VisionVenture to have a gray-green exterior color. Available in a wide variety of colors, Chromacool reflects the sun’s infrared light, thus reducing heat build-up in the vehicle body. This passive temperature management means that heating of the vehicle’s surface is reduced by up to 68°F, with the inside temperature dropping by as much as 39°F. This translates into less energy needed for air conditioning, which helps to reduce fuel consumption, or to increase the range of electric vehicles.
- » BASF’s Infinergy®, primarily associated with the Energy Boost running shoe from adidas, appears in jet black for the first time in the VisionVenture. In the steps and the bed frame, it gives pressure point relief together with pleasing aesthetics. As a connection module, it holds the slats in the slatted base together, resulting in an individually adjustable mattress base on account of its high material resilience.
- » BASF and Hymer also developed a customized NVH (noise, vibration, harshness) package for the VisionVenture to reduce vibrations and block noise in the interior, drive or chassis.
- » BASF Veneo Slate®, a pliable surfacing material with razor-thin, natural-stone facing, enhances the look and feel of the walls in what they call the “wellness area.”



Many of the camper’s living areas are multifunctional, including a wet/dry bathroom and a living room that can double as an office. (top-left) Hymer applied BASF’s Veneo Slate, a pliable surfacing material with razor-thin, natural-stone facing, to the camper’s bathroom walls. (top-right) Using many “tiny home” concepts, the van offers storage underneath the LED-illuminated staircase. (bottom-left) The vehicle includes more than 100 3D-printed components, including this wheel-arch cladding. (bottom-right)



(From left to right): Hymer President Christian Bauer consults with BASF product designer Anne Lena Ebmeyer, Hymer's head of project management Dominik Hepe, and BASF's Guiscard Glück during the material selection process. Courtesy of BASF

Hymer President Christian Bauer says the partners used many “tiny home” concepts to allow the compact Sprinter to feel more spacious. For example, the LED-illuminated staircase which leads to the roof, doubles as a storage unit, and the bathroom sink can be tucked away to make room for the shower. Other features are multipurpose, such as a lamp that serves as a ceiling light, patio light, and interior light pendant. Also, the companies designed the wall covering as a “rail system” that allows for storage or decoration hanging.

“A major source of inspiration for this project was the camper community, who have given us new impetus with their creative ideas and DIY conversions,” says Bauer.

The camper van’s interior includes a private patio with a pull-out electric barbecue grill with food-prep area, a kitchen, a bedroom, a wet/dry bathroom with a rain shower, and a living room that can double as an office space.

While one reviewer described the vehicle as a “million-dollar van,” a BASF spokesperson says. “We absolutely

appreciate the comment; it means that customers have perceived the VisionVenture as a true premium model. But of course,” she adds, “the price for a model which includes the VisionVenture’s special features in 2025 would need to be a competitive one.”

ABOUT THE AUTHOR

Robert Grace is a writer, editor and marketing communications professional who has been active in B2B journalism since 1980. He was founding editor of and worked for 25 years at *Plastics News*, serving as editorial director, associate publisher and conference director. He is now both editor of SPE’s *Journal of Blow Molding* and a regular contributor to various outlets. A long-time member of the Industrial Designers Society of America, he runs his own firm, RC Grace LLC, in Daytona Beach, Fla., and can be contacted at bob@rcgrace.com.





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