

News Release

BASF, Toyota and US Farathane receive the SPE Automotive Innovation Grand Award for the 2024 Toyota Tacoma TRD Pro IsoDynamic Seat

WYANDOTTE, MI, November 14, 2024 – [BASF](#), [Toyota](#) and [US Farathane](#) have received the prestigious Society of Plastic Engineers (SPE) Automotive Innovation Grand Award for the most innovative product in all competition categories, as well as the enabling technology category, for the IsoDynamic resin seat frame design in the 2024 Toyota Tacoma™ TRD Pro model. By utilizing structural resin inner frames, Toyota was able to incorporate many design features to avoid adding up to 20 extra components. This complexity reduction by using resin potentially reduced both mass and cost. The result is the world's first automotive seat with lateral, vertical and horizontal movement, which isolates the occupant in the vehicle and keeps them firmly planted in the seat.

“The IsoDynamic Performance Seat utilizes lateral, vertical and horizontal dynamic motions with adjustable dampers for the driver and passengers, which improves vehicle stability for driver maneuverability and occupant experience,” said Brandon Vick, Senior Engineer, Body Design of Seats, Toyota. “BASF and US Farathane collaboration helps us achieve many firsts with this unique seat innovation.”

The injection molded seat structure by US Farathane Corporation utilizes a combination of BASF's Ultramid® impact-modified polyamide grades. The optimization of the seatback and cushion structural design by BASF's Ultrasim®

Computer-aided engineering (CAE) software prototypes the seat design to meet and exceed all safety and ride and handling requirements.

“We were able to reduce an all-steel assembly that originally included more than seventeen steel components into one molded part,” said Dan Fleming, Director of Advanced Engineering and Project Leader, US Farathane Corporation.

“At BASF, we continue to push the boundaries of innovation,” said Kipp Grumm, Technology Leader Thermoplastic Composites, Performance Materials, BASF Corporation. “Our collaboration with Toyota and US Farathane on the IsoDynamic Performance Seat is a prime example of this. The unique design of the seat frame sets a new standard in off-road vehicles and paves the way for future advancements in the industry.”

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Tacoma is a trademark of Toyota

About BASF

BASF Corporation, headquartered in Florham Park, New Jersey, is the North American affiliate of BASF SE, Ludwigshafen, Germany. BASF has approximately 16,000 employees in North America and had sales of \$20.5 billion in 2023. For more information about BASF’s North American operations, visit www.basf.com/us.

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. Around 112,000 employees in the BASF Group contribute to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio comprises six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of €68.9 billion in 2023. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the United States. Further information at www.basf.com.