

# News Release

## **BASF, Toyota and US Farathane win Altair Enlighten Award for Resin Seat Design on 2024 Toyota Tacoma TRD Pro**

WYANDOTTE, MI, August 1, 2023 – [BASF](#), [Toyota](#) and [US Farathane](#) have won the prestigious Altair Enlighten Award in the category of enabling technology for the resin seat frame design in the 2024 Toyota Tacoma™ TRD Pro model. Adopting this innovation in the IsoDynamic Performance Seats reduces the need for multi-piece steel components, resulting in an estimated cost savings of 20% and a weight savings of 30%, while passing all front-row seat requirements.

“To ensure passengers experience a good ride and smooth handling in our off-road vehicles, the IsoDynamic Performance Seat utilizes lateral, vertical and horizontal dynamic motions with adjustable dampers for the driver and passengers,” said Brandon Vick, Senior Engineer, Body Design of Seats, Toyota. “BASF and US Farathane are great partners who helped us achieve many firsts with this unique seat innovation.”

This seat structure, injection molded by US Farathane Corporation, uses a combination of BASF’s Ultramid® impact-modified polyamide grades. Using BASF’s Ultrasim® CAE program, the seatback and cushion structural design optimization creates a suspension system that ensures lateral rigidity in resin frames while improving the occupant’s ride.

“Through this close collaboration, we were able to reduce an all-steel assembly that

included more than seventeen steel components into one molded part,” said Dan Fleming, Director of Advanced Engineering and Project Leader, US Farathane Corporation.

Innovation throughout the process has massive potential to spread to other applications. Close collaboration and customer-led innovative engineering can bring many firsts.

“At BASF, we work very closely with our customers and their customers to deliver lightweight, cost-effective solutions with integrated functionality,” said Kipp Grumm, Senior Technical Development Engineer, Performance Materials, BASF Corporation.

“The unique design of the injection molded resin seat frame in the IsoDynamic Performance Seat can open the door for future projects in off-road vehicles.”

Ultramid and Ultrasim are registered trademarks of BASF SE

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 \$25.7 billion in 2022. For more information about BASF’s North American operations, visit [www.basf.com/us](http://www.basf.com/us).

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. More than 111,000 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 €87.3 billion in 2022. 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](http://www.basf.com).