

News Release

BASF, General Motors, WITOL and ADAC win the SPE Automotive Innovation Award for the fastener sleeves on the 2024 Chevrolet Equinox EV

WYANDOTTE, MI, November 14, 2024 – [BASF](#), [General Motors](#), [WITOL](#) and [ADAC](#) have won the Society of Plastics Engineers (SPE) Automotive Innovation Award in the body exterior category for the fastener sleeves on the outside door handle housings of the 2024 Chevrolet Equinox EV. These self-compensating sleeves are automatically adjustable in all three axes for flush exterior door handles and eliminate the need for manual adjustment or installation with specialty tools compared to traditional designs.

“The nylon self-adjusting sleeve surrounds a metal cylinder to accommodate GM’s standard hex-head fastening strategy, a key enabler of this innovation,” explained Mary Reiber, Materials Engineer, Composites and Plastic Body Modules, General Motors. “This new design eliminates manual adjustment operation with a specialized tool, significantly reducing fit and finish rework time at the plant.”

The self-adjusting fastener sleeves, designed explicitly by WITOL and produced by ADAC, incorporate BASF’s Ultramid® B3WG10, a 50 percent glass fiber reinforced polyamide ideal for parts requiring high rigidity.

“While the WITOL fastener allows for tolerance compensation by enabling freedom of movement, the handle still needs to be located and secured to the door panel,” stated

Robert Rowley, Lead Product Engineer, ADAC. "The ADAC-designed protective and locating cover achieves this by locating the handle to the outer door panel and ensuring even gaps around it."

"By incorporating three-axis variation control with off-the-shelf fasteners currently used at the plants," said Kevin Corrigan, Key Account Manager, WITOL, "we were able to incorporate the three design requirements from General Motors into an industry first innovation."

"When teams with different strengths and expertise collaborate, they cultivate an environment where creativity flourishes, leading to groundbreaking solutions," said Thomas Poznick, OEM Business Development Manager, Performance Materials, BASF. "Together, the team was able to transform challenges into opportunities, proving that the power of collaboration is the catalyst for extraordinary advancements."

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Chevrolet and Equinox are registered trademarks of General Motors

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.

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