



Joint News Release

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BASF and Bemis receive honorable mention at Altair Enlighten Awards on large hydraulic tanks for compact excavators

WYANDOTTE, MI, and SHEBOYGAN FALLS, WI, August 8, 2024 – BASF and Bemis Manufacturing Company received honorable mention at the Altair Enlighten Awards in the enabling technology category for their collaboration on large hydraulic tanks for compact excavators. By leveraging a combination of injection molding and vibration welding techniques, the team was able to lower costs by approximately 20% and reduce mass by approximately 5% compared to the traditional roto-molding process while providing an eco-efficient solution delivering both environmental savings (reductions in life cycle CO₂ emissions) and reducing life cycle cost.

“We needed a way to produce large, complex parts with shorter cycle times, while reducing secondary processing waste,” said Jeff Lallensack, Senior Project Engineer, Bemis Manufacturing. “The BASF team understands our business and their engineering expertise in vibration welding improved the functional performance of the hydraulic tank by successfully containing vibration weld flash during processing.”

The hydraulic tank, which was injection molded and then vibration welded by Bemis Manufacturing, uses a BASF polyamide 6 (PA6) grade, Ultramid® B3WG6 GPX BK23238, reinforced with 30% short glass-fiber. This specific grade of Ultramid provides

exceptional vibration weld joint strength and high temperature fatigue strength. Using BASF's Computer Aided Engineering (CAE) expertise, via ULTRASIM® and Burst Failure Index (BFI)-for-weld methodology, the stringent structural part performance requirements were successfully met.

“At BASF, collaborative innovation with our customers, mutual trust and respect and customer-led engineering is crucial to their success as well as ours,” said Ankur Bhosale, Senior Principal Engineer, Performance Materials, BASF Corporation. “BASF's technical expertise via ULTRAJOIN®, and simulation expertise via ULTRASIM and Burst Failure Index (BFI)-for-weld methodology were the key differentiators that were extensively leveraged to surpass stringent performance requirements. As a team, we made the impossible possible by delivering approximately 20% cost savings to our customer partners while delivering an eco-efficient solution. It's a true demonstrator of the power of co-creation.”

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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.

About Bemis Manufacturing Company

Headquartered in Sheboygan Falls, WI, Bemis Manufacturing Company is a family-owned manufacturer of consumer goods and custom injection molding services tracing its roots back to 1901. While best

known for their market leading position in toilet seats, Bemis is an innovative and diversified manufacturer, serving consumer, commercial, medical and industrial markets worldwide.

Proud of its role as a US manufacturer, Bemis also has manufacturing facilities in the UK, Mexico, France, and Croatia. For more information, visit Bemis Manufacturing Company at [HOME | Bemis Mfg.](#) and Bemis Contract Group at [Custom Injection Molding Company - Bemis Contract Group](#)