

Press Release

**Alumobility and Porsche Reveal Results of Joint Aluminum Lightweight Study:
A Conversion of the Porsche Taycan Top Hat from Mixed Material to a Full Aluminum Design
at the Car Body Xperience 2024 on April 23 in Rochester, MI, USA**

Conversion delivers reduction in weight, CO2e and complexity

ZURICH, Apr. 9, 2024: Together with Porsche, [Alumobility](https://alumobility.com), the global association committed to advancing the adoption of aluminum in the automotive industry, will present the results of a new joint study, entitled “Aluminum Lightweight Study: A Conversion of the Porsche Taycan Top Hat from Mixed Material to an Aluminum Design.” The presentation will be featured as part of Automotive Circle’s Car Body Xperience’s electrification program on April 23rd at 11:45 am in Rochester, MI, USA.

Professor Mark White, Technical Director, Alumobility will join Jens Christlein, Director R&D Body in White, Dr. Ing. h.c. F. Porsche AG, DE to present the scope of the study and its results. The discussion will be followed by a Q&A session with the audience.

The Alumobility-Porsche cooperation involved a theoretical case study focused on converting the existing steel-intensive mixed-material body Top Hat structure of the Porsche Taycan to an all-aluminum Top Hat, which would result in approximately 40% weight savings against the steel reference parts, while also maintaining attributes for safety, body stiffness and performance. The project further demonstrated that aluminum-intensive vehicles offer manufacturing efficiency opportunities by reducing the number of parts, joint types, and total joint count. In addition, it was determined recycled aluminum would lower lifetime emissions compared to the steel reference.

“For us at Porsche it is a great benefit to get state-of-the art technical industry input regarding lightweight structures,” said Jens Christlein, Director R&D Body in White with Porsche AG. “The cooperation with Alumobility and its entire team was very efficient and provided many interesting features which will help us to optimize our cars further toward benchmarking performance.”

“Our objective was to demonstrate that converting the Taycan Top Hat to all aluminum would deliver weight, CO2e and complexity reduction without sacrificing performance, safety or appearance, and we delivered on that target,” said Professor White.

The cooperation partners jointly checked and validated the results to demonstrate the feasibility of the study relative to the agreed targets.

“Working with a partner like Porsche is a great step for advancing Alumobility’s mission of conducting technical studies that showcase how aluminum is the material of choice for the future of mobility,” said Professor White. “Presenting the results of this comprehensive study to an international audience of automotive design and manufacturing engineers at the Car Body Xperience conference is an excellent opportunity for Alumobility to share industry knowledge with the automotive industry to help address the key challenges of reducing weight and emissions.”

Organized by Automotive Circle, the Car Body Xperience Conference will bring together industry experts from around the world to showcase the latest car body developments, performance and production techniques.

To register for this event, click [HERE](#)

About Alumobility:

Alumobility is a global ecosystem of leading aluminum and downstream technology partners that supports automotive manufacturers in creating lighter, safer, smarter and more sustainable vehicles. The non-profit association was founded to focus on technical studies to advance the adoption of aluminum automotive body sheet (ABS). Alumobility is helping to fulfill the promise of a lighter, more efficient, more sustainable mobility future.

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