

Press Release

Alumobility to Reveal Study Findings that Showcase Benefits of Converting Steel Intensive Vehicle Body in White to Fully Aluminum

Association to Conduct Free Webinar on July 6

ZURICH, June 27 2023 --- <u>Alumobility</u>, a global association committed to helping advance the adoption of aluminum by automakers, is presenting a webinar that reveals the benefits of converting a steelintensive body-in-white (BIW) to a fully aluminum BIW. The presentation is based on a recent technical case study conducted by the association.

"This webinar is an ideal forum for sharing our findings, which reveal that shifting from steel to aluminum-intensive BIW delivers 40% weight savings for the same attribute performance, while reducing the total number of parts and joints.," said Professor Mark White, Technical Director of Alumobility. "Our goal is to inform the automotive industry on the benefits of aluminum, which is the material of choice for producing lighter, safer, smarter and more sustainable vehicles."

In this free, 60-minute webinar, <u>Alumobility's</u> Technical Director, <u>Mark White</u> will provide these **key topics and takeaways**:

- Aluminum offers a 40% weight save versus a steel-intensive vehicle (SIV) BIW reference while achieving all safety and BIW performance targets
- Converting steel parts and designing for aluminum can reduce overall part count
- Converting from a SIV BIW to an aluminum-intensive vehicle AIV BIW allows for a reduction in overall joint count
- Aluminum BIW offers a significant reduction in gauge and grade complexity versus a steelintensive reference

The project focused on a hypothetical conversion of all the steel parts on a mixed material production body-in-white (BIW) to a full aluminum BIW, which resulted in a 40% weight savings for the sum of the converted parts while also maintaining or improving the specified BIW attributes for safety, noise, vibration, and harshness (NVH). It further revealed that, when compared to steel intensive mixed material BIW, aluminum intensive BIW offered complexity reduction opportunities and reduced the total number of parts and joints while also lowering the gauge and grade combinations.

In terms of process, the study's first phase consisted of a geometry carry-over with a gauge and grade conversion and its second phase focused on topology, optimizing geometry along with gauge and grade.

The study was conducted in conjunction with a leading global automaker, using one of its latest steel intensive mixed material production battery electric vehicles (BEV) BIW structures.

Airing on July 6, at <u>10:00 am EST</u> and <u>11:00 am CET</u>, the Alumobility webinar which is part of an ongoing series, supports the organization's mission to advance the use of aluminum in vehicles through technical studies, collaboration, information, and sharing valuable insights. The webinar replay will also be available through the <u>Alumobility website</u>.

To register for the webinar, follow this link: News & Events - Alumobility

About Alumobility

<u>Alumobility</u> 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). Working with global automakers, Alumobility is helping to fulfill the promise of a lighter, more efficient, more sustainable mobility future.

###

Media Contact info@alumobility.com

Natalia Freeman +1 561 690 4241