Novelis Debuts New Aluminum Solution Category for Automakers

Advanz™ 7UHS-s701 Provides Best High-Strength Product for Structural Applications

ATLANTA, Feb. 17, 2021 /PRNewswire/ -- Novelis Inc., the world leader in aluminum rolling and recycling, today unveiled its strongest automotive aluminum product to date, Novelis AdvanzTM 7UHS-s701. The technologically advanced, ultra-high-strength material is now available commercially to the global automotive industry.

The product offers lightweighting potential of up to 40% over existing ultra-high strength, hot-formed steel solutions. It is designed for safety-critical structural applications in passenger vehicles that require high inservice strengths such as A and B pillar reinforcements and side impact door beams. Commercial vehicles and electric vehicles will also benefit from using this material, as it offers mass reduction to enable increased payload and longer battery range, while still meeting all crash, loading and overall design requirements.

"The s701 technology represents the future of high-strength material in automotive applications and offers a clear alternative to the most advanced high-strength steel products," said Philippe Meyer, Senior Vice President and Chief Technology Officer, Novelis Inc. "Aluminum is already the material of choice for lightweighting, and now we are offering a solution that helps automakers design even safer, lighter and better performing vehicles."

Novelis will leverage its knowledge and expertise in the aerospace industry to manufacture s701. To enable rapid adoption of this unique technology, Novelis' Customer Solution Center (CSC) network has expertise to engage with automotive engineers on how to best incorporate this material on new development projects. The CSC teams have invested considerable time and resources to demonstrate the material's capabilities, as well as the value it delivers while addressing any potential implementation questions from OEMs.

Advanz™ 7UHS-s701 allows down gauging in applications already using aluminum and offers further lightweighting possibilities. The material's targeted use in age-hardened tempers means it does not age, giving it an indefinite shelf life and providing automakers significant supply chain flexibility.

Critically important to automotive designers and engineers, the alloy is compatible with hot stamping processes. In fact, Novelis is actively working with hot stampers and technology partners, such as TELOS Global, to further facilitate rapid aluminum adoption. TELOS Global specializes in conception, design, training and manufacturing associated with high-quality press hardened steel and aluminum stampings, tooling, and related thermal and production equipment.

"We have been co-developing targeted hot formed application solutions using Advanz™ 7UHS-s701 for some time now, delivering greater economic value through increased levels of mass reduction while meeting critical safety requirements," said Rick Teague, CEO, TELOS Global. "Launching this product into the market will now give automakers even more flexibility to engineer highly efficient, multi-material structures."

The Advanz™ 7UHS-s701 material allows scrap collected from the manufacturing process to be fed into a closed loop recycling system for reforming into the same products from which it was derived. As a result, Novelis and its customers maximize product value while minimizing environmental impact through reduced CO2 emissions and transportation costs.

About Novelis

Novelis Inc. is driven by its purpose to shape a sustainable world together. As a global leader in innovative products and services and the world's largest recycler of aluminum, we partner with customers in the aerospace, automotive, beverage can and specialties industries to deliver solutions that maximize the benefits of lightweight aluminum throughout North America, Europe, Asia and South America. Novelis is a subsidiary of Hindalco Industries Limited, an industry leader in aluminum and copper, and the metals flagship company of the Aditya Birla Group, a multinational conglomerate based in Mumbai, India. For more information, visit novelis.com.

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