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Novelis

Novelis Partners with Impression Technologies

New collaboration explores innovative HFQ hot stamping technology for automotive aluminum

ATLANTA, Nov. 7, 2018 /PRNewswire/ -- Novelis Inc., the world leader in aluminum rolling and recycling, today announced it has agreed to partner with Impression Technologies to explore innovative ways to increase the broader adoption of aluminum through the hot stamping process. Impression Technologies has the exclusive rights to Hot Form Quench (HFQ®), a unique technology used to design and manufacture components using ultra high-strength aluminum for the high volume automotive and transport markets.



This partnership reflects Novelis' strategy to collaborate with partners across the automotive and aluminum industries that are developing products and processes to achieve innovative and cost-effective solutions for lightweighting vehicles. Novelis will utilize ultra high-strength alloys, such as 7000 series, that offer higher levels of strength and lightweighting to compete with hot formed Boron steel in a wide range of strength and safety driven parts of automotive structures. Impression's HFQ hot stamping technology is an enabler for new vehicle design applications in both aluminum-intensive vehicles as well as mix-material architectures.

"Combining our most advanced high strength aluminum alloys with hot stamping allows

automotive designers and engineers to push the limits of what is possible for next-generation vehicle architectures," said Todd Summe, Chief Research and Development Officer, Novelis Inc. "By leveraging the expertise of technology suppliers like Impression Technologies and others, Novelis is able to provide solutions to our customers' most demanding requirements throughout their development journey."

As automakers continue to adopt aluminum into vehicle design and use hot stamping technology, Novelis will work with Impression Technologies and other partners to share knowledge and best-practices with OEMs and Tier One suppliers to accelerate adoption of aluminum light-weighting as a global standard.

"We are delighted to be working with Novelis to accelerate the adoption of ultra high-strength aluminium formed using HFQ into the volume automotive and transport markets," said Jonathan Watkins, Chief Executive Officer of Impression Technologies.

About Novelis

Novelis Inc. is the global leader in aluminum rolled products and the world's largest recycler of aluminum. The company is headquartered in Atlanta, Georgia, operates in 10 countries, has approximately 11,000 employees and had \$11.5 billion in revenue for its 2018 fiscal year. Novelis supplies premium aluminum sheet and foil products to transportation, packaging, construction, industrial and consumer electronics markets throughout North America, Europe, Asia and South America. Novelis is a subsidiary of Hindalco Industries Limited, an industry leader in aluminum and copper, and metals flagship company of the Aditya Birla Group, a multinational conglomerate based in Mumbai, India. For more information, visit novelis.com and follow us on Facebook at facebook.com/Novelis and Twitter at twitter.com/Novelis.

About Impression Technologies and HFQ[®]

Impression Technologies has industrialised and continues to develop the breakthrough HFQ[®] Technology that was pioneered at Imperial College, London. HFQ enables high and ultra high-strength aluminium to be formed into complex-shaped parts reducing part count, weight and costs and reducing tool investment. Parts designed and manufactured using HFQ are made at the company's production facility in Coventry, England and are used on production cars manufactured by Aston Martin and Lotus. The company is making its HFQ Technology available to commercial partners.

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