



Dana Introduces Aluminum Cooling Solutions for EV, Hybrid Vehicles

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MAUMEE, Ohio, Nov. 3, 2014 /PRNewswire/ -- Dana Holding Corporation (NYSE: DAN) announced today the introduction of a new aluminum cooling technology for electric and hybrid vehicles.

Specifically, the company is utilizing the efficiency of aluminum in its Long® brand of integrated cooling plates that enhance heat transfer of insulated gate bipolar transistor (IGBT) switches. This newest addition to Dana's robust thermal-management portfolio provides customers with optimized, compact cooling components to address the high-heat, high-power demands of electric and hybrid vehicles.

This technology has been developed to limit the maximum temperature of the IGBT junction in a compact design, providing customers with a clean, lightweight, recyclable, and cost-effective solution that offers superior heat transfer and cooling abilities.

Furthermore, by utilizing the company's proprietary fluxless brazing process, Dana is able to produce cooling solutions that are exceptionally clean and flux-free, minimizing coolant contamination to maintain low conductivity in the power electronics cooling circuit. With their efficient attributes, Dana's IGBT cooling solutions improve the ability of automotive electronics engineers to transfer high power between batteries and motors.

"Both OEMs and suppliers are constantly looking at different materials and technologies in order to meet the ever changing needs of the automotive industry," said Dwayne Matthews, president of Dana's Power Technologies Group. "By utilizing aluminum cooling solutions we are able to better reach the efficiencies our customers desire, while addressing issues associated with space and weight."

By leveraging its expertise in the development of advanced thermal-management technologies, Dana is able to provide its customers with custom-tailored aluminum cooling solutions that are engineered to meet specific performance requirements.

The high-quality IGBT cooling plates will be manufactured at Dana's facility in Cambridge, Ontario, with production expected to begin in early 2015.

About Dana Holding Corporation

Dana is a global leader in the supply of highly engineered driveline, sealing, and thermal-management technologies that improve the efficiency and performance of vehicles with both conventional and alternative-energy powertrains. Serving three primary markets – passenger vehicle, commercial truck, and off-highway equipment – Dana provides the world's original-equipment manufacturers and the aftermarket with local product and service support through a network of nearly 100 engineering, manufacturing, and distribution facilities. Founded in 1904 and based in Maumee, Ohio, the company employs 23,000 people in 26 countries on six continents. In 2013, Dana generated sales of \$6.8 billion. *Forbes* magazine selected Dana as one of America's 100 Most Trustworthy Companies in 2014. For more information, please visit dana.com.

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