



## **Dana Outlines Strategies for Managing Higher Torques Associated with Engine Downsampling in New White Paper**

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MAUMEE, Ohio, Dec. 8, 2014 /PRNewswire/ -- Dana Holding Corporation (NYSE: DAN) has published a new white paper for the commercial trucking industry that addresses the need for fleets and original-equipment manufacturers to properly manage the higher driveline torques that are resulting from the increasing use of more fuel-efficient downspped engines.

Titled "The Right Solution for Downspped Engines," the paper is free and may be downloaded at: [www.danacv.com/downsamplingwhitepaper](http://www.danacv.com/downsamplingwhitepaper).

Authored by Andy Nieman, vice president of global engineering for Dana Commercial Vehicle Technologies, it describes the motivations behind downsampling, what constitutes downsampling, and fuel consumption and environmental benefits. The piece goes on to explain how the resulting higher torques place added stress on a vehicle's axle, driveshaft, and inter-axle.

Different strategies are then presented for managing the higher torques, including Dana's recommendation for specifying proper driveline components. These components, the paper explains, need to be carefully engineered, thoroughly tested, and proven to be fully capable of delivering the necessary performance in a high-torque environment.

Charts are also provided to help illustrate the data provided and support Dana's conclusions.

The Dana system optimized for engine downsampling includes the Spicer® AdvanTEK® 40 tandem axle, the SPL® 350 driveshaft, and the SPL 250 inter-axle shaft.

The Spicer AdvanTEK 40 axle is now available with ratios that support the engine downsampling efforts of truck manufacturers, including the industry's fastest axle ratio of 2.26:1. The Spicer AdvanTEK 40 tandem axle was developed with faster axle ratios to handle the higher axle input torques that result from lowering engine rpm at highway cruise speed, which enables increased overall vehicle efficiency of up to 2 percent.

Ultimately, the Spicer AdvanTEK 40 axle can help a truck operating in a typical linehaul duty cycle save more than 2,700 gallons of diesel fuel over a five-year time span. This translates into up to \$10,000 in estimated operating savings and a reduction of over 60,000 lbs in carbon dioxide output when compared with most tandem axle offerings on the road today.

The other piece of Dana's engine downsampling solution is the SPL 350 driveshaft and SPL 250 inter-axle shaft, which have been engineered to maximize the efficiency and durability of the Spicer AdvanTEK 40 tandem axle and low rpm engines. The most robust heavy-duty driveshaft and inter-axle shaft in their class, the SPL 350 driveshaft and SPL 250 inter-axle shaft offer more power density, 40 percent more torque carrying capability, and double the bearing life over competitive designs. In fact, they are the only driveshaft and inter-axle shaft on the market today that can supply up to a million miles of life expectancy in a downspped engine powertrain.

For more information, visit [www.danacv.com/danacv/advantek40](http://www.danacv.com/danacv/advantek40).

### **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](http://dana.com).

To view the original version on PR Newswire, visit: <http://www.prnewswire.com/news-releases/dana-outlines-strategies-for-managing-higher-torques-associated-with-engine-downsampling-in-new-white-paper-300006071.html>

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