



Dana Engages Diverse Global Demand for Material-Handling Equipment with Four-Tier Strategy for Powershift Transmissions

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HANOVER, Germany, May 19, 2014 /PRNewswire/ -- Today at CeMAT 2014, the world's leading exhibition for intralogistics, Dana Holding Corporation (NYSE: DAN) unveiled a four-tier technology strategy offering powershift transmissions customized to meet regional requirements and preferences for forklift trucks and other material-handling vehicles.

Dana will offer a wide range of capabilities across the four tiers by building on a common transmission platform suitable for all markets. This strategy allows machine designers to configure a series of vehicles in the same power range with a wide selection of features that require minimal alterations to the packaging envelope.

The tiers include a full range of options from basic transmission configurations for emerging markets supplying proven performance and long-term durability, up to high-feature transmissions for developed markets incorporating cutting-edge technologies for maximizing fuel efficiency and productivity. Dana has thoroughly tested these features to determine the efficiency gains of these options and help OEMs quantify the total cost of ownership benefits for equipment buyers.

"Material-handling equipment plays a key role in renewed development and economic prosperity around the globe, but there are vast differences in preferences from region to region," said Aziz Aghili, president of Dana Off-Highway Driveline Technologies. "Dana offers an unmatched selection of transmission capabilities through a full line of field-tested technologies and market-leading innovations that can be finely tuned to the unique demands of each region."

Spicer T30 and TE30 powershift transmissions for reach stackers and heavy-duty forklift trucks with engines ranging from 225 to 300 kW (300 to 400 hp) demonstrate the versatility of Dana's four-tier platform. Available features will include:

- reduced internal rotational spinning speeds;
- optimized clutch capacity;
- intelligent lubrication and cooling;
- a high-efficiency, cast-aluminum torque converter that optimizes oil flow more efficiently than stamped steel designs;
- high contact-ratio helical gears for reducing noise;
- upgraded software and enhanced hardware capacity, flexibility, and expandability that enable advanced control capabilities such as precise inching, eco-drive, power drive, and next-generation overlap control;
- converter freewheel and lock-up clutches that optimize efficiency in high-power conditions; and
- streamlined integration with a broad spectrum of advanced parallel hybrid technologies that recuperate energy through electric, kinetic, or hydraulic systems.

Dana will offer prototypes of these transmissions for OEM field testing in the third quarter of 2014, and the production of models with select features is expected to begin at the end of this year.

Dana will follow the same approach in the development of Spicer T14 and TE14 powershift transmissions for mid-sized forklift trucks with lift capacities of 13 to 27 tonnes (14 to 30 tons) in the 120 to 200 kW (160 to 270 hp) range. Short-drop prototypes of these transmissions will be available in third quarter of 2014, with the start of production expected by the middle of 2015.

CeMAT attendees may visit Dana in hall 25, stand G29. For more information about Dana's drivetrain solutions for the material-handling market, visit www.dana.com/offhighway.

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 vehicles, commercial trucks, 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, Dana employs 23,000 people in 26 countries on six continents. In 2013, Dana generated sales of \$6.8 billion. For more information, please visit dana.com.

SOURCE Dana Holding Corporation

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