Dana Rexroth Begins Pre-Production Testing on R3 Hydromechanical Variable Transmission

SHANGHAI, Nov. 22, 2016 – Dana Rexroth Transmission Systems today announced that several global original-equipment manufacturers (OEMs) have begun pre-production testing on the R3 hydromechanical variable transmission (HVT).

The HVT R3 from Dana Rexroth features a modular design that can be adapted for a variety of configurations, including wheel loaders, motor graders, industrial lift trucks, reach stackers, forestry skidders, and other off-highway equipment. This transmission is designed for applications with net input power from 200 to 270 kW (268 to 362 hp).

“As off-highway vehicles have evolved into increasingly complex and highly technological systems, expectations have also risen from both OEMs and operators demanding a smoother, quieter ride. The industry today requires a blend of fuel economy, performance, and driveability,” said Roland Friedl, head of sales and product management for Dana Rexroth Transmission Systems. “The HVT R3 from Dana Rexroth is a premium solution that delivers this optimized mix of efficiency and driving performance. We can provide support for customers interested in this high-quality solution in China, and around the world.”

Driven by the “Made in China 2025” initiative, Chinese markets are experiencing a rapid shift toward sophisticated, high-tech equipment for construction applications. Aligning with the program’s guiding principles to make manufacturing innovation-driven, Dana Rexroth shares similar ideals focusing on a relentless drive for continuous improvement and technologies that deliver excellence.

A product of the joint venture between Dana Incorporated and Bosch Rexroth, HVTs from Dana Rexroth significantly reduce fuel consumption by decreasing engine speeds throughout the duty cycle and also at idle, when speeds can drop to as low as 600 rpm. Application analysis demonstrates the possibility of further savings without compromising performance through engine downsizing.
Dana Rexroth HVTs enable sensitive, precise vehicle positioning with a stepless drive that offers improved acceleration while maintaining tractive effort. They optimize the operating point of the diesel engine by decoupling engine speed from drive speed, and maintenance costs are reduced by utilizing hydrostatic braking and wear-free directional reversing without clutches.

The HVT system designed by Dana Rexroth helps reduce complexity for equipment manufacturers, since the entire system of gears, clutches, and hydrostatic units is managed by an advanced electronic control unit and optimized for efficiency by a single supplier.

At Bauma China in hall N5, stand 210, Dana will exhibit the Dana Rexroth HVT R2 supporting power outputs from 135 to 210 kW (180 to 282 hp). The HVT R2 was the first hydromechanical variable transmission from Dana Rexroth, and it has been in production since early 2016. The HVT R2 is featured on Kalmar’s new Gloria generation of reach stackers as part of the highly efficient Kalmar K-Motion drivetrain.

About Dana Rexroth Transmission Systems
Established in 2011, Dana Rexroth Transmission Systems is a 50-50 joint venture formed by Dana Incorporated (NYSE: DAN) and Bosch Rexroth AG to develop and manufacture advanced drive transmissions for the off-highway market.

Dana Rexroth develops and manufactures hydromechanical variable transmission (HVT) systems that combine Dana's expertise in off-highway transmission engineering and manufacturing with Bosch Rexroth's deep experience in hydraulics and systems.

Targeted for use in off-highway applications, the advanced HVT systems developed by Dana Rexroth are focused on meeting customer needs for improved fuel economy, productivity, emissions, and maneuverability.

Dana Rexroth Transmission Systems is based in Arco, Italy. For more information, visit www.danarexroth.com.

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