Dana Enhances Electrification Portfolio, Production Capabilities to Bolster Support for North American Construction Industry

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LAS VEGAS, March 14, 2023 /PRNewswire/ -- Dana Incorporated (NYSE: DAN) today announced several initiatives—including new drivetrain offerings for electrified vehicles—that strengthen the company's growing commitment to the North American construction and off-highway markets.

Dana Enhances Electrification Portfolio

Among these initiatives, Dana is:

- Debuting the Spicer Electrified™eSP502 e-Transmission for the North American construction market. This flexible platform is designed to support the electrification of mid-sized wheel loaders, rough terrain cranes, and other off-highway vehicles, with availability now expanded to empty container handlers and reach stackers in the material-handling market.
- Introducing a new modular Spicer® drivetrain solution for telehandlers with 12k lifting capacities that enables original-equipment manufacturers (OEMs) to seamlessly transition from conventional vehicle designs to next-generation zero-emissions powertrains.
- Increasing process capabilities and equipment capacity at its Lafayette, Ind., USA, facility, which manufactures Spicer Torque-Hub™ track drives to meet the rising demand of compact track loaders (CTLs) and other small- to mid-sized construction vehicles in North America.

Dana is promoting these developments, along with a wide range of other drive and motion solutions for traditional and electric-driven construction vehicles, this week in booth S-84815 in the South Hall at CONEXPO-CON/AGG in Las Vegas.

"In conjunction with our customers, Dana is always pursuing opportunities to eliminate waste and maximize customer satisfaction," said Jeroen Decleer, senior vice president, Off-Highway Drive and Motion Systems for Dana Incorporated. "By strategically expanding our product and process capabilities in North America, Dana is well-positioned to partner with our customers in the region to address changing market demands and considerations."

North American Debut of Next-generation e-Transmission

Leveraging Dana's field-proven powershift technology, the eSP502 e-Transmission offers a dual-motor, two-speed design that is built on a flexible platform to enable optimized performance at maximum efficiency in a compact package. The modular approach to the transmission design allows for a single motor solution, as well as an optional power take-off, depending on the specific vehicle requirements.

Delivering high efficiency in a compact package that performs like a conventional powershift transmission, the dual-motor version supports continuous power outputs up to 326 horsepower (240 kW), while the single-motor configuration is engineered for 187 horsepower (140 kW) of continuous output.

The eSP502 is equipped with next-generation control software and functional safety readiness, enabling easy installation and smooth integration, and it features a patented clutch design that minimizes clutch drag to maximize efficiency.

It is equipped with field-proven Dana TM4™ high-voltage motors of up to 800 volts to improve efficiency, reduce total package size, and provide redundancy as needed.

The eSP502 e-Transmission's compact and modular design allows it to be adapted for use in 4x2 or 4x4 vehicle applications with a range of ratio options to support a variety of vehicle types.

Versatile, Future-ready Driveline for Telehandlers

Developed for telehandlers lifting up to 12,000 pounds (5,400 kg), Dana's new driveline comes equipped with a compact Spicer 312 dropbox for high-power hydrostatic motors. This new hydrostatic dropbox functions as a continuously variable transmission without torque interruption, delivering enhanced performance with precise maneuvering at low speeds, reduced fuel consumption, and an integrated spring applied hydraulic release parking brake.

The system includes the field-proven Spicer® 222 front and rear heavy-duty axles, which each feature a limited-slip differential and provide the customer with maintenance-free brakes. The complete driveline system is optimized for efficiency as well as noise, vibration, and harshness.

To support the industry's transition to zero-emission vehicles, Dana optimized the axles and driveline system to improve efficiency for a variety of architectures, allowing customers to retain the same driveline solution while choosing between implementing a hydrostatic dropbox or an electrically driven design.

Growing Production Capabilities for North American OEMs

To engage the rapidly increasing interest in CTLs and other tracked equipment in North America, Dana is nearly tripling its annual production of Spicer Torque-Hub track drives within the current footprint of its manufacturing and assembly hub in Lafayette.

Spicer Torque-Hub drives for CTLs offer output torque ratings from 5,000 to 17,000 Nm, delivering increased productivity with maximized motor displacements in a compact package.

Scheduled to start operation in the second quarter of 2023, the expansion includes installing automated assembly processes managed by a full manufacturing execution system, extending already robust lean manufacturing initiatives, and incorporating next-generation quality controls.

In addition to expanding its drive production capacity, Dana has also recently repositioned the final assembly of its line of heavy axles for mining and other extreme-duty applications to its Lafayette facility. The realignment helps Dana better address the supply-chain requirements and onshoring of North American OEMs.

These initiatives enhance Dana's reputation in North America as a leader in gear engineering, manufacturing, and production. At CONEXPO, Dana will spotlight its ability to deliver precision-made Fairfield™ gears and gear drives for industrial and mobile applications. The company's machining and state-of-the-art heat-treatment capabilities enable the production of custom-made Fairfield gears up to 6-1/2 feet (2 meters) in diameter and shafts up to 10 feet (3 meters) in length.

Dana also supports the production of custom-made Fairfield drives produced to industry certifications, ranging from build-to-print services up to end-to-end support encompassing design, manufacturing, metallurgical engineering, and testing.

"Our Lafayette facility serves a dual purpose as a world-class manufacturing facility and as a technical and customer experience center," Decleer commented. "Optimally located for many of our U.S.-based customers, our Spicer Torque-Hub center of excellence features numerous upgrades that will help us further increase customer satisfaction and create value."

Technologies Showcased at CONEXPO

Dana's exhibit at CONEXPO also includes a wide selection of updated drive and motion technologies for traditional and electrified construction machinery, including mini excavators, mobile elevated work platforms (MEWPs), and crawler cranes. The display will also highlight the updated Brevini EvoMax™ helical and bevel-helical gearbox used for numerous applications in the production of cement, from limestone quarrying to the distribution of packed cement powder.

The company's advanced solutions for OEMs will be featured by numerous exhibitors throughout the show, such as high-efficiency Dana TM4 SUMO™ motors supplied to Tadano Group, a Japanese manufacturer of mobile cranes and MEWPs located in the Festival Lot, booth F-9707.

Dana's complete lineup of drive and motion technologies for the construction industry can be viewed by visiting http://www.dana.com/off-highway.

About Dana Incorporated

Dana is a leader in the design and manufacture of highly efficient propulsion and energy-management solutions that power vehicles and machines in all mobility markets across the globe. The company is shaping sustainable progress through its conventional and clean-energy solutions that support nearly every vehicle manufacturer with drive and motion systems; electrodynamic technologies, including software and controls; and thermal, sealing, and digital solutions.

Based in Maumee, Ohio, USA, the company reported sales of $10.2 billion in 2022 with 42,000 people in 31 countries across six continents. Dana, with a history dating to 1904, was named one of "America's Most Responsible Companies 2023" by *Newsweek* magazine for its emphasis on sustainability and social responsibility. The company is driven by a high-performance culture that focuses on valuing others, inspiring innovation, growing responsibly, and winning together, earning it global recognition as a top employer. Learn more at dana.com.

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