



Autonomous Rigid Dump Truck by North Hauler Features the Allison 8610 Off Road Series™ Fully Automatic Transmission

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INDIANAPOLIS--(BUSINESS WIRE)--Dec. 10, 2020-- The recent delivery of autonomous drive rigid dump truck model NTR100A, equipped with an Allison 8610 Off Road Series™ (ORS) fully automatic transmission, by Inner Mongolia North Hauler Joint Stock Co. Ltd (NHL), has accelerated the pace of driverless rigid dump truck development in China. Allison's proprietary electronic controls optimize the integration of autonomous components and are a key enabler of driverless autonomous mode for the NTR100A rigid dump model. Allison fully automatic transmissions are built to perform in the toughest conditions and offer unrivalled reliability and power for the toughest mining applications.

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20201210006068/en/>



"Allison transmissions are highly regarded in the mining industry for their excellent performance, quality, reliability and increased uptime. Allison ORS transmissions only require their first maintenance after 18,000 hours," said Zhao Xinchun, Manager of NHL Customer Service Center. "Autonomous mining trucks will be the future trend and the application of Allison transmissions in this area is progressing very well. We look forward to further cooperation and a satisfactory outcome in the field of self-driving vehicles."

There is an increasing demand for driverless off-road trucks due to poor road conditions and tough working environments. As a pioneer in the development and production of self-driving mining trucks in China, NHL has achieved a major milestone in autonomous mining with the release of the Allison equipped, NTR100A rigid dump model. The NTR100A features two control modes,

Inner Mongolia North Hauler Joint Stock Co., Ltd (NHL) NTR100A autonomous driving dump truck equipped with an Allison 8610ORS automatic transmission. (Photo: Business Wire)

driver mode and autonomous mode. In autonomous or driverless mode, the truck's Autonomous Drive Controller sends instructions to the Allison Transmission Control Module, vehicle brake and other control systems.

Rated at GVW 160 ton, the new model NTR100A couples to the Cummins QST30 with a maximum power of 783kW or 1050HP and a maximum torque of 4629Nm. Equipped with Allison's 8610 ORS fully automatic transmission, the NTR100A can achieve a maximum speed of 47 km/h. In addition to providing dedicated autonomous mode calibration for virtual shift selection, Allison has also developed I/O (input/output) packages for control of autonomous mode, such as inhibiting reverse when the bed dump is hoisted.

At present, 20 units of driverless NTR100A rigid dump trucks with Allison 8610 ORS have been delivered to Conch Cement, the largest cement maker in China. These trucks will be operated every day in demanding and hazardous conditions, while addressing the shortage of drivers and eliminating human operational errors.

"Designed to match the most severe conditions, Allison 8610 ORS delivers consistent torque and provides more power to the wheels. It offers dump trucks better control and maneuverability on loose soil, while enhancing traction on uphill and downhill grades," said Chen Jing, Deputy Managing Director for Allison China Sales. "Armed with shift energy management, this not only improves transmission durability and overall performance, but also contributes to the entire vehicle's fuel economy. With its prognostic functions, the end-user will be informed on the maintenance schedule well in advance thus preventing major transmissions failures."

About Allison Transmission

Allison Transmission (NYSE: ALSN) is the world's largest manufacturer of fully automatic transmissions for medium- and heavy-duty commercial vehicles and medium- and heavy-tactical U.S. defense vehicles, as well as a supplier of commercial vehicle propulsion solutions, including electric hybrid and fully electric propulsion systems. Allison products are used in a wide variety of applications, including on-highway trucks (distribution, refuse, construction, fire and emergency), buses (school, transit and coach), motorhomes, off-highway vehicles and equipment (energy, mining and construction applications) and defense vehicles (wheeled and tracked). Founded in 1915, the company is headquartered in Indianapolis, Indiana, USA. With a market presence in more than 80 countries, Allison has regional headquarters in the Netherlands, China and Brazil with manufacturing facilities in the U.S., Hungary and India. Allison also has approximately 1,500 independent distributor and dealer locations worldwide. For more information, visit allisontransmission.com.

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