International Newsroom

Navistar Launches International® S13 Integrated Powertrain for Vocational Market



LISLE, III., March 14, 2023 / PRNewswire / -- Navistar has launched the International® S13 Integrated Powertrain for the vocational market. The S13 Integrated Powertrain, developed in collaboration with the TRATON Group, demonstrates advancements in robustness, reliability and performance. This latest announcement showcases a continued commitment to customers by setting the foundation for the next generation of vehicles, technologies and comprehensive ownership solutions.

"The S13 Integrated Powertrain is the most advanced powertrain we've ever produced and the lightest vocational powertrain available on the market," said Mark Stasell, vice president, Vocational Truck Business. "The S13 Integrated will benefit vocational customers by achieving stellar performance, simplicity and serviceability, and superior operating economy."

This launch expands upon the current S13 Integrated Powertrain customer offering. Navistar first introduced the S13 Integrated Powertrain for the onhighway market in August 2022, available in the International® LT® and RH™

Series models.

Developed from a clean sheet design, the S13 Integrated Powertrain consists of three distinct components – an engine, a transmission and an aftertreatment system – all designed and developed concurrently to ensure maximized compatibility and integration between systems.

Engine and Aftertreatment Capabilities Save Time and Capital

The S13 Integrated Powertrain maximizes performance and capitalizes on efficiency made possible through its modular design in global collaboration with the TRATON Group.

The 13-liter International S13 engine achieves advanced fuel efficiency and performance through a clean-burn combustion strategy and a reduction of friction and pumping losses. The S13 engine is Navistar's first engine designed with selective catalytic reduction (SCR) technology as the primary emissions reduction technology. The absence of an exhaust gas recirculation (EGR) cooler on this engine allows for nearly 100 percent of exhaust to flow to the fixed geometry turbocharger, equating to more power and improved engine performance. Additionally, the engine operates on low revolutions and high torque which equates to fewer fuel injections and less fuel consumption, delivering up to 515 horsepower and 1,850 lb-ft of torque.

The compact design of the Dual Stage Aftertreatment is purpose built with easy access for serviceability, as well as significantly improved emissions control and fuel efficiency. To keep temperatures at an optimal range and extend service intervals, the aftertreatment system includes a dual-stage SCR catalyst system in a one-box design.

Since an EGR cooler was eliminated from the combustion process, less soot and particulate matter are generated. This cleaner combustion cycle allows for extended service intervals and eliminates the need for the diesel oxidation catalyst (DOC) and active regeneration.

"Vocational trucks often spend quite a bit of time idling on a job site which has historically required more frequent active regens," said Stasell. "The aftertreatment system of the S13 Integrated Powertrain, combined with the engine combustion strategy, vastly reduces the need for both active and parked regens."

Transmission and Various PTO Options For Vocational Customer Needs

The International® T14 Transmission, a 14-speed automated manual transmission (AMT), uniquely combines the transmissions low range and six reverse gears through the use of a planetary gear set.

The T14 combines two deep crawler gears and a wide 26.7 overall ratio to provide slow-speed maneuverability, exceptional startability and enhanced performance running to and from the job site.

The T14 Transmission features vocational-specific drive modes including offroad mode, manual mode and paver mode. These drive modes combined with other vocationally focused functionalities, such as split-shaft mode and rocking mode, which breaks the truck free when stuck, prove the T14 is ready for any job.

As part of the clean sheet design, shifting logic and integrated software controls maximize efficiency and performance resulting in gear shifting that is perfectly matched to engine revolutions. The T14 also uses an electronic clutch actuator with controls integrated with the engine to deliver faster, smoother shifting.

Multiple spec'ing options are available for various vocational customer applications including front-engine power take-off (FEPTO), rear-engine power take-off (REPTO) as well as single and dual output transmission PTOs.

All PTO options are factory-installed at Navistar's Integrated Powertrain Plant in Huntsville, Alabama, and carry the warranty of the T14 transmission.

The S13 Integrated Powertrain also takes advantage of Navistar's Diamond Logic® electrical system to optimize body integration, convenience and safety features. This provides both chassis upfitters and customers maximum flexibility, simplicity, and functionality.

Comprehensive Ownership Solutions

The International S13 Integrated Powertrain includes several customer benefits outside of the product itself, including dealer integrated software, built-in service products and repair maintenance contracts.

Navistar's connected solution, OnCommand® Connection (OCC), comes standard on all International vehicles including those equipped with the S13 Integrated Powertrain. OCC combined with International® 360 provides fleet monitoring and preventive maintenance scheduling to increase uptime and keep customers' businesses operating at maximum efficiency. Customers can also utilize the OCC Go mobile app to monitor their vehicles in real time.

When spec'd for vocational applications, the S13 Engine and Dual Stage Aftertreatment system comes standard with a two-year, unlimited miles and unlimited hours warranty, and the T14 Transmission and factory-installed PTOs feature a three-year, unlimited miles warranty. A selection of additional warranties and extended service contracts are also available. The S13 Integrated Powertrain is backed by North America's largest one-stop dealer network to support any service needs.

"The S13 Integrated Powertrain increases efficient traditional propulsion technologies to allow the industry to advance toward a more sustainable future," said Göran Nyberg, executive vice president, Commercial Operations.

An International HX® Series truck equipped with the S13 Integrated Powertrain will be on display in the International Truck booth #S-60707 during CONEXPO-CON/AGG 2023 at the Las Vegas Convention Center March 14-18 in Las Vegas.

To learn more about the S13 Integrated Powertrain, visit www.internationaltrucks.com/media/hxseriesshift.

For additional media resources, visit www.internationaltrucks.com/media/S13.

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