Komatsu Europe International Introduces the HM400-5 Articulated Dump Truck

Powered by Komatsu EU Stage IV Engine



*Vilvoorde, January 2014* — Komatsu Europe International N.V. announces the introduction of the Komatsu HM400-5 Articulated Dump Truck (ADT) to the EU market. Presented at CONEXPO-CON/AGG 2014 in Las Vegas, the HM400-5 is powered by a Komatsu SAA6D140E-7 engine that is EU Stage IV emissions certified and with a net 353 kW (480 HP).

Komatsu's EU Stage IV engines are built on a solid foundation initiated in 1996 with the introduction of Komatsu's Tier 1 engines. Today's new articulated dump truck leverages Komatsu's leadership in technology and innovation by delivering a more environmentally friendly engine with high levels of performance.

### **High productivity**

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The HM400-5 has a maximum payload of 40 tonnes and a body capacity (heaped) of 24 m<sup>3</sup>.

Loading height is only 3.164 mm, which enables easy and quick loading. Additionally, the two single-staged body lift cylinders provide a 70 degree dump angle. Selectable working modes allow the operator to choose between Economy and Power modes to tailor machine performance to the application or to work conditions.



### **Efficient operation**

The HM400-5 features the Komatsu Traction Control System (K-TCS) for automatic and optimum traction in soft ground conditions. As ground conditions worsen and tire slippage is detected by speed sensors located on four wheels, the inter-axle is automatically locked. If tire slippage continues, four independent brakes are activated to regain traction.

The HM400-5 is enhanced with K-ATOMiCS (Komatsu Advanced Transmission with Optimum Modulation Control System). K-ATOMiCS offers a six-speed, fully-automatic transmission that uses an advanced electronic system to eliminate shift shock and torque cutoff to improve engine efficiency. It automatically selects the ideal gear based on vehicle speed, engine rpm and the shift position chosen. This results in powerful acceleration, smooth down-shifting and synchronized engine speed when climbing slopes. Operator fatigue is minimized, the load is kept in the body and productivity is increased.

A large automatic retarder allows the operator to select the optimum speed on downhill travel and fully loaded hauls, eliminating acceleration generated by the grade of the slope.

An integrated Payload Meter (PLM) is available in option on the HM400-5. It displays the weight of loaded material on the 7" high-resolution LCD monitor for the truck operator, and indicates payload information to the loader operator via external display lamps. PLM data is also transferred via KOMTRAX<sup>TM</sup> and can be accessed by web.

## Komatsu EU Stage IV Emission Certified Engine – Productive, dependable, efficient

Komatsu's EU Stage IV engines are built on the strength of the proven EU Stage IIIB foundation. By integrating Selective Catalyst Reduction (SCR), the EU Stage IV engine further reduces NOx emissions using AdBlue<sup>®</sup>, an additive which helps to converts harmful NOx from the machine's exhaust into harmless nitrogen and steam.

The Komatsu EU Stage IV engine uses an advanced electronic control system to manage the airflow rate, fuel injection, combustion parameters, and after treatment functions to optimize performance, reduce emissions, and provide advanced diagnostic capability. The result is lower fuel consumption with no loss of performance. Komatsu continues to use a Komatsu Variable Geometry Turbocharger (KVGT) and an Exhaust Gas Recirculation (EGR) valve for more precise temperature and air management control as well as longer component life.

For product reliability and durability in demanding conditions, Komatsu developed the entire system, including the control software which is critical to the effective operation of the aftertreatment system. This control system is also integrated into the machine's on-board diagnostics systems and KOMTRAX<sup>TM</sup>.

### **Operator environment**

The large cab of the HM400-5 provides a comfortable and quiet work environment. The ROPS/FOPS Level-2 certified cab has a rounded front dash panel with easy-to-reach switches. The centre-mounted high back, heated air ride seat with 3-point seat belt provides the operator with excellent visibility. The dashboard and front console give easy access to all machine controls as well as high visibility to the monitor panel. Two 12-volt ports were added, along with an auxiliary input to connect a smart phone or other devices.

The high resolution 7" LCD monitor offers enhanced capabilities and it displays information in 25 languages for global support. On the monitor, the operator can easily modify settings



for items such as the Auto Idle Shutdown or the auto-reversing fan, check operational records, such as driving history or fuel consumption, monitor the KDPF, or check how much time is required before the next maintenance. The monitor also provides the ECO Guidance function, which gives operational tips on how to reduce fuel consumption. A rear view monitor system with a separate 7" LCD monitor is standard and is mounted on the right hand side of the console for operator convenience.

# **Convenient maintenance and serviceability**

The HM400-5 provides easy service access in order to reduce costly downtime. The new truck has a light-weight fiberglass engine hood for easy access and increased cooling capacity. Two standard hydraulically driven auto-reversing fans help to keep the radiator and charge air cooler clean. The electrically powered tilt function, also standard on the HM400-5, tilts the cab rearward for easy access to the transmission.

The HM400-5 is equipped with the latest KOMTRAX<sup>™</sup> remote monitoring **KØMTRAX** technology with data access via the web or by KOMTRAX<sup>™</sup> Mobile on your smart phone. In addition to providing data such as fuel levels, operating hours, location, cautions and maintenance alerts, KOMTRAX<sup>TM</sup> was further enhanced to also monitor AdBlue<sup>®</sup> levels and KDPF regeneration, and to provide fuel theft alerts. A new Operator Identification System reports key operating information for multiple users. The new Auto Idle Shutdown function helps to lower costs by reducing unnecessary idle time.



All Komatsu EU Stage IV machines come with Komatsu CARE<sup>®</sup>, a complimentary maintenance program for Komatsu customers that is standard with every new Komatsu EU Stage IV construction machine. For the first three years or 2.000 hours it covers factory-scheduled maintenance, performed by Komatsutrained technicians with Komatsu Genuine parts. Komatsu CARE<sup>®</sup> offers up to a maximum of 2 complimentary Komatsu Diesel Particulate Filter (KDPF) exchanges and a KDPF warranty for the first 5 years or 9.000 hours.

Information in this news release is current on the date of the announcement and is subject to change without

- All comparisons are to the Komatsu model HM400-3.
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- AdBlue<sup>®</sup> is a registered trademark of Verband der Automobilindustrie.

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