



DANTOTSU Products



Introducing the FH Series of Forklift Trucks



Making Forays into Medium-Size Forklift Truck Market with Komatsu's Latest FH Series



Small-size engine-powered forklift trucks with a rated capacity of less than 3 tonnes (6,000 lbs) make up approximately 60% of global demand for forklift trucks (counterbalanced type). Compared with construction equipment, not only is a forklift truck fairly inexpensive but also its simple structure makes new entry relatively easy, both aspects of which have led in recent years to the rise of manufacturers from emerging countries in the forklift truck market.

This trend is particularly pronounced in the field of small-size engine-powered models. In addition, a lack of differentiation from other companies has resulted in price competition in many countries. To increase competitiveness, the forklift truck market is

undergoing an accelerated pace of reorganization through mergers and acquisitions.

Against this backdrop, Komatsu set its sights on a medium-size engine-powered forklift truck with a rated capacity of more than 4 tonnes (9,000 lbs) rather than focus on small-size versions that invite price competitions with other companies. Komatsu has worked on the development of forklift trucks so overwhelmingly advanced that the competition cannot emulate them even in a few years.

Once Again Adding to Komatsu's Innovative Product Lineup

Here, we introduce the FH Series of 4- to 5-tonne (9,000- to 11,000-lb) medium-size diesel engine-

powered forklift trucks equipped with hydrostatic transmission (HST), born amid fierce competition.

Developed based on Komatsu's unique hydraulic pressure and control technologies accumulated through the development of construction equipment, the FH Series was first marketed in a limited edition for the Japanese market. Following a full evaluation at GEMBA (work sites), sales of the FH Series began for the Japanese market in July 2012 and for the overseas market in 2013.

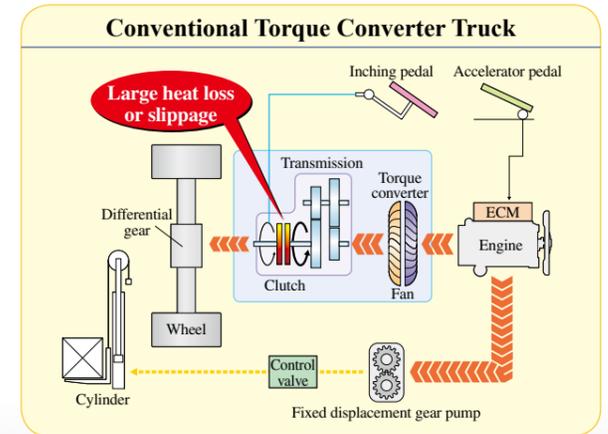
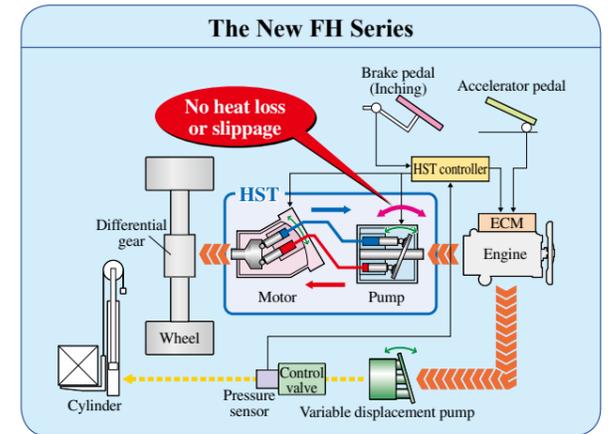
Based on innovative technological expertise, Komatsu develops high-performance products known as DANTOTSU (unique and unrivaled) products, which generate high added-value not easily imitated by competitors.

Key elements embodied in DANTOTSU products are environmental performance, safety and information and communication technology (ICT). With the release of the FH Series of forklift trucks, Komatsu has delivered to the world another DANTOTSU product to customers' GEMBA, once again adding to its innovative product lineup.

True DANTOTSU Product

(1) Environmental performance

In the drive mechanism, the FH Series is equipped with electronically controlled HST, which has garnered high acclaim on wheel loaders and bulldozers. In this system, the engine powers the pump while utilizing the hydraulic pressure to



First order received for FH Series forklift trucks in Indonesia



Unveiling a new FH Series forklift truck in Indonesia

rotate the motor and drive the wheels. Conventional models were fitted with a torque converter, which led to loss of transmission when the internal clutch slipped. HST, on the other hand, enables a highly efficient transfer of engine power with minimal transmission loss thanks to the absence of mechanical friction.

In the operational mechanism, the FH Series is fitted with a variable displacement pump with a closed-center load sensing system (CLSS), which is a hydraulic system employed in Komatsu hydraulic excavators, as well as a Komatsu diesel engine. The optimum control of these features has resulted in a significant reduction in fuel consumption as well as decreases in nitrogen oxide (NOx) and particulate matter (PM) emissions.

The FH Series of forklift trucks exerts significantly better fuel economy during high-load, high-operation work that involves frequent lifting and unloading as well as shifting forward and backward. At a certain paper mill, fuel consumption was reduced by up to 30%* in comparison with Komatsu's conventional models.

* Differs by work content

(2) Safety

A speed limit function comes as standard on the FH Series, for which the top speed can be set at four different levels. Also, the use of HST contributes to safe work operations by preventing uncontrolled rolling back on a ramp.

(3) ICT

Another standard feature on the FH Series is the KOMTRAX machine tracking system, a first for Komatsu forklift trucks. Visualizing information on the forklift trucks, including their locations, operational status and fuel consumption, enables

Komatsu to provide finely tuned support so that customers can always use the machines in the optimum condition.

Proactive Sales Promotion Activities Overseas

In overseas markets, where Komatsu has begun full-fledged sales of the FH Series since fiscal 2013, various marketing initiatives have been taken and to good effect.

The FH Series has been broadly recognized not only with the President's Award for fiscal 2012 but also with the Outstanding Energy-Saving Equipment Award (The Japan Machinery Federation Chairman's Award) for fiscal 2012 in Japan.

Going forward, Komatsu will strive to further expand sales of the FH Series and take on concerted activities with the aim of becoming an indispensable partner for our customers and continue to be their partner of choice.



Safe operation by preventing uncontrolled rolling back on a ramp



Training for FH Series in Russia



Showcasing FH Series at an exhibition held in Thailand



Demonstration for a recycling company in Australia

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We welcome any comments from readers via email:
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