# KOMATSU®

**HM300-2** 

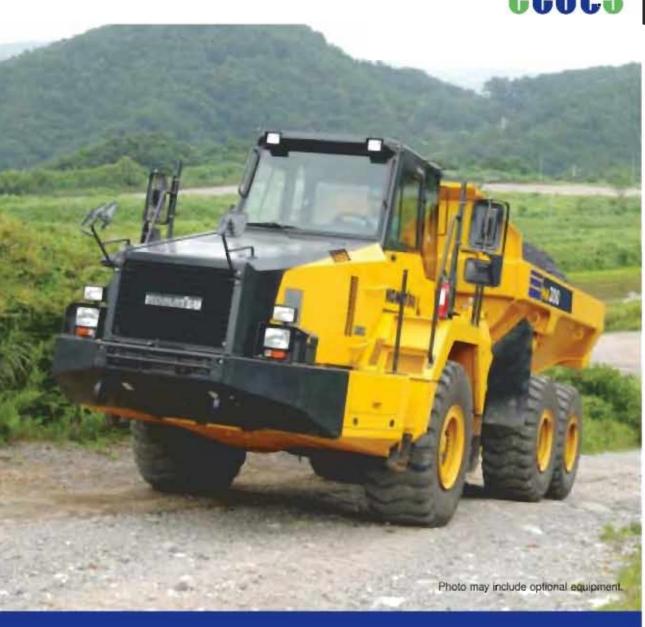
**GROSS HORSEPOWER** 254 kW 340 HP

**NET HORSEPOWER** 

246 kW 329 HP **MAXIMUM GVW** 

51420 kg 113,360 lb

ecot3 300





ARTICULATED DUMP TRUCK

### WALK-AROUND

The HM300-2 with new ecot3 engine, meets the EPA Tier 3 and EU Stage 3A emission regulations, offers all around maximum productivity with faster travel speed and many features that enhance efficiency, while reducing maintenance costs. From rough terrain construction sites to landfills - the HM300-2 has the competitive edge.



Building on the technology and expertise Komatsu has accumulated since its establishment in 1921, GALEO presents customers worldwide with a strong, distinctive image of technological innovation and exceptional value. The GALEO brand will be employed for Komatsu's full lineup of advanced construction and mining equipment. Designed with high productivity, safety and environmental considerations in mind, the machines in this line reflect Komatsu's commitment to contributing to the creation of a better world.

Genuine Answers for Land & Environment Optimization

#### Wide, spacious cab with excellent visibility

- The wide cab offers a comfortable operator and passenger environment
- Viscous mounts support the cab while absorbing vibrations and noise
- Low-noise cab through improved sealing with integrated floor Interior noise level 76 dB(A)
- Additional front under view mirrors provide superior visibility
- Air suspension seat is standard
- Power window (L.H)

#### High performance and environment-friendly SAA6D125E-5 ecot3 engine

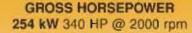
- Gross horsepower 254 kW 340HP
- Meets North American EPA Tier 3 and EU Stage 3A emission regulations for 2006
- Engine power mode selection system realizes both greater productivity and improved fuel economy
- Higher engine output and torque improve productivity in all applications

**Tiltable cab** can be tilted rearward 32 degrees to provide easy service.



#### Fully hydraulic articulated steering

- Light and easy operation
- Minimum turning radius 7.96 m 26'1"



#### NET HORSEPOWER 246 kW 329 HP @ 2000 rpm

#### **MAXIMUM GVW** 51420 kg 113,360 lb

### Komatsu designed, electronically controlled transmission for a comfortable ride.

F6-R2 counter-shaft type transmission with K-ATOMiCS (Komatsu Advanced Transmission with Optimum Modulation Control System). Transmission shift hold button optimizes the operator control

#### Easy-to-Load Body

- Heaped capacity 16.6 m<sup>3</sup> 21.7 yd<sup>3</sup>
- Low loading height 2790 mm 9'2"
- High strength body constructed of thick wear-resistant steel having 400 Brinell hardness



#### Hydro-pneumatic Suspension for all terrains

The hydro-pneumatic suspension in both front and rear suspensions assures a comfortable ride even over rough terrain.

Photo may include optional equipment.

#### Differential locks provide excellent traction in rough terrain.

The oil-cooled multiple-disc interaxle lock can be turned on and off during travel. In addition, the limited slip differentials prevent the tires on either side from slipping on soft ground for maximum traction.

#### High capacity, reliable, continuously cooled, wet type multiple-disc brakes and retarder

- Fully hydraulic controlled wet multiple-disc brake
- Retarder Absorbing Capacity (continuous descent) 370 kW 496 HP

### **PRODUCTIVITY FEATURES**

The combination of high travel speeds and an efficient engine with low emissions delivers maximum productivity at the lowest cost.

#### Komatsu Technology



Komatsu develops and produces all major components, such as engines, electronics and hydraulic components, in house.

With this "Komatsu Technology," and adding customer feedback, Komatsu is achieving great advancement in technology.

To achieve both high levels of productivity and economical performance, Komatsu has developed the main components with a total control system.

The result is a new generation of high performance and environment friendly machines.

#### High Performance Komatsu SAA6D125E-5 Engine

This engine delivers faster acceleration and higher travel speeds with high horsepower per ton in its class. Advanced technology, such as Common Rail Injection system (CRI), air to air aftercooler, and an efficient turbo-charger enables the engine to meet the North American EPA Tier 3 and EU stage 3A emission regulations. High torque at low speed, impressive acceleration, and low fuel consumption ensure maximum productivity.



#### Engine Power Mode Selection System

The system allows selection of the appropriate mode between two modes <Power mode > or <Economy mode> according to each working condition. The mode is easily selected with a switch in the operator's cab.

#### Power mode

Great productivity can be attained by taking a full advantage of high output power. It is appropriate for job sites where larger production at uphill-hauling is required.

#### Economy mode

Engine speeds of the maximum output, downshift, and upshift are set to a lower level. It is appropriate for light work on the flat ground.

#### Komatsu Designed Electronically Controlled Countershaft Transmission

The Komatsu designed Electronically Controlled Transmission called K-ATOMiCS has been a success in Komatsu's rigid dump trucks. The electronic clutch modulation system ensures proper clutch pressure when the clutch is engaged. The total control system controls both the engine and transmission by monitoring the vehicle conditions. This high technology system assures smooth shifts without shock and maximizes power train life.

#### Komatsu Designed Differential Locking Systems

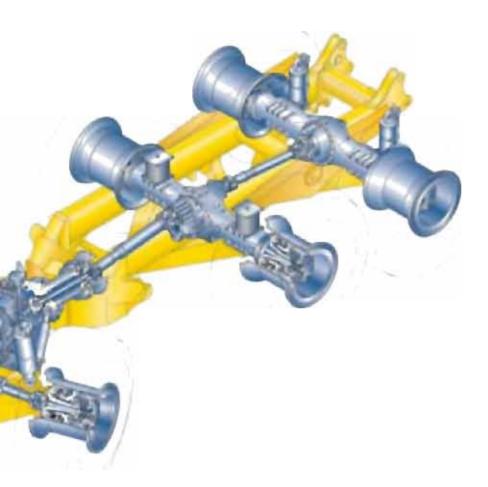
The full-time six-wheel drive system reduces slippage. A wet multiple-disk interaxle clutch also locks the three axles in unison for greater traction. The interaxle lock can be switched on and off while the truck is travelling, thereby boosting productivity. In addition, limited slip differentials prevent the tires on either side from slipping on soft ground.

#### Hydro-pneumatic Suspension

Hydro-pneumatic suspension with proven performance in larger articulated and rigid trucks is tailored for use in the HM300.

The front axle hydro-pneumatic suspension employs "De Dion' type design, allowing the machine to ride more smoothly over bumps. The rear-axles are mounted on a dynamic equalizer structure equipped with hydro-pneumatic suspension. The entire vehicle's suspension delivers a comfortable ride and maximizes productivity.





#### Large Capacity Body and Box Section Frame Structure

The HM300 has the large heaped capacity of 16.6 m³ 21.7yd³ body. The low loading height of 2790 mm 9'2" enables easy loading. The body is built of high strength wear-resistant steel with a Brinell hardness of 400, and the body shape provides excellent load stability. Rugged enough for the toughest jobs, the HM300's frame is designed using a rigid box structure with connecting torque tubes made of high strength low alloy steel.

#### Hydraulically Controlled Wet Multiple-Disc Brakes and Retarder

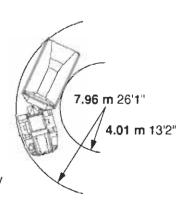
Wet multiple-disc brakes with proven performance in larger articulated and rigid trucks are tailored for use in the HM300. The large-capacity, continuously cooled,wet-multiple disc brakes also function as a highly responsive retarder which gives the operator greater confidence at higher speeds when travelling downhill.

Retarder Absorbing Capacity (continuous descent):

370 kW 496 HP

#### **Articulated Steering**

Fully hydraulic articulated steering offers low-effort operating performance and maneuverability. A minimum turning radius of only 7.96 m 26'1" provides ability to work in tight areas.



### **OPERATOR ENVIRONMENT**

Komatsu has developed a state-of-the-art, wide comfortable cab. The low level of vibration and noise ensure maximum productivity from the operator.

#### Low-noise Designed Cab

Integrated cab and floor provide airtight cab. Engine room is also sealed. The low noise and sound insulated muffler /exhaust pipe contribute to reducing sound levels.

All these together offer a quiet and comfortable operator environment.

#### Wide, Spacious Cab with Excellent Visibility

The wide cab provides a comfortable space for the operator and a full size buddy seat. Large electrically operated window and the operator's seat positioned to the left side ensures superior visibility.

#### Ergonomically Designed Cab

The ergonomically designed operator's compartment makes it very easy and comfortable for the operator to use all the controls. The result is more confident operation by operators and greater productivity.

The front under view mirrors are increased to three from one, and the rear view mirrors increased to four from two.

Newly employed laminated glass in the windshield assures safe operation. In addition, electric heated rear window facilitates defrosting.



#### Easy-to-See Instrument Panel

The instrument panel makes it easy to monitor critical machine functions. In addition, a caution light warns the operator of any problems that may occur. This Komatsu on-board monitoring system makes the machine very friendly and easy to service.

#### Steering Wheel and Pedals



#### Built-in ROPS/FOPS

These structures conform to ISO 3471-1994 standards.

#### Hydro-pneumatic Suspension for all Terrains

The hydro-pneumatic suspension assures a comfortable ride even over rough terrain and ensures maximum productivity and operator confidence.

#### Viscous Cab Mounts

Viscous mounts reduce the noise transmitted to the cab and achieve a quiet 76 dB(A) noise level



#### Air Suspension Seat is Standard

The air suspension, fabric-covered seat which is adjustable to the operator's weight is provided as standard. The air suspension seat dampens vibrations transmitted from the machine and reduces operator fatigue as well as holding the operator securely to assure confident operation.

#### **Electric Body Dump Control Lever**

The low effort lever makes dumping easier than ever.

#### Supplementary Steering and Secondary Brakes

Supplementary steering and secondary brakes are standard features.

Steering: ISO 5010-1992, SAE J1511

Brakes: ISO 3450-1996



### EASY MAINTENANCE

The HM300-2 has been designed to keep service time down and productivity up by reduced number of grease points, easy access to filters, and longer intervals between oil changes.

#### Tiltable Cab

The cab can be tilted rearward 32 degrees to provide easy maintenance/service for the engine and transmission.

Note: An external hydraulic pump is required to tilt the cab or a service crane can be used after easily removing only eight bolts...



#### **Fewer Grease Points**

The number of grease points are minimized by using maintenance-free rubber bushings.

#### **Extended Service Intervals**

In order to minimize operating costs, service intervals have been extended:

- Engine oil 500 hours
- Transmission oil 1000 hours
- Engine oil filter 500 hours
- Transmission oil filters 1000 hours

#### Guards

The following guards are provided as standard:

- Protective grille for rear window
- Engine underguard
- · Heavy duty transmission underguard
- Propeller shaft guards
- Exhaust thermal guard
- Fire prevention covers



## **SPECIFICATIONS**



#### ENGINE

Model     Komatsu SAA6D125E-5       Type     Water-cooled, 4-cycle       Aspiration     Turbo-charged, after-cooled, cooled EGR
Number of cylinders
Bore
Stroke
Piston displacement
Horsepower
SAÈ J1995
ISO 9249 / SAE J1349 Nei 246 kW 329 HP
Rated rpm
Fan drive type
Maximum torque
Fuel system Direct injection
Governor Electronically controlled
Lubrication system
Method Gear pump, force-lubrication
FilterFull-flow type
Air cleaner Dry type with double elements and
precleaner (cyclonpack type), plus dust indicator



#### TRANSMISSION

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Fig. Section 1



#### AXLES

Full time all wheel drive with limited slip differential	in all axles.
Final drive type	Planetary gear
Ratios:	
Differential	3.154
Planetary	4.667



#### SUSPENSION SYSTEM

Front	Hydro-pneumatic suspension
Rear	Combined hydro-pneumatic
	and rubber suspension system



#### STEERING SYSTEM

Type Articulated type, fully hydraulic power steering
with two double-acting cylinders
Supplementary steering Automatically actuated.
electrically powered
Minimum turning radius, wall to wall
Articulation angle



Service brakes Full-hydraulic control, oil-coc	nlar
multiple-disc type on front and center at	
Parking brake Spring applied, caliper disc t	
Retarder Front and center axle brakes act as retar	



#### MAIN FRAME

Туре .	Articulated type, box-sectioned
	construction on front and rear
	Connected by strong targue tubes.



#### BODY

Capacity:	
Struck	<b>12.9 m³</b> 16.9 yd³
Heaped (2:1, SAE)	<b>16.6 m³</b> 21.7 ýd³
	27.3 metric tons 30.1 U.S. tons
	130 kg/mm <sup>2</sup> 184,925 psi
	high tensile strength steel
Material thickness:	
Bottom	14 mm 0.55"
Front	8 mm 0.31"
Sides	
Target area	
(inside length x width)	5240 mm x 2685 mm 17'2" x 8'10"
	Exhaust heating (option)



#### HYDRAULIC SYSTEM

Hoist cylinder	Twin, 2-stage telescopic type
Relief pressure	. 20.6 MPa 210 kg/cm <sup>2</sup> 2,990 psi
Hoist time	



#### CAB

Dimensions comply with ISO 3471 and SAE J1040-1988c ROPS (Roll-Over Protective Structure) standards



#### WEIGHT (APPROXIMATE)

Empty weight	. <b>24,040 kg</b> 53,000 lb
Gross vehicle weight	. <b>51,420 kg</b> 113,360 lb
Weight distribution:	_
Empty: Front axle	55.8%
Center axle	
Rear axle	20.6%
Loaded: Front axle	30.3%
Center axle	35.5%
Rear axle	



#### TIDES

Cidildes d side, , ,	Standard tire			23.5 R2
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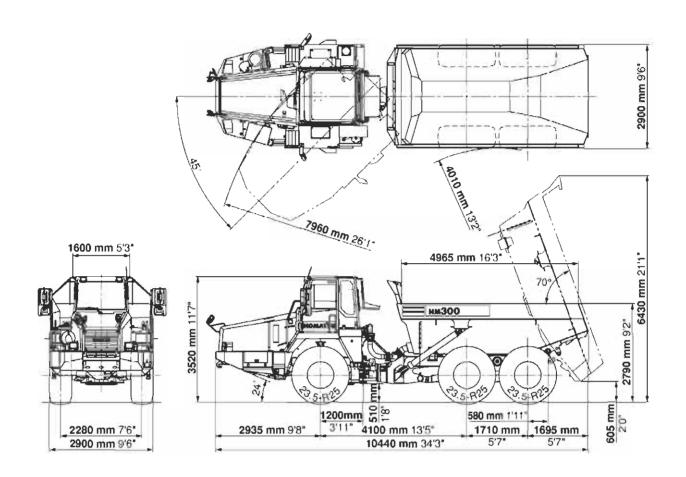


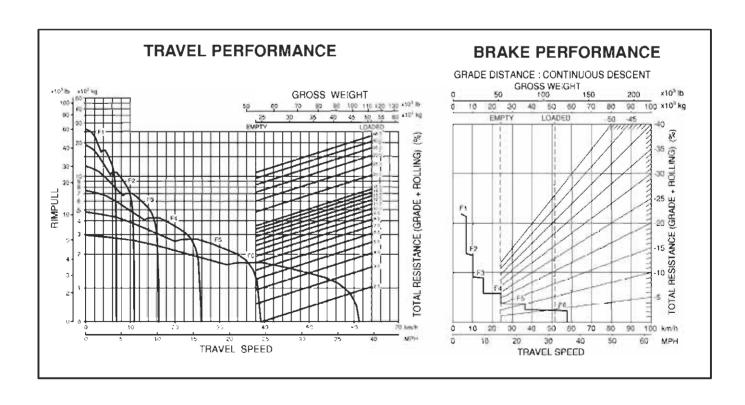
#### SERVICE REFILL CAPACITIES

Fuel tank
Engine oil
Torque converter, transmission and
retarder cooling
Differentials (total)
Final drives (total)
Hydraulic system
Suspension (total) 10.4 ltr. 2.7 U.S. Gal

#### HM300-2 ARTICULATED DUMP TRUCK









#### STANDARD EQUIPMENT FOR BASE MACHINE

#### **ENGINE:**

- Alternator, 50A/24V
- Batteries, 2 x 12V/136Ah
- Engine, Komatsu SAA6D125E-5
- Exhaust multler
- Starting motor, 1 x 7.5 kW

#### CAB:

- Air conditioner
- Ashtray
- Cigarette lighter
- Cup holder
- Electronic maintenance display/monitoring system
- · Heated rear window
- Operator seat, reclining, air suspension type with retractable 78 mm 3" width seat belt
- Passenger seat
- Power window (L.H)
- Space for lunch box
- · Steering wheel, tilt and telescopic
- · Sun visor, front window
- Tiltable ROPS cab with FOPS, sound suppression type
- Two doors, left and right

#### LIGHTING SYSTEM:

- Back-up light
- Hazard lights
- · Headlights with dimmer switch
- · Indicator, stop and tail lights

#### **GUARD AND COVERS:**

- Engine underguard
- · Exhaust muffler thermal guard
- · Fire prevention covers
- · Propeller shaft guards, front and rear
- Transmission underguard

#### SAFETY EQUIPMENT:

- · Alarm, backup
- · Anti-slip material on fenders
- Automatic supplementary steering
- · Coolant temperature alarm and light
- · Hand rails for platform
- Horn, electric
- · Ladders, left and right hand side
- Protective grille for rear window
- Rearview mirrors
- · Steering joint locking assembly
- Under view mirrors

#### BODY:

· Electronic hoist control system

#### TIRES:

• 23.5 R25

#### OTHER:

- · Centralized greasing
- · Electric circuit breaker, 24V
- · Limited slip differentials in all axles
- Mud guards
- Side marker

### OPTIONAL EQUIPMENT

#### CAB:

- Power window (R.H)
- Radio, AM/FM
- Radio, AM/FM with cassette

#### BODY:

- · Body exhaust heating kit
- Body liner
- Rock body
- · Tail gate, wire type
- Upper side extension, 200 mm 8"

#### LIGHTING SYSTEM:

- Back work lights, left and right side
- Fog lights
- Yellow beacon

#### SAFETY:

Rear view camera and monitor

#### TIDES

• 30/65 R25 (750/65 R25)

#### OTHER:

- Alternator, 75A/24V
- Fire extinguisher
- Gas charge tool
- Spare parts for first service
- Tool kit
- Vandalism protection

Standard equipment may vary for each country, and this specification sheet may contain attachments and optional equipment that are not available in your area. Please consult your Komatsu distributor for detailed information.	
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KOMAT'SU'	
CEN00070-02	Materials and specifications are subject to change without notice.