KOMATSU

HM300-2R



Articulated dump truck

Engine power 254 kW / 340 HP @ 2000 rpm

Max. payload 27.3 metric tons

Body capacity, heaped 16.6 m³

Walk-around

The HM300-2R 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 HM300-2R has the competitive edge.

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 (LH)

Tiltable cab

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



High performance and Komatsu SAA6D125E-5 engine

- Engine power mode selection system realizes both greater productivity and improved fuel economy
- Higher engine output and torque improve productivity in all applications

Fully hydraulic articulated steering

- · Light and easy operation
- · Minimum turning radius 7.96 m

Engine power 254 kW / 340 HP @ 2000 rpm

Max. payload

Body capacity, heaped

27,3 metric tons

16.6 m³

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 m³
- · Low loading height 2790 mm
- 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.

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 delivers maximum productivity at the lowest cost.

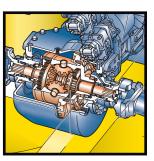


Komatsu technology

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

Powerful turbocharged and air-to-air aftercooled Komatsu SAA6D125E-5 engine provides 254 kW / 340 HP. This engine realizes high power in low fuel consumption with Common Rail Injection system (CRI), and thus it delivers higher travel speeds with high horsepower. Also 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

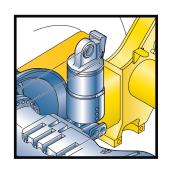
The Komatsu designed electronically controlled transmission called K-ATOMiCS has been a success in Komatsu's rigid dump trucks. The electronic clutch modulation system ensures proper clutch pressure when the clutch is engaged. The total control system controls both the engine and transmission by monitoring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

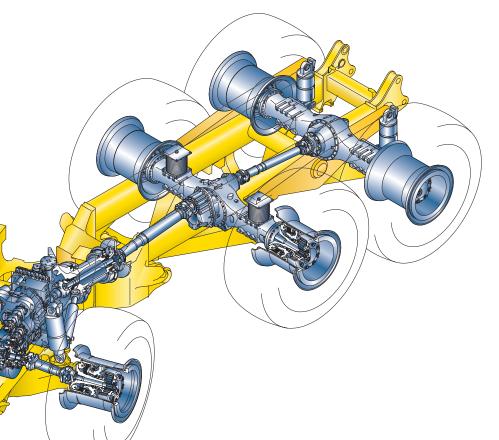
Komatsu designed differential locking systems

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 HM300-2R . 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

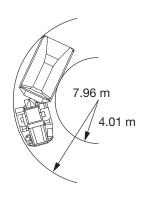
The HM300-2R has the large heaped capacity of 16.6 m³ body. The low loading height of 2790 mm enables easy loading. The body is built of high strength wear-resistant steel with a Brinell hardness of 400, and the body shape provides excellent load stability. Rugged enough for the toughest jobs, the HM300-2R '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 HM300-2R. 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 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.



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

Low effort pedals reduce operator fatigue when working continuously for long periods. The tiltable, telescoping steering column enables operators to maintain the optimum driving position at all times.





Built-in ROPS/FOPS cab

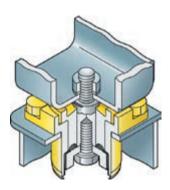
These structures conform to ISO 3471-1994 standard.

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

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 HM300-2R 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° 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.





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

Type
Number of cylinders
Bore × stroke
Bore × stroke
Piston displacement
Horsepower
SAE J1995
ISO 9249 / SAE J1349
Rated rpm
Fan drive type Mechanical
Maximum torque
Fuel system Direct injection
Governor Electronically controlled
,
Lubrication system
Method
FilterFull-flow type
Air cleaner
precleaner (cyclonpack type), plus dust indicator



Transmission

Torque converter	3-elements, 1-stage, 2-phase
Transmission	Full-automatic, counter-shaft type
Speed range	6 speeds forward and 2 reverse
Lockup clutch	Wet, single-disk clutch
Forward	Torque converter drive in 1st gear,
	direct drive in 1st lockup and all higher gears
Reverse	Torque converter drive and direct drive in all gears
	Electronic shift control with automatic
	clutch modulation in all gear
Maximum travel speed	58.6 km/h



Avloc

Full time all wheel drive with limited slip differential in all axles.
Final drive typePlanetary gear
Ratios:
Differential
Planetary4.667



Suspension system

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



Steering system

TypeArt	iculated type, fully hydraulic power steering with two double-acting cylinders
Supplementary steering	Automatically actuated,
9	electrically powered7.96 m45° each direction



Brakes

Service brakes	Full-hydraulic control, oil-cooled
	multiple-disc type on front and center axles
Parking brake	Spring applied, caliper disc type
Retarder	. Front and center axle brakes act as retarde



Main frame

TypeArticulated type, box-sectioned
construction on front and rear
Connected by strong torque tubes.



Body

Capacity:	
Struck	12.9 m ³
	16.6 m³
Payload	27.3 metric tons / 30.1 U.S. tons
Material	130 kg/mm²
	high tensile strength steel
Material thickness:	
	14 mm
Front	8 mm
Sides	12 mm
Target area	
(inside length × width)	5240 mm × 2685 mm
Heating	Exhaust heating (option)



Hydraulic system

Hoist cylinder	. Twin, 2-stage telescopic type
Relief pressure	20.6 MPa / 210 kg/cm ²
Hoist time	12 s



Cal

Dimensions comply with ISO 3471 ROPS (Roll-Over Protective Structure) standards



Weight (approx.)

Empty weight	
Neight distribution:	
Empty: Front axle	
Center axle	
Rear axle	
Loaded: Front axle	
Center axle	
Rear axle	



Tiro

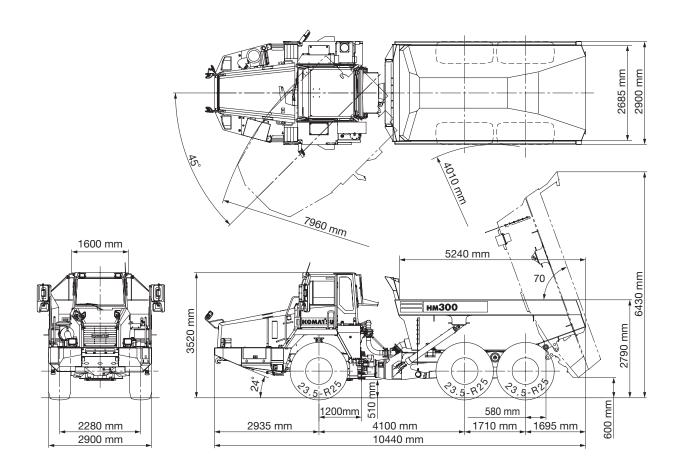
Standard tire	23.5 R25
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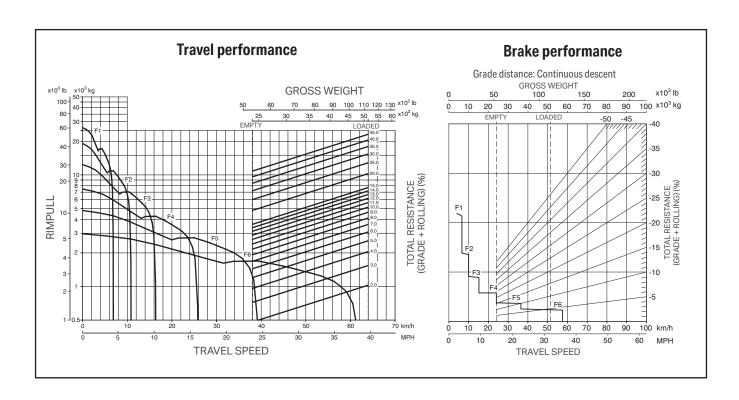


Service refill capacities

Fuel tank	
Engine oil	
Torque converter, transmission and retarder cooling	77.5 l
Differentials (total)	63.51
Final drives (total)	241
Hydraulic system	
Suspension (total)	10.41









Engine

- Alternator, 50 A/24 V
- Batteries, 2 × 12 V/136 Ah
- Engine, Komatsu SAA6D125E-5
- · Exhaust muffler
- . Starting motor, 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 width seat belt
- · Passenger seat with retractable seat belt
- 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, 24 V
- · 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

Lighting system

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

Safety equipment

Rear view camera and monitor

Tires

30/65 R25 (750/65 R25)

Other

- Alternator, 75 A/24 V
- Auto Retarder with Accelerator Control (ARAC)
- · Fire extinguisher
- · Gas charge tool
- Spare parts for first service
- Tool kit
- Vandalism protection

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