KOMATSU®

HM300-2

With Tier 3 Engine

GROSS HORSEPOWER
254 kW **340 HP**

NET HORSEPOWER
246 kW **329 HP**

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

HM 300

ARTICULATED DUMP TRUCK

Photo may include optional equipment

WALK-AROUND

The HM300-2 with the new EPA Tier 3 and EU Stage 3A emission certified "ecot3" engine offers all around maximum productivity with more horsepower and many features that enhance efficiency, while reducing maintenance costs. From rough terrain construction sites to landfills, the HM300-2 has the competitive advantage.

Fully hydraulic articulated steering

- Light and easy operation
- Minimum turning radius 7.96 m **26'1"**
- Tilt and telescoping steering column fits any operator

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

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 windows

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

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

Hydro-pneumatic suspension for all terrains.

The hydro-pneumatic suspension in both front and rear suspensions assures a comfortable ride even over rough terrain and keeps the tires on the ground at all times.

KOMTRAX™

KOMTRAX equipped machines can send location, SMR and operation maps to a secure website utilizing wireless technology. Machines also relay error codes, cautions, maintenance items, fuel levels, and much more.

HM300-2

GROSS HORSEPOWER
254 kW **340 HP** @ 2000 rpm

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 or the transmission will automatically shift through all gears.

Easy-to-load body

- Heaped capacity 16.6 m^3 **21.7 yd^3**
- Low loading height 2790 mm **9'2"**
- High strength body constructed of thick wear-resistant steel with 400 Brinell hardness

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 automatically prevents the tires on either side from slipping on soft ground for maximum traction.

High capacity, reliable, continuously cooled, wet type multiple-disc brake and retarder combination

- Fully hydraulic controlled wet multiple-disc service brakes
- Retarder Absorbing Capacity (continuous descent) 349 kW **468 HP**

PRODUCTIVITY FEATURES

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

ecot3
ecology & economy - technology 3

Komatsu's new "ecot3" engines are designed to deliver optimum performance under the toughest of conditions, while meeting the latest environmental regulations. This engine is Tier 3 EPA, EU Stage 3A and Japan emissions certified. "ecot3" – ecology and economy combined with Komatsu technology to create a high performance engine without sacrificing power or productivity.

High Performance SAA6D125E-5 Komatsu Engine

The Komatsu engine delivers faster acceleration and higher travel speeds with high horsepower per ton. Advanced technology, such as Common Rail Injection system (CRI), air-to-air aftercooler, and an efficient turbo-charger enables the engine to be North American EPA Tier 3 and EU stage 3A emission certified. High torque at low speed, impressive acceleration, and low fuel consumption ensures 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.

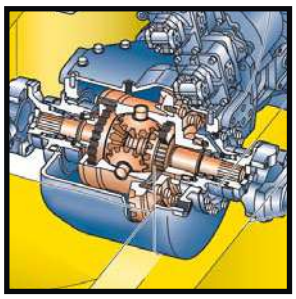
Power mode
Great productivity can be attained by taking full advantage of high output power. It is appropriate for job sites where the truck meets high resistance.

Economy mode
Engine speeds for the maximum horsepower output and the downshift and upshift speeds are set to a lower level. This mode is selected for maximum economy and lighter work applications.

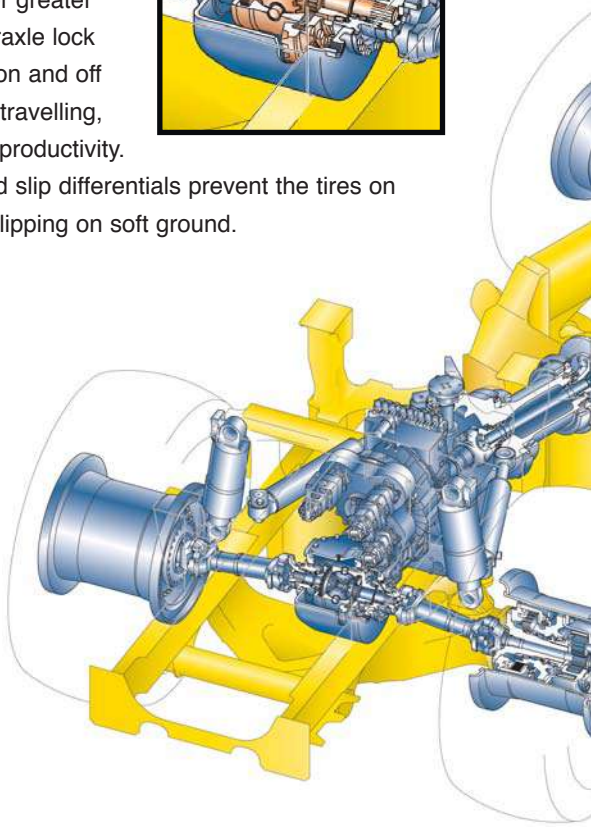
Komatsu Designed Electronically Controlled Countershaft Transmission

The Komatsu designed Electronically Controlled Transmission with 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

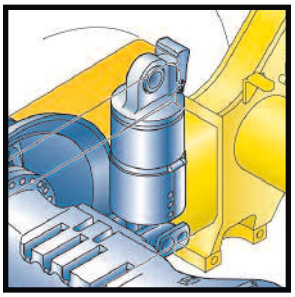


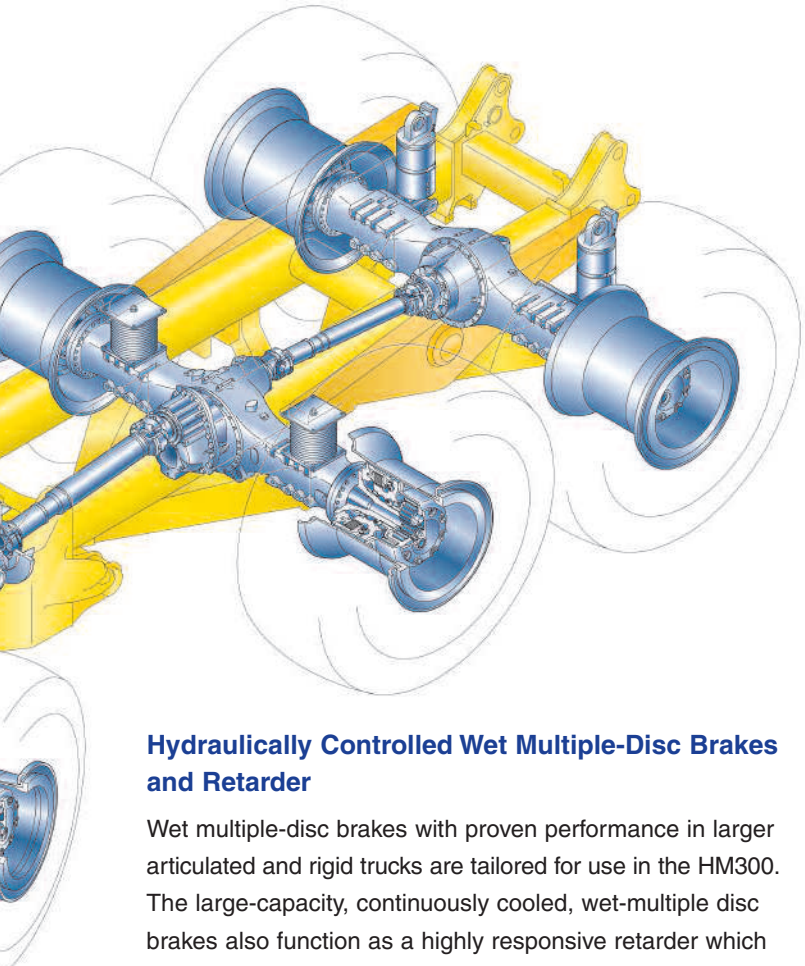
The full-time six-wheel drive system reduces slippage. A wet multiple-disk interaxle clutch also locks the three axles in unison for greater traction. The interaxle lock can be switched on and off while the truck is travelling, thereby boosting productivity. In addition, limited slip differentials prevent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



Hydro-Pneumatic Trailing Arm 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 a "De Dion" type design. The suspension is a trailing arm design which allows the truck to ride smoothly over bumps. The rear-axles are mounted on a dynamic equalizer structure equipped with hydro-pneumatic suspension. The entire vehicle's hydro-pneumatic suspension delivers a comfortable ride and maximizes productivity.





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):

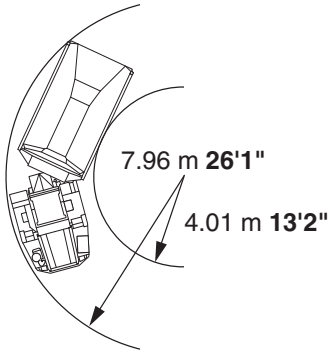
349 kW **468 HP**

Large Capacity Body and Box Section Frame Structure

The 16.6 m^3 **21.7yd^3** heaped capacity body is among the highest in its class. 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 and retains the load. 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.

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.



EASY MAINTENANCE

The Komatsu cab is a state-of-the-art, wide comfortable cab with a low level of vibration and noise, plus excellent visibility.

Low-Noise Designed Cab

Integrated cab and floor provide an airtight cab. Engine compartment is also sealed. The low noise and sound insulated muffler/exhaust pipe contribute to reducing sound levels. The combined features 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 windows 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 comfortable operation for greater productivity.

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

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 Level 2

Hydro-Pneumatic Suspension for All Terrains

The hydro-pneumatic suspension, for both front and rear axles, 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

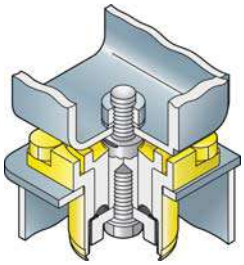
The air suspension, fabric-covered seat which is adjustable to the operator's weight is provided as standard. The air suspension seat dampens vibrations transmitted from the truck and reduces operator fatigue as well as holding the operator securely to assure confident operation.

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.



EASY MAINTENANCE

The HM300-2 has been designed to keep service time down and productivity up with a 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.

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
- Rear tire guard

SPECIFICATIONS

ENGINE

Model . . . . . Komatsu SAA6D125E-5
Type . . . . . Water-cooled, 4-cycle
Aspiration . . . . . Turbo-charged, after-cooled, cooled EGR
Number of cylinders 6
Bore . . . . . 125 mm **4.92"**
Stroke . . . . . 150 mm **5.91"**
Piston displacement . . . . . 11.04 ltr **674 in³**
Horsepower
SAE J1995 . . . . . Gross 254 kW **340 HP**
ISO 9249 / SAE J1349 . . . . . Net 246 kW **329 HP**
Rated rpm . . . . . 2000 rpm
Fan drive type . . . . . Mechanical
Maximum torque . . . . . 174 kg•m **1,259 lb. ft**
Fuel system . . . . . Direct injection
Governor . . . . . Electronically controlled
Lubrication system
Method . . . . . Gear pump, force-lubrication
Filter . . . . . Full-flow type
Air cleaner . . . . . Dry type with double elements and precleaner (cyclopack type), plus dust indicator

EPA Tier 3 certified

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 gear
Shift control . . . . . Electronic shift control with automatic clutch modulation in all gear
Maximum travel speed . . . . . 58.6 km/h **36.4 mph**

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 . . . . . 7.96 m **26'1"**
Articulation angle . . . . . 45° 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 retarder

MAIN FRAME

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

BODY

Capacity:
Struck . . . . . 12.9 m³ **16.9 yd³**
Heaped (2:1, SAE) . . . . . 16.6 m³ **21.7 yd³**
Payload . . . . . 27.3 metric tons **30.1 U.S. tons**
Material . . . . . 130 kg/mm² **184,925 psi** high tensile strength steel
Material thickness:
Bottom . . . . . 14 mm **0.55"**
Front . . . . . 8 mm **0.31"**
Sides . . . . . 12 mm **0.47"**
Target area
(inside length x width) . . . . . 5240 mm x 2685 mm **17'2" x 8'10"**
Heating . . . . . Exhaust heating (option)

HYDRAULIC SYSTEM

Hoist cylinder . . . . . Twin, 2-stage telescopic type
Relief pressure . . . . . 20.6 Mpa **210 kg/cm² 2,990 psi**
Hoist time . . . . . 12 sec

CAB

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

WEIGHT (APPROXIMATE)

Empty weight . . . . . 24,040 kg **53,000 lb**
Gross vehicle weight . . . . . 51,420 kg **113,360 lb**
Weight distribution:
Empty: Front axle 55.8%
Center axle 23.6%
Rear axles 20.6%
Loaded: Front axle 30.3%
Center axle 35.5%
Rear axles 34.2%

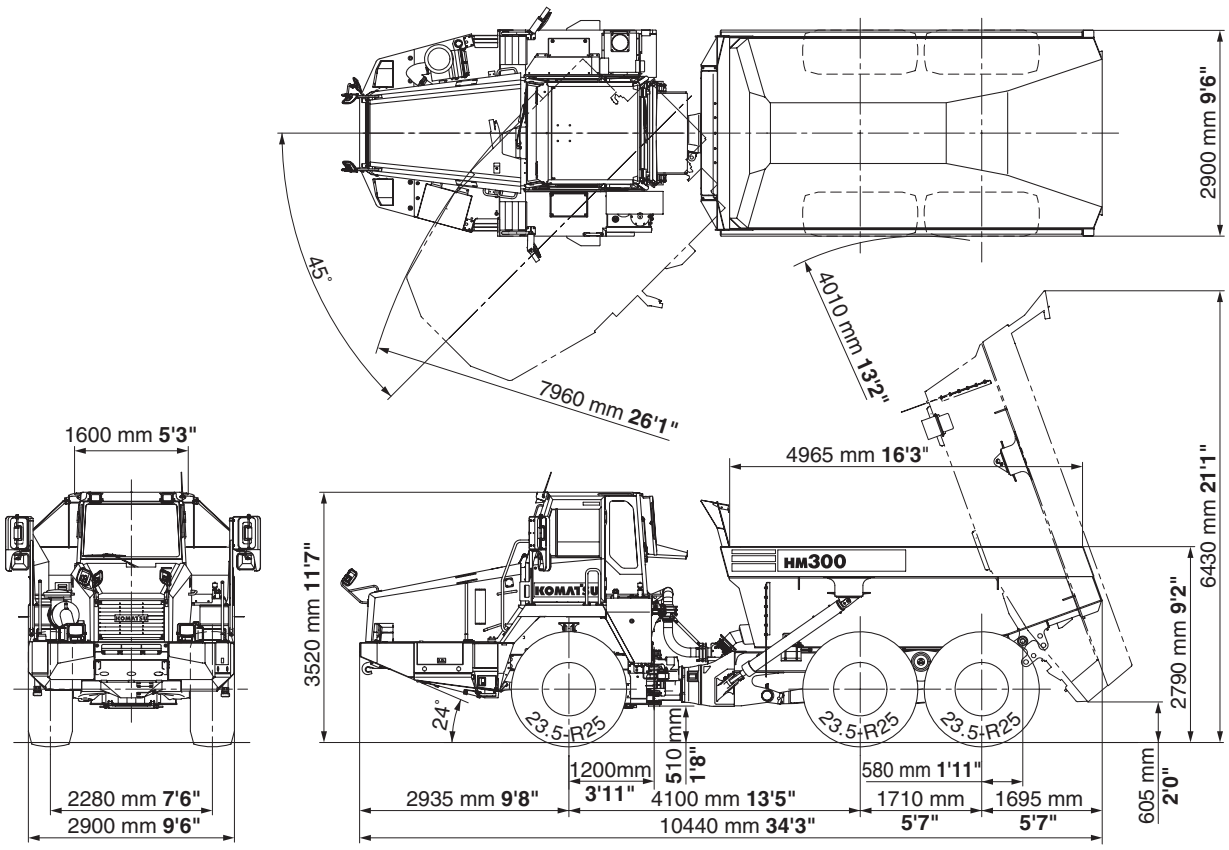
TIRES

Standard tire 23.5 R25

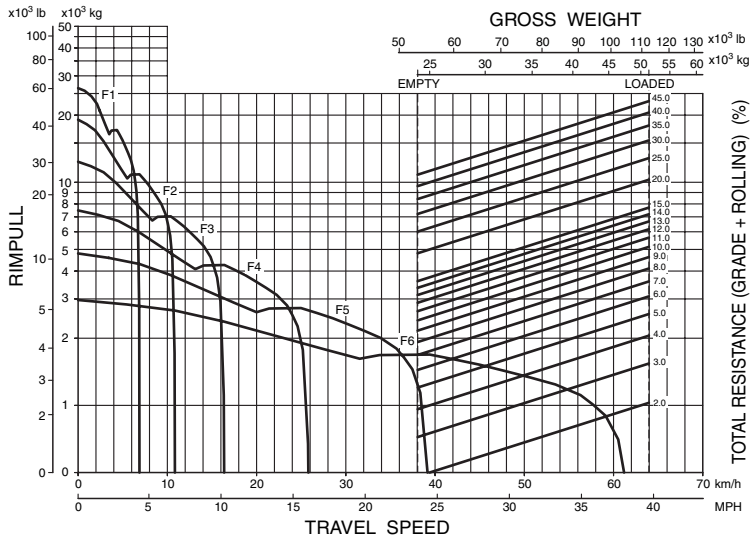
SERVICE REFILL CAPACITIES

Fuel tank	384 ltr.	**101.5 U.S. Gal**
Engine oil	37 ltr.	**9.8 U.S. Gal**
Torque converter, transmission and retarder cooling	77.5 ltr.	**20.5 U.S. Gal**
Differentials (total)	63.5 ltr.	**16.8 U.S. Gal**
Final drives (total)	24 ltr.	**6.3 U.S. Gal**
Hydraulic system	120 ltr.	**31.7 U.S. Gal**
Suspension (total)	10.4 ltr.	**2.7 U.S. Gal**

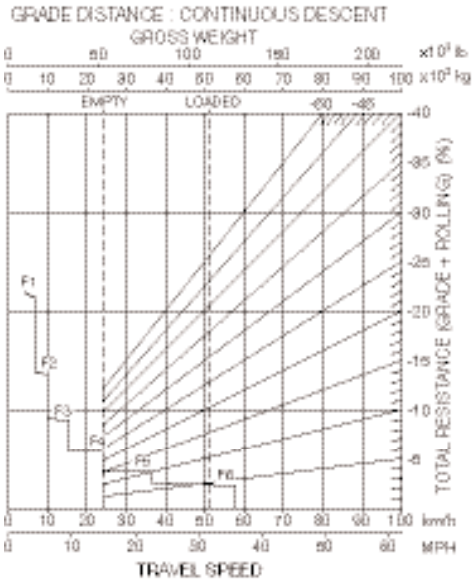
DIMENSIONS



TRAVEL PERFORMANCE



BRAKE PERFORMANCE



STANDARD EQUIPMENT FOR BASE MACHINE

ENGINE
- Alternator, 50A/24V
- Air cleaner, dry type with double elements and precleaner, plus dust indicator
- Batteries, 170 Ah/2 x 12V
- Electric governor
- Engine, Komatsu SAA6D125E-5, turbocharged and air-to-air aftercooled, high pressure common rail injection system, 2006 USA Tier 3 certified, diesel
- Exhaust muffler with stack
- Full-automatic F6 R2 transmission with K-ATOMiC shift control and automatic T/C lockup
- Separator, fuel/water
- Starting motor, 11.0 kW
- Switch for power or economy setting

CAB
- 12 volt outlet port
- Air conditioner/heater/defroster, electronically-controlled
- Ashtray
- Cigarette lighter
- Cup holder
- Dual entry
- Electronic hoist control system
- Electronic maintenance display/ monitoring system
- Floormat
- Heater rear window
- Operator seat, reclining, air suspension type with retractable 78 mm **3"** seat belt
- Passenger seat with 78 mm **3"** seat belt
- Power windows
- Radio AM/FM with cassette
- Rear window guard
- ROPS/FOPS level 2
- 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 oil pan
- Exhaust/muffler thermal guard
- Propeller shaft guards, front and rear
- Transmission underguard
- Rear tire guards

MONITORING SYSTEM
- Instrument panel (digital display with service meter and odometer, fuel gauge, speedometer, tachometer, coolant temperature, torque converter oil temperature, retarder oil temperature)
- Warning light and alarm system (parking brake, dump body float, fuel, secondary steering, coolant temperature, torque converter oil temperature, retarder oil temperature, battery charge, steering oil temperature, engine oil pressure, retarder oil pressure, tilt caution, engine system, transmission system, retarder system)

OTHER STANDARD EQUIPMENT
- Alarm, backup
- Body, 16.6 m^3 **21.7 yd^3**
- Body lockout bar
- Centralized greasing
- Limited slip type differential in all axles
- Electric circuit breaker, 24 volt
- Hand rails for platform
- Horn, electric
- Hydropneumatic suspension, front and rear
- Interaxle lockup, clutch type
- KOMTRAX™
- Ladders, left and right hand side
- Payload, dump counter
- Provision for tailgate
- Rearview mirrors
- Rearview mirrors, additional, left- and right-hand side
- Retarder/brake system, continuously cooled
- Steering system, auxiliary, automatic electric
- Rims for 23.5 x 25 tires (set of 6)
- Under view mirror, front

OPTIONAL EQUIPMENT

BODY
- Body exhaust heating kit
- Delete body
- Fender kit for wide tires
- Tail gate, scissors type

LIGHTING SYSTEM
- Fog lights
- Side work lights, left and right side

TIRES
- Bridgestone . . 23.5R25 VLT E3
- Michelin . . . . . 23.5R25 XADN
  . . . . . 23.5R25 XADT
- Goodyear . . . . 23.5R25 RL-2+

OTHER
- Alternator, 75A/24V

ALLIED ATTACHMENTS
- Automatic lubrication
- Body liners, steel and poly
- Body sideboards - 203 mm **8"** high
- Tailgate field kit

AESS701-02 K04(5M) C 4/07(EV-1)

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