KOMATSU

HM300-2

GROSS HORSEPOWER
254 kW 340 HP

NET HORSEPOWER
246 kW 329 HP

MAXIMUM GVW
51420 kg 113,360 lb

Photo may include optional equipment.
The HM300-2 with new ecot3 engine certified by EPA Tier 3 and EU Stage 3A emissions offers all around maximum productivity with faster travel speed. It features enhanced efficiency while reducing maintenance costs. From rough terrain construction sites to landfills - the HM300-2 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 (L.H)

**High performance and environment-friendly SAA6D125E-5 ecot3 engine**
- Gross horsepower 254 kW 340HP
- EPA Tier 3 and EU Stage 3A emissions certified
- 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 26’1”

Tiltable cab can be tilted rearward 32 degrees to provide easy service.
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 21.7 yd³
- 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.

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
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 turbocharger enables the engine is EPA Tier 3 and EU Stage 3A emissions certified. 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.
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):

\[370 \text{ kW} \quad 496 \text{ HP}\]

Articulated Steering

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

Large Capacity Body and Box Section Frame Structure

The HM300 has the large heaped capacity of \[16.6 \text{ m}^3 \quad 21.7\text{yd}^3\] body. The low loading height of \[2790 \text{ mm} \quad 9'2"\] 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.

Hydraulic-pneumatic Suspension

Hydraulic-pneumatic suspension with proven performance in larger articulated and rigid trucks is tailored for use in the HM300. The front axle hydraulic-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 hydraulic-pneumatic suspension. The entire vehicle’s suspension delivers a comfortable ride and maximizes productivity.
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**
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 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
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**: 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
- **Fuel system**: Direct injection
- **Governor**: Electronically controlled
- **Lubrication system**: Gear pump, force-lubrication
- **Air cleaner**: Dry type with double elements and precleaner (cyclonpack type), plus dust indicator
- **Rated rpm**: 2000 rpm
- **Bore**: 125 mm 4.92"
- **Number of cylinders**: 6
- **Aspiration**: Turbo-charged, after-cooled, cooled EGR
- **Model**: Komatsu SAA6D125E-5

### 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**: 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 172" x 810"
- **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 ROPS (Roll-Over Protective Structure) standard

### 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 axle 20.6%
  - Loaded: Front axle 30.3%, Center axle 35.5%, Rear axle 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

### 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

### 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
### STANDARD EQUIPMENT FOR BASE MACHINE

**ENGINE:**
- Alternator, 50A/24V
- Batteries, 2 x 12V/136Ah
- Engine, Komatsu SAA6D125E-5
- Exhaust muffler
- 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 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, 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
- Tail gate, wire type
- Upper side extension, **200 mm 8”**

**LIGHTING SYSTEM:**
- Fog lights
- Yellow beacon

**SAFETY:**
- Rear view camera and monitor

**TIRES:**
- 30/65 R25 (750/65 R25)

**OTHER:**
- Alternator, 75A/24V
- Auto Retarder with Accelerator Control (ARAC)
- 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.

www.Komatsu.com Printed in Japan 201403 IP.AD

KOMATSU®

Materials and specifications are subject to change without notice. KOMATSU is a trademark of Komatsu Ltd. Japan.