

Australia & New Zealand Specifications

ARTICULATED TRUCK



HORSEPOWER

Gross: 332 HP 248 kW Net: 324 HP 242 kW

PAYLOAD

28,000 kg

BODY CAPACITY

Heaped (SAE 2:1): 17.1 m³





Photos may include optional equipment.

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PRODUCTIVITY ON DEMAND

Komatsu Traction Control System (KTCS) automatically engages the inter axle lock and the KTCS braking to provide optimal traction in soft ground conditions.

Selectable working modes for Economy and Power allow machine performance to be adjusted depending on operator's demand and operating conditions.

Komatsu SAA6D125E-7 variable geometry turbocharged and aftercooled 11.04 litre diesel engine is EPA Tier 4 Final emissions certified.

- Heavy duty Selective Catalytic Reduction (SCR) system
- Diesel Exhaust Fluid (DEF) system
- Komatsu Diesel Particulate Filter (KDPF) system
 Heavy duty cooled Exhaust Gas Recirculation (EGR) system
- Electronic control system seamless to the operator
- Variable Geometry Turbocharger (VGT) system
- Heavy duty High Pressure Common Rail (HPCR) fuel injection system

Variable Geometry Turbocharger (VGT) uses a hydraulic actuator to provide optimum air flow under all speed and load conditions.

Komatsu Diesel Particulate Filter (KDPF) and Selective Catalytic Reduction (SCR) systems reduce particulate matter and NOx while providing automatic regeneration that does not interfere with daily operation.

Fluid neutral or better

Fuel & DEF total consumption is less than fuel consumed by prior model.

Advanced diagnostic system continuously monitors machine operation and vital systems to identify machine issues and assist with troubleshooting.

Large LCD colour monitor panel:

- 7" high resolution screen
- Provides "Ecology Guidance" for fuel efficient operation

Wide & spacious cab with excellent visibility:

- Centre-located operator's seat
- · Short nose design
- The rounded engine hood provides improved front visibility.
- · Colour rearview monitoring system
- The wide cab offers a comfortable operator and passenger environment



For operator comfort:

- Low noise cab through improved sealing with integrated floor.
- Interior noise level 73 dB(A)
- Air suspension seat Radio with AUX terminal

The KOMTRAX® telematics system is standard on Komatsu equipment with no subscription-fee's throughout the life of the machine. Using the latest wireless technology, KOMTRAX® transmits valuable information such as location, utilisation, and maintenance records to a PC or smartphone app. Custom machine reports are provided for identifying machine efficiency and operating trends. KOMTRAX® also provides advanced machine troubleshooting capabilities by continuously monitoring machine health.

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).

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

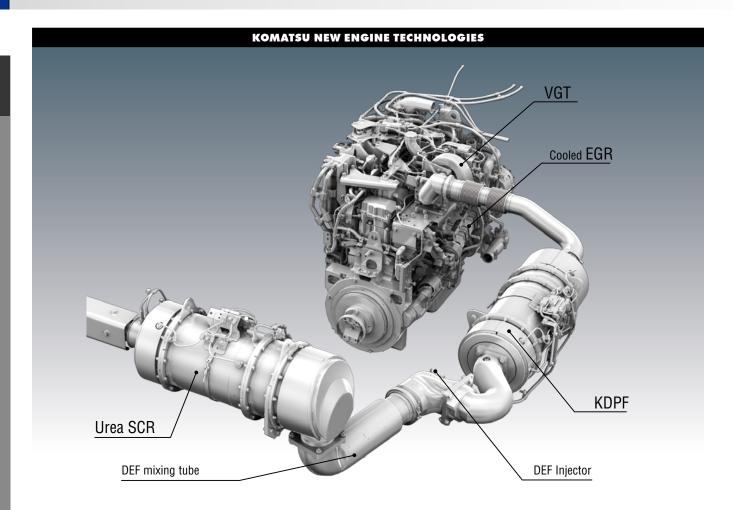
- Fully hydraulic controlled wet multiple-disc brakes
- Retarder absorbing capacity (continuous descent) 392 kW 526 HP

Hydro-pneumatic suspension for all terrains. The hydro-pneumatic suspension on both front and rear suspensions assures a comfortable ride even over rough terrain.

Easy-to-load body:

- Heaped capacity 17.1 m³
- · Low loading height 2830 mm
- High strength body constructed of thick wear-resistant steel having 400 Brinell hardness.

PERFORMANCE FEATURES



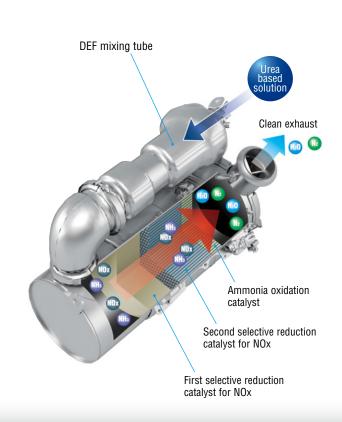
New Tier 4 Final Engine

The Komatsu SAA6D125E-7 engine is EPA Tier 4 Final emissions certified and provides exceptional performance while reducing fuel consumption. Based on Komatsu proprietary technologies developed over many years, this new diesel engine reduces nitrogen oxides (NOx) by more than 80% when compared to Tier 4 interim levels. Through the in-house development and production of engines, electronics, and hydraulic components, Komatsu has achieved great advancements in technology, providing high levels of performance and efficiency in virtually all applications.

Technologies Applied to New Engine

Heavy-duty aftertreatment system

This new system combines a Komatsu Diesel Particulate Filter (KDPF) and Selective Catalytic Reduction (SCR). The SCR NOx reduction system injects the correct amount of DEF at the proper rate, thereby decomposing NOx into non-toxic water (H₂O) and nitrogen gas (N₂).

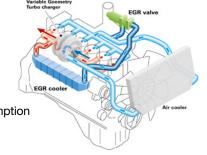


Heavy-duty cooled Exhaust Gas Recirculation (EGR) system

The system recirculates a portion of exhaust gas into the air intake and lowers combustion temperatures, thereby

reducing NOx emissions.
EGR gas flow has been decreased for Tier 4 Final with the addition of SCR technology. The system achieves a dynamic reduction of NOx, while helping reduce fuel consumption

below Tier 4 Interim levels.

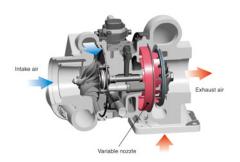


Advanced Electronic Control System

The electronic control system performs high-speed processing of all signals from sensors installed in the vehicle providing total control of equipment in all conditions of use. Engine condition information is displayed via an on-board network to the monitor inside the cab, providing necessary information to the operator. Additionally, managing the information via KOMTRAX helps customers keep up with required maintenance.

Variable Geometry Turbocharger (VGT) system

The VGT system features proven Komatsu designed hydraulic technology for variable control of air-flow and supplies optimal air according to load conditions. The upgraded version provides better exhaust temperature management.



Heavy-Duty High-Pressure Common Rail (HPCR) Fuel Injection System

The system is designed to achieve an optimal injection of high-pressure fuel by means of computerised control, providing close to complete combustion to reduce PM emissions.

While this technology is already used in current engines, the new system uses high pressure injection, thereby reducing both Particulate Matter (PM) emissions and fuel consumption over the entyre range of engine operating conditions. The Tier 4 Final engine has advanced fuel injection timing for reduced fuel consumption and lower soot levels.



PERFORMANCE FEATURES

Low Fuel Consumption

A variable displacement piston pump consumes engine power only as needed to eliminate unnecessary Power Take-Off (PTO) inefficiencies. Design improvements to the drive axles as well as the transmission have been implemented to reduce driveline parasitic losses.

The electronic engine control has been updated with the inception of the SCR technology to conform to EPA Tier 4 Final emissions standards. All of these factors combine to allow for the new HM300 to operate at the same performance level as its predecessor while improving fuel efficiency. The quantity of diesel fuel and DEF consumed by the HM300-5 is less than the quantity of fuel alone consumed by the previous model.

Komatsu Auto Idle Shutdown

In order to reduce unwanted idle time, Komatsu offers Komatsu Auto Idle Shutdown. This function will shut the engine off and apply the parking brake and hydraulic lock

after a preset idle time limit.



Selectable Working Modes

The operator can choose between two working modes, Economy Mode or Power Mode, according to their work demand and conditions.

Power mode



Appropriate for higher production jobs and uphill hauling applications. The power mode increases the engine maximum output and raises the upshift and downshift engine speeds during operation.

Economy mode



Appropriate for lighter work on flat ground. The economy mode lowers the engine maximum output along with lowering the upshift and downshift engine

speeds during operation.



Large Capacity Body

The HM300-5 has a heaped body capacity of 17.1 m³. The low loading height of 2830 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. HM300's frame employs a rigid box structure utilising high tensile strength steel, and is rugged enough for the toughest jobs.



Komatsu Designed Electronically Controlled Countershaft Transmission

The Komatsu designed electronically controlled transmission called K-ATOMiCS has been a success in Komatsu's 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 the transmission by monitoring the vehicle conditions. This high technology system assures smooth shifts with minimal shock and maximises the power train life.





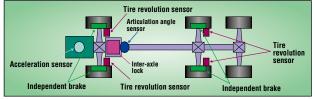
Komatsu Traction Control System (KTCS)

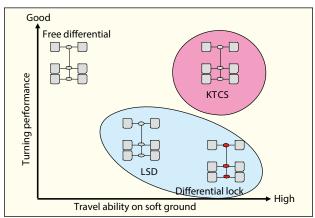
The KTCS was developed by Komatsu to allow for maximum machine performance in soft and slippery ground conditions. Komatsu leveraged its prior experience with the traction control systems in bulldozers and rigid dump trucks to develop this system for use in articulated dump trucks.

The KTCS monitors the wheel speeds on the front and middle axles. If the system detects wheel slip, it will automatically engage the inter axle lock to improve machine performance. If the machine continues to detect wheel slip it will brake the wheel that slip was detected on. It will continually monitor the wheel speeds and engage the brakes as necessary.

KTCS is automatically activated and deactivated.

The inter-axle lock can also be engaged by the operator via a rocker switch located on the dash panel.





Payload Meter (PLM)

A payload meter is included as standard equipment on the new HM300-5. The payload tonnage is displayed on the Machine Monitor and is visible to the haul truck operator. An external display lamp mounted on the top of the cab communicates payload status to the loader operator. The external display lamp indicator lights are visible from both sides of the truck so it is always in sight of the loader operator.

PLM data is transmitted by KOMTRAX and can be accessed via the internet. Detailed data is stored in the truck's controller and can be directly downloaded from the truck to a PC.



External display lamp



GENERAL FEATURES



Rear View Monitoring System

The rear view camera and monitor are equipped as standard.



Rear view monitor



Rear view camera

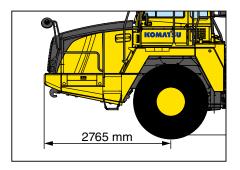
Centre-located Operator Seat

Placing the seat at the centre of the operator's cabin provides a wide view of the working area.



Short Nose

The layout of the cooling system allows for a short nose shape and increases the operator's field of view.



Round Convex Mirrors and Heated Rear View Mirrors (optional)

Round convex mirrors provide a wide viewing angle directly in front of the hood. The heated rear view mirrors can be easily folded and are standard.





Heated mirror (optional)

Built-in ROPS/FOPS Cab

These structures conform to ISO 3471 ROPS (Roll-Over Protective Structure) standard, and ISO 3449 FOPS (Falling Objects Protective Structure : Level II) standard.

Secondary Engine Shutdown Switch

The engine shutdown switch is added in the cab for emergency use.



LED Rear Combination Lamps (Standard)

Long-life LED stop, tail and turn signal lamps are standard.



LED lamp

Hydraulically Controlled Wet Multiple-disc Brakes and Retarder

Wet multiple-disc brakes with proven performance in other Komatsu dump trucks are tailored for use in the HM300-5. 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.

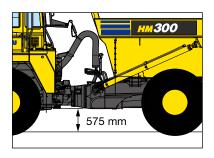
Retarder Absorbing Capacity (continuous descent): 392 kW 526 HP

Secondary Steering

The secondary steering system is automatically activated if the hydraulic pressure of the steering hydraulic circuit lowers due to a failure in the hydraulic system. This can also be activated manually by the secondary steering switch in the cab. The pilot lamp on the LCD monitor tells the operator that the system is operable when turning the key switch on. Conform to: ISO 5010, SAE J1511

Ground Clearance

The lowest surface of the hitch is higher than the front axle differential gear housing, maximising the HM300's ground clearance.





WORKING ENVIRONMENT



Ergonomic Comfort

Ergonomically designed curved dashboard allows switches to be arranged so that they are in easy reach of the operator.



Low Noise Design

The large cab is mounted with Komatsu's unique ROPS/FOPS viscous mounts. The low-noise engine, hydraulically driven fan, and hydraulic pumps are mounted with rubber cushions, and the cab sealing is designed to provide a quiet, low-vibration, dustproof, and comfortable operating environment.

Operator's ear noise (ISO6396) 73 dB (A) Dynamic noise level (outside) 108 dB (A)

Air Suspension Seat

The air suspension, fabric-covered seat is adjustable to the operator's weight and is provided standard. The air suspension seat dampens vibrations transmitted from the machine and reduces operator fatigue. The seat is heated for operator comfort.

3 Point Seat Belt

A three-point seat belt is standard equipment. The seat belt can be converted to a two-point lap belt.

Foldable Passenger Seat

The cushion and the back rest of the passenger seat are foldable. Folding the cushion allows the operator to easily come in and out of the cab and allows easy access to the recirculation filter of the air conditioner. Folding the backrest allows easy access to the storage behind the seat.



Tilt-away Steering Column

The tilt steering column and telescopic steering wheel allow the operator to set the steering wheel to the desired position. The tilt mechanism incorporates a spring-assist for easy adjustment.



Radio with AUX Terminal

By connecting an auxiliary device to this plug, the operator can hear sound through the speakers in the cab.

Two DC12V Electrical Outlets

Two DC12 volt outlets are standard in the operators cab. A 12 volt cigarette lighter is located on the front side of the right console and an additional 12 volt outlet is located on the rear right corner behind the operator seat.



Cigarette lighter
DC12V electrical outlet
AUX terminal



Hydro-pneumatic Suspension

The front axle hydro-pneumatic suspension employs "De Dion" type design, allowing the machine to ride more smoothly over rough terrain. The rear-axles are mounted on a dynamic equaliser structure equipped with hydro-pneumatic suspension. The entyre suspension system delivers a comfortable ride and maximises productivity.

Electronic Hoist Control Lever

The control lever is short in travel and can be operated with a light effort. A "Kick-out function" eliminates a need to hold the lever in "raise" position.
Furthermore, body seating shock is significantly reduced because a sensor detects the body just before seating on the frame and reduces the lowering speed.



INFORMATION & COMMUNICATION TECHNOLOGY

Ecology Guidance

The monitor panel provides guidance to the operator to help promote energy saving operation.

For example, if the operator stops the machine for a long period of time with the engine idling, the message "Avoid excessive engine idling" is displayed on the monitor panel.

The ecology guidance function displays six (6) messages:

- Avoid Excessive Engine Idling
- Release the Hoist Lever
- Operating the Accelerator Pedal with Brake Actuated Lowers Fuel Economy
- Shift Up
- Avoid Operating the Accelerator Pedal with the Body Moving Down
- Avoid Hard Use of Steering

Ecology Gauge

The ecology gauge indicates a momentary fuel consumption rate during operation.

Operating the machine by keeping the gauge within the green zone leads to energy-saving operation.



Ecology gauge Fuel consumption gauge



Energy Saving Operation Guide

The operator can check the operation record, Ecology Guidance Record, and fuel consumption record. The Operation Records indicate the status of the machine for the current day.

The Ecology Guidance Records displays a tally of each guidance message. During operation, operators are encouraged to reduce guidance messages in order to achieve energy-saving operation.

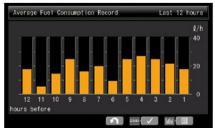
The Average Fuel Consumption Logs graph fuel consumption for the previous 12 hours (based on service meter reading) and daily fuel consumption for the previous 7 days.



Operation Records



Ecology Guidance Records



Average Fuel Consumption Record

Machine Monitor

The machine monitor displays various machine information and allows for various settings of the machine.

Switch panel

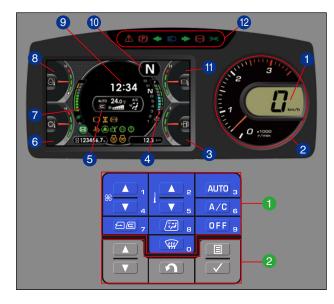
The switch panel is used to select various LCD unit screens and the air conditioner control screen.

By using the switch panel, you can display various user menus on the LCD unit screen and access the settings of the machine.

Large Multi-Lingual LCD Monitor

A large user-friendly colour monitor provides excellent screen visibility through the use of a TFT liquid crystal display that can easily be read at various angles and lighting conditions. A keypad provides simple and easy navigation to machine operation information.





Machine Monitor

- 1 Speedometer
- 2 Engine tachometer
- 3 Fuel gauge
- 4 DEF level gauge
- 6 Air conditioner display
- 6 Torque converter oil temperature gauge
- **7** Ecology gauge
- 8 Engine coolant temperature gauge
- Olock
- 10 Shift indicator
- Retarder oil temperature gauge
- 12 LED indicator

Switch Panel

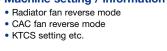
Air conditioner switches / Numeral key pad

Punction switches

1 Ecology Guidance

- Operation records
- Ecology guidance records
- Average fuel consumption record
- Configurations

Machine setting / information





3 KDPF regeneration

- Setting regeneration disable
- Operation of manual stationary regeneration
- 4 SCR information



Maintenance

 Check and reset of various maintenance intervals

6 Monitor setting

- Language setting (27 languages)
- Rear view monitor setting
- Measurement unit setting
- Screen brightness adjustment etc.



MAINTENANCE FEATURES

Ground Access to Filters

The oil filters of the transmission and the brake systems can be serviced from ground level.



Reversible Fan

The radiator fan and Charge Air Cooler (CAC) fan are driven hydraulically. You can reverse the rotation of the radiator fan and/or CAC fan to blow off dirt and dust accumulated on respective cores. Fan reverse mode can be controlled on the monitor.







Easy Access DEF Tank

Located to the rear of the fuel tank, and easy to access.





Tiltable Cab with Power Tilt

The cab can be tilted rearward by 29 degrees to provide easy access to the engine and transmission for service. Electrically-operated cab tilt is standard.



Round Design Engine Hood and Grill

The lightweight resin hood is easy to open and close. The CAC cover is also made of resin.

Electric Fuel Priming Pump

Electric fuel priming pump is equipped as standard.



Maintenance Information

DEF Level and Refill Timing

The DEF level gauge is displayed continuously on the right side of the monitor screen. In addition, when the refill timing* is reached, the DEF low level guidance appears as a pop up display to inform the operator in real time.

* The Tier 4 Final emission requirements for off-road engines stipulates that the engine output has to be limited when DEF level becomes very low.



DEF level gauge

KALSS AUSTRALIAN STANDARD SPECIFICATION



Emergency Stop

1x Cab, 2x External E-Stops, enable the machine to be shut down in the case of an emergency.



Automatic Greasing System With ground level refill.



Rotating Amber Beacon & PLM lights





Battery Isolator

Battery isolator can be used to disconnect power when performing service work.



Wheel Chocks

Steel type wheel chocks with storage brackets.



LED Tailights, and Reverse Camera

LED lights and reverse camera on the rear for improved visibility.

KOMTRAX EQUIPMENT MONITORING



- KOMTRAX is Komatsu's remote equipment monitoring and management system
- KOMTRAX continuously monitors and records machine health and operational data
- Information such as fuel consumption, utilisation, and a detailed history lowering owning and operating cost



- Know when your machines are running or idling and make decisions that will improve your fleet utilisation
- Detailed movement records ensure you know when and where your equipment is moved
- Up to date records allow you to know when maintenance is due and help you plan for future maintenance needs





- KOMTRAX data can be accessed virtually anywhere through your computer, the web or your smart phone
- Automatic alerts keep fleet managers up to date on the latest machine notifications



- Knowledge is power make informed decisions to manage your fleet better
- Knowing your idle time and fuel consumption will help maximise your machine efficiency
- Take control of your equipment - any time, anywhere



 KOMTRAX is standard equipment on all Komatsu construction products









For construction and compact equipment.

For production and mining class machines.

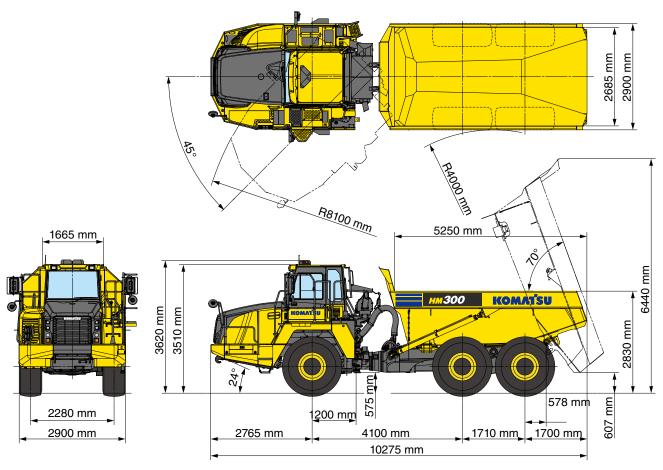
SPECIFICATIONS

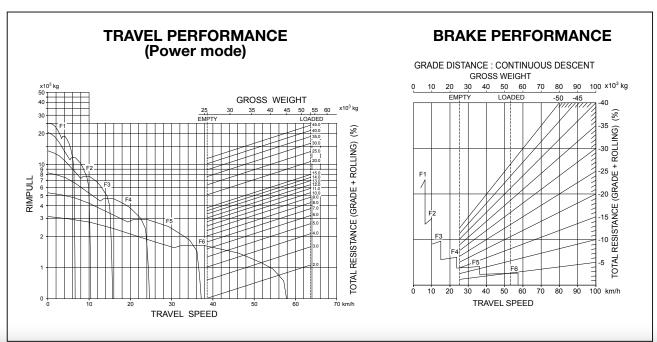
| ENGINE |
|---|
| Model Komatsu SAA6D125E-7* Type Water-cooled, 4-cycle Aspiration Turbo-charged, after-cooled, cooled EGR Number of cylinders 6 Bore 125 mm Stroke 150 mm Piston displacement 11.0 ltr Horsepower: SAE J1995 Gross 248 kW 332 HP ISO 9249 / SAE J1349 Net 242 kW 324 HP Rated rpm 2000 rpm Fan drive type Hydraulic driven Maximum torque 171 kg•m 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 |
| *EPA Tier 4 Final emissions certified |
| TRANSMISSION |
| |
| Torque converter |
| waxiinum tavei speed |
| AXLES |
| Full time all wheel drive with Komatsu Traction Control System (K-TCS) Final drive type |
| SUSPENSION SYSTEM |
| Front |
| STEERING SYSTEM |
| TypeArticulated type, fully hydraulic power steering |
| with two double-acting cylinders Secondary steering |
| CAR |
| Ctondord 1000440 (E0D0) |
| StandardISO3449 (FOPS) ISO3471 (ROPS) |

| BRAKES |
|--|
| Service brakesFull-hydraulic control, oil-cooled multiple-disc type on front and centre axles StandardISO3450 Parking brakeSpring applied, caliper disc type RetarderFront and centre axle brakes act as retarder |
| MAIN FRAME |
| Type |
| BODY |
| Capacity: Struck 13.4 m³ Heaped (2:1, SAE) 17.1 m³ Payload 28.0 metric tons Material 130 kg/mm² high tensile strength steel Material thickness: 8 mm Bottom 14 mm Front 8 mm Sides 12 mm Target area (inside length x width) 5250 mm x 2685 mm |
| Heating Exhaust heating (option) |
| HYDRAULIC SYSTEM |
| Hoist cylinder |
| WEIGHT (APPROXIMATE) |
| Empty weight. 25,395 kg Gross vehicle weight. 53,475 kg Weight distribution: 58.9% Empty: Front axle. 22.5% Rear axle. 18.6% Loaded: Front axle. 30.8% Centre axle. 36.0% Rear axle. 33.2% |
| S |
| TYRES |
| Standard tyre |
| SERVICE REFILL CAPACITIES |
| Fuel tank |
| retarder cooling 80 ltr Differentials (total) 71.5 ltr Final drives (total) 23 ltr Hydraulic system 103 ltr Suspension (total) 10.4 ltr |

SPECIFICATIONS









STANDARD EQUIPMENT FOR BASE MACHINE

ENGINE:

- Air cleaner dust level indicator
- Air cleaner, dry type, double elements
- Air pre-cleaner
- Alternator, 90 A, 24 V
- Batteries, 2 x 12 V/200 Ah
- Engine, Komatsu SAA6D125E-7
- Hydraulic driven cooling fan, for after cooler
- Hydraulic driven cooling fan, for radiator
- Komatsu Diesel Particulate Filter (KDPF)
- Selective Catalyst Reduction (SCR) system
- Starting motor, 7.5 kW
- Two mode engine power system (Economy and Power)
- Variable Geometry Turbocharger (VGT)

CAB:

- 12 V cigarette lighter
- 2 x DC12V electrical outlets
- Air conditioner/Heater/Defroster
- AM/FM radio with AUX terminal
- Colour LCD/TFT multi-monitor
- Floor mat
- Operator seat, reclining, air suspension type with 3-point retractable seat belt, 76 mm width lap belt, 50 mm width shoulder belt
- Passenger seat with 2-point retractable seat belt, 76 mm width
- Power window (LH)
- ROPS/FOPS cab Level 2
- Sliding window (RH)
- Steering wheel, tilt and telescopic
- Sun visor, front window
- Tiltable ROPS cab with FOPS, sound suppression type
- Windshield washer and wiper, front and rear

LIGHTING SYSTEM:

- Back-up lamp
- Hazard lamps
- Headlights, front (high and low)
- Stop, tail, and turn signal lamps (LED)
- Work lamps, LH and RH side

GUARD AND COVERS:

- Engine underguard
- Propeller shaft guards, front and rear
- Protective grille for rear window
- Transmission underguard

BODY:

- Body, 17.1 m³ SAE 2:1 heaped
- Electronic hoist control system

TYRES:

23.5 R25

OTHER:

- Alarm, backup
- Anti-slip material on fenders
- Automatic greasing system
- Auxiliary steering system, automatic, electric
- Battery isolator, lockable
- Colour rear view camera and monitor
- Coolant temperature alarm and lamp
- Dump counter
- Ecology Guidance
- Electric circuit breaker, 24 V
- Electric priming fuel pump
- Electronic pump for hydraulic tilt cab

- Emergency stop switches (3)
- Engine shutdown secondary switch
- Flashing beacon, LED with guard
- Front view mirror
- Full-automatic F6-R2 transmission with lock-up torque converter & K-ATOMIC shift control
- Handrail with 100 mm kickplate
- Heated rear-view mirrors, LH and RH side
- Horn, electric
- Hydropneumatic suspension, front and rear
- Interaxle lockup, wet disc clutch type, controller by KTCS
- Komatsu Traction Control System (KTCS)
- KOMTRAX®
- Ladders LH side
- Mud guard
- Parking brake
- Payload Meter (PLM)
- Retarder, with Automatic speed control
- Steering joint locking assembly
- Step (right side)
- Tailgate
- Tool box
- Wheel chocks, steel type



OPTIONAL EQUIPMENT

- Bluetooth Radio
- Body Liners
- Body, exhaust heated, 17.1 m³
- Fire Extinguishers
- Fire SuppressionJump start receptacle

- Live Sampling points
- Lockable Isolators
- UHF Radio

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