

# KOMATSU®

# HM400-5

EPA Tier 4 Final Engine

Australia & New Zealand Specifications

**ARTICULATED TRUCK**

HM400



Photos may include optional equipment.

**HORSEPOWER**

Gross: 473 HP 353 kW  
Net: 466 HP 348 kW

**PAYLOAD**

40,000 kg

**BODY CAPACITY**

Heaped (SAE 2:1): 24.0 m<sup>3</sup>

# WALK-AROUND

HM400-5



Photos may include optional equipment.

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Heaped (SAE 2:1): 24.0 m<sup>3</sup>

## 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 operators to adjust machine performance based on need and conditions.

**Komatsu SAA6D140E-7 variable geometry turbocharged and aftercooled 15.24 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 NO<sub>x</sub> 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 72 dB(A)
- Heated, air suspension seat Radio with AUX terminal

**KOMTRAX®** equipped machines can send location, SMR and operation maps to a secure website or smart phone utilising wireless technology. Machines also relay error codes, cautions, maintenance items, fuel & DEF levels, and much more.

### 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) 510 kW 684 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.

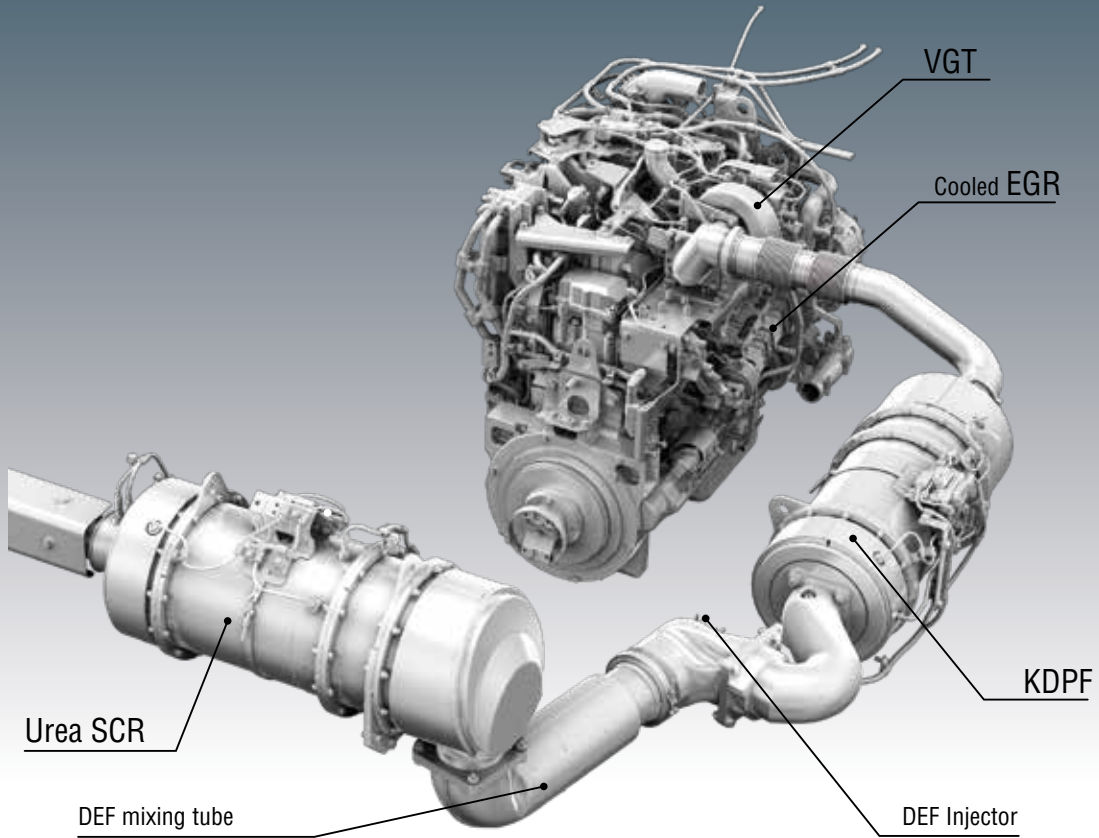
### Easy-to-load body:

- Heaped capacity 24 m<sup>3</sup>
- Low loading height 3164 mm
- High strength body constructed of 400 Brinell, wear-resistant steel.

# PERFORMANCE FEATURES

HM400-5

## KOMATSU NEW ENGINE TECHNOLOGIES



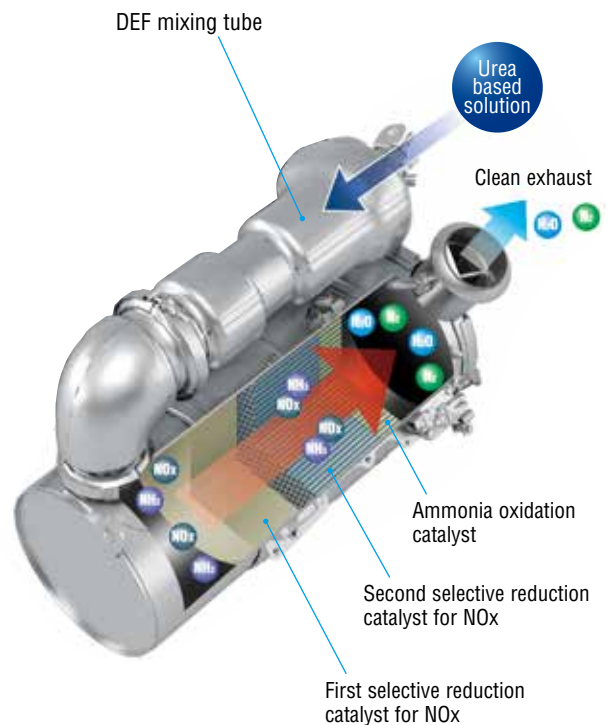
### New Tier 4 Final Engine

The Komatsu SAA6D140E-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.

### Technologies Applied to New Engine

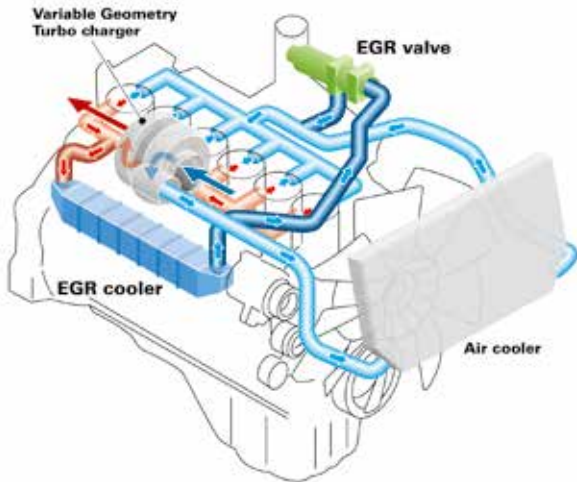
#### Heavy-duty aftertreatment system

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 Diesel Exhaust Fluid (DEF) at the proper rate, thereby decomposing NOx into non-toxic water (H<sub>2</sub>O) and nitrogen gas (N<sub>2</sub>).



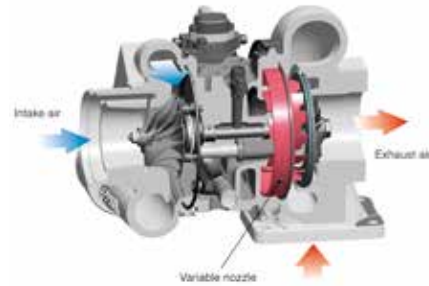
**Heavy-duty cooled Exhaust Gas Recirculation (EGR) system**

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 dramatically reduces NOx, while helping cut fuel consumption below Tier 4 Interim levels.



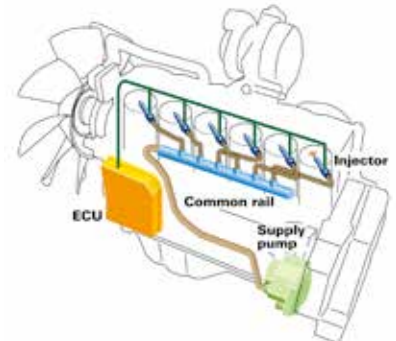
**Variable Geometry Turbocharger (VGT) system**

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 near complete combustion to reduce PM emissions.



**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. Engine condition information is displayed on the monitor inside the cab, providing vital information to the operator. Additionally, managing the information via KOMTRAX helps customers keep up with required maintenance.



# 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 HM400 to operate at the same performance level as its predecessor while improving fuel efficiency. The quantity of diesel fuel and DEF consumed by the HM400-5 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, depending on 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 HM400-5 has a heaped body capacity of 24.0 m<sup>3</sup>. The low loading height of 3164 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. HM400's frame employs a rigid box structure utilising high tensile strength steel – rugged enough for the toughest jobs.



## Komatsu-Designed, Electronically-Controlled Countershaft Transmission

The Komatsu designed, electronically controlled K-ATOMICS transmission has been a success in Komatsu's dump trucks. The electronic clutch modulation system ensures proper clutch pressure when the clutch is engaged. The system controls both the engine and the transmission by monitoring the vehicle conditions. This advanced system assures smooth shifts with minimal shock and maximises the power train life.



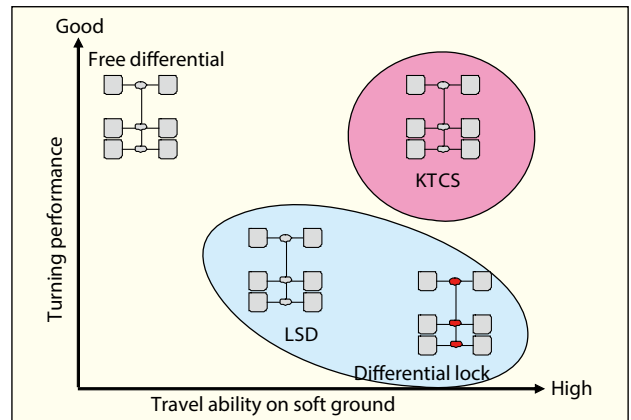
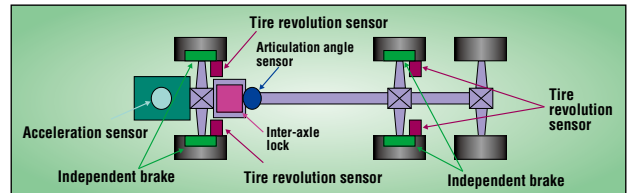


**Komatsu Traction Control System (KTCS)**

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 continually monitors wheel speeds and engages 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 HM400-5. 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



Payload display

# GENERAL FEATURES

HM400-5



## Rear View Monitoring System

The rear view camera and monitor are equipped as standard.



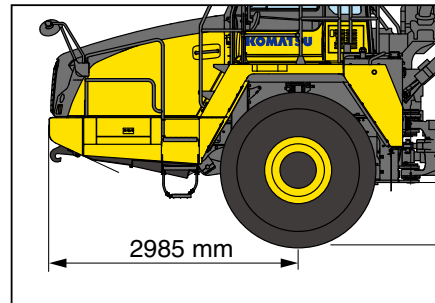
Rear view monitor



Rear view camera

## Short Nose

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



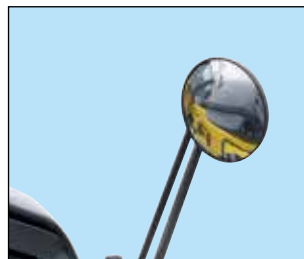
## Centre-located Operator Seat

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



## 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.



## 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 HM400-5. 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):  
510 kW 684 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

## Secondary Engine Shutdown Switch

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

## LED Rear Combination Lamps (Standard)

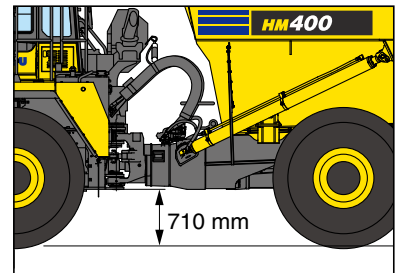
Long-life LED stop, tail and turn signal lamps are standard.



LED lamp

## Ground Clearance

The lowest surface of the hitch is higher than the front axle differential gear housing, maximising the HM400's ground clearance.



# WORKING ENVIRONMENT



HM400-5

Photos may include optional equipment.

## Ergonomic Comfort

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

### Machine monitor



### Colour rear view monitor



### Multi-switch panel



### 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) 72 dB (A)**

**Dynamic noise level (outside) 110 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.

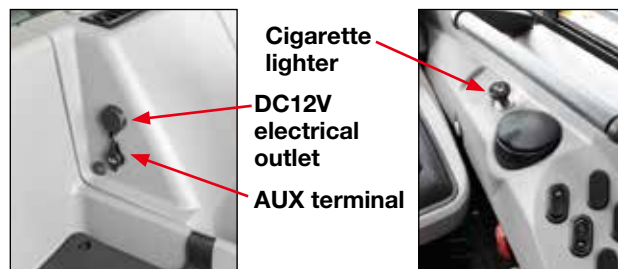


### Radio with AUX Terminal

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.



### 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 entire 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

HM400-5

## Ecology Guidance

The monitor 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.

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

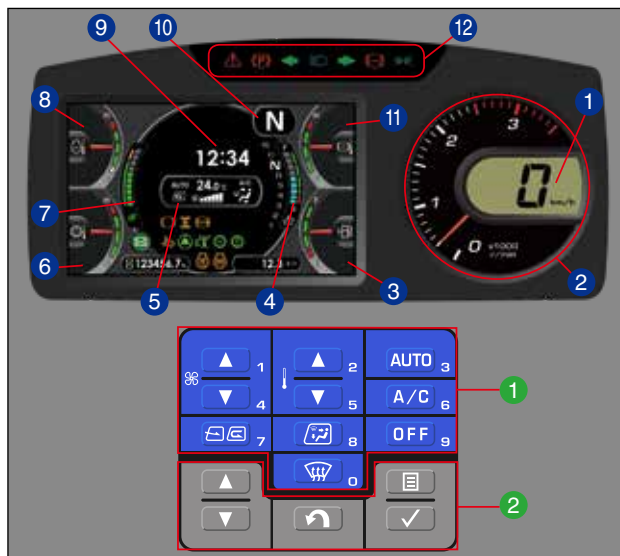
The machine monitor displays machine information and provides access to machine settings.

### Switch panel

The switch panel is used to select various LCD screens and the air conditioner control screen. By using the switch panel, you can display user menus on the LCD screen and access machine settings.

### 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
- 5 Air conditioner display
- 6 Torque converter oil temperature gauge
- 7 Ecology gauge
- 8 Engine coolant temperature gauge
- 9 Clock
- 10 Shift indicator
- 11 Retarder oil temperature gauge
- 12 LED indicator

### Switch Panel

- 1 Air conditioner switches / Numeral key pad
- 2 Function switches

#### 1 Ecology Guidance

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

#### 2 Machine setting / information

- Radiator fan reverse mode
- CAC fan reverse mode
- KTCS setting etc.

#### 3 KDPF regeneration

- Setting regeneration disable
- Operation of manual stationary regeneration

#### 4 SCR information

#### 5 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

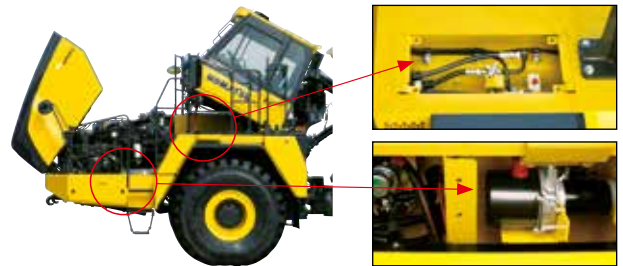
## Ground Access to Filters

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



## Tiltable Cab with Power Tilt

The cab can be tilted rearward by 27 degrees to provide easy access to the engine and transmission for service. Electrically-operated cab tilt is standard.



## 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.



Fan reverse indicator

## Round Design Engine Hood and Grill

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

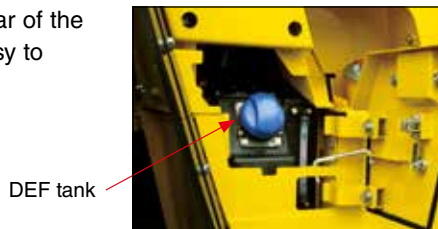
## Electric Fuel Priming Pump

Electric fuel priming pump is equipped as standard.



## Easy Access DEF Tank

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



## 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 case of an emergency.



### Automatic Greasing System

With ground level refill.



### Rotating Amber Beacon & PLM lights

### Provision for UHF Radio

Bracket and pre-wiring

PLM

Mounting Provision for Fire Extinguisher

Tailgate

Mounting Provision for Fire Suppression

Hyd control Cooling Fan w/Reverse Function

Handrail with 100 mm Kickplate

### Wheel Chocks

Steel type wheel chocks with storage brackets.



### Lockable Starter & Battery Isolator

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



### KOWA Live Sampling Points

Sampling points for engine, transmission, and hydraulic oil.



### LED Reverse & Articulation Area Lights

LED lights on the rear and articulation area for improved visibility.

# KOMTRAX EQUIPMENT MONITORING

GET THE WHOLE STORY WITH  
**KOMTRAX**<sup>®</sup>

## ✓ WHAT

- 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**

## ✓ WHEN

- 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

## ✓ WHERE

- 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

## ✓ WHY

- 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

## ✓ WHO

- KOMTRAX is **standard** equipment on all Komatsu construction products



**KOMTRAX**<sup>®</sup>

For construction and compact equipment.

**KOMTRAX Plus**<sup>®</sup>

For production and mining class machines.



# SPECIFICATIONS



## ENGINE

Model .....	Komatsu SAA6D140E-7*
Type .....	Water-cooled, 4-cycle
Aspiration .....	Komatsu variable geometry, turbo-charged, after-cooled, cooled EGR
Number of cylinders .....	6
Bore .....	140 mm
Stroke .....	165 mm
Piston displacement .....	15.24 ltr
Horsepower:	
SAE J1995 .....	Gross 353 kW 473 HP
ISO 9249 / SAE J1349 .....	Net 348 kW 466 HP
Rated rpm .....	2000 rpm
Fan drive type .....	Hydraulic
Maximum torque .....	2257 N•m 230 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 precleaner (cyclonpack type), plus dust indicator

\*EPA Tier 4 Final emissions 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 .....	55.9 km/h



## AXLES

Full time all wheel drive .....	
Final drive type .....	Planetary gear
Ratios:	
Differential .....	3.727
Planetary .....	4.941



## 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
Standard .....	ISO5010, SAE J1511
Minimum turning radius, wall to wall .....	8.8 m
Articulation angle .....	45° each direction



## CAB

Standard .....	ISO3449 (FOPS) ISO3471 (ROPS)
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## BRAKES

Service brakes .....	Full-hydraulic control, oil-cooled multiple-disc type on front and centre axles
Standard .....	ISO3450
Parking brake .....	Spring applied, caliper disc type
Retarder .....	Front and centre axle brakes act as retarder



## MAIN FRAME

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

Capacity:	
Struck .....	18.2 m <sup>3</sup>
Heaped (2:1, SAE) .....	24 m <sup>3</sup>
Payload .....	40 metric tons
Material .....	130 kg/mm <sup>2</sup> high tensile strength steel
Material thickness:	
Bottom .....	16 mm
Front .....	8 mm
Sides .....	12 mm
Target area (inside length x width) .....	5667 mm x 3194 mm
Heating .....	Exhaust heating (option)



## HYDRAULIC SYSTEM

Hoist cylinder .....	Twin, telescopic type
Relief pressure .....	28.4 MPa 290 kg/cm <sup>2</sup>
Hoist time .....	12.0 sec



## WEIGHT (APPROXIMATE)

Empty weight .....	35055 kg
Gross vehicle weight .....	75135 kg
Weight distribution:	
Empty: Front axle .....	56.9%
Centre axle .....	23.6%
Rear axle .....	19.5%
Loaded: Front axle .....	30.4%
Centre axle .....	35.8%
Rear axle .....	33.8%



## TYRES

Standard tyre .....	29.5 R25
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## SERVICE REFILL CAPACITIES

Fuel tank .....	525 ltr
DEF tank .....	34.0 ltr
Engine oil .....	50 ltr
Torque converter, transmission and retarder cooling .....	125 ltr
Differentials (total) .....	108 ltr
Final drives (total) .....	32 ltr
Hydraulic system .....	167 ltr
Suspension (total) .....	21.4 ltr





## STANDARD EQUIPMENT FOR BASE MACHINE

### ENGINE

- Air cleaner, dry type, double elements and pre-cleaner, plus dust indicator
- Alternator, 90 A, 24 V
- Batteries, 2 x 12 V/160 Ah, 910 CCA
- Engine, Komatsu SAA6D140E-7 (with EGR)
- Hydraulic driven reversible cooling fan, after cooler
- Hydraulic driven reversible cooling fan, radiator
- Komatsu Diesel Particulate Filter (KDPF)
- Komatsu Variable Displacement Turbocharger
- Selective Catalyst Reduction (SCR) system
- Starting motor, 11.0 kW
- Two mode power system (Economy and Power)

### CAB

- 2 x DC12V electrical outlets
- Air conditioner
- AM/FM radio with AUX terminal
- Colour rear view monitor
- Front wiper (with washer and intermittent)
- Operator seat, reclining, air suspension type with 3-point retractable seat belt
- Passenger seat with 2-point retractable seat belt
- Power window (LH)
- Rear wiper (with washer)
- Steering wheel, tilt and telescopic
- Sun visor, front window
- Tilttable ROPS cab with FOPS, sound suppression type

### LIGHTING SYSTEM

- Back-up lamp
- Back work lamps, LH and RH side
- Flashing beacon, LED with guard
- Front, cab mounted work lamps
- Hazard lamps
- Head lamps (High/Low)
- LED reverse and articulation work area lights
- LED stop, tail and turn signal lamps

### GUARD AND COVERS

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

### BODY

- Body, 24.0m<sup>3</sup>, SAE 2:1 heaped
- Electronic hoist control system

### TYRES

- 29.5 R25

### OTHER

- Automatic greasing system
- Alarm, backup
- Anti-slip material on fenders
- Auto idle stop function
- Back-up alarm
- Lockable starter and battery isolation switch
- Coolant temperature alarm and lamp
- Dump counter
- Ecology guidance and ecology gauge
- Emergency stop switches (3)
- Electric circuit breakers, 24 V
- Electric priming fuel pump
- Engine shutdown secondary switch
- Full-automatic F6-R2 transmission with lock-up torque converter & K-ATOMIC shift control
- Guard rails
- Handrail with 100 mm kickplate
- Horn, electric
- Hydropneumatic suspension, front and rear
- KOWA live sampling points for engine, transmission, and hydraulic oil
- Komatsu Traction Control System (KTCS)
- KOMTRAX® Level 5
- Mud guard
- Provision for fire suppression
- Provision for UHF radio, bracket and wiring
- Provision for 9 kg fire extinguisher
- Parking brake
- Payload Meter (PLM)
- Power cab tilt
- Protective grille for rear window
- Provision for tailgate installation
- Heated rear-view mirrors, LH and RH side
- Retarder, with Automatic speed control
- Rear view monitoring system
- Secondary brake
- Secondary steering, automatic, electric
- Side markers
- Steering joint locking assembly
- Step (right side) and ladder (left side)
- Tool box
- Wheel chocks, steel type
- Under view mirror



## OPTIONAL EQUIPMENT

- Bluetooth Radio
- Body Liners
- Body, with exhaust heating ducting, 24.0 m<sup>3</sup>, SAE 2:1 heaped, unlined floor
- Fire Extinguishers
- Fire Suppression
- Jump start receptacle
- UHF Radio

