# KOMATSU

# HD605-10



Mechanical truck

#### Horsepower

Gross: 818 HP (610 kW) Net: 791 HP (590 kW)

#### **Nominal payload**

70.7 US tons (64.1 metric tons)

#### **Body capacity**

Heaped (SAE 2:1): 56.2 yd3 (43.0 m3)

### **Boosted productivity and efficiency**

The HD605-10 rigid frame mechanical-drive haul truck is purpose-built with quarry, aggregate and mining customers in mind. This model maintains the legendary reliability and durability reputation experienced by customers around the globe while integrating modern operator comfort and technology features. It can quickly descend grades to the loading area and haul material to the dumping area in less time than the prior model due to reduced empty vehicle weight and increased engine horsepower.

#### **High-performance Komatsu SAA6D170E-7** engine with 5.5% more horsepower and 9.5% more max torque than the prior model

- · Larger radiator and demand fan
- High-efficiency, enlarged closed-loop cooling system

• Dual stage economy mode

· 2.6% reduction in empty vehicle weight • Maintains the tight turning radius (28'7"/8,712 mm) of the prior model

#### You can count on the HD605-10 to keep your operation moving

- New dump body design with higher tensile strength steel
- Integrated payload meter system
- · Adoption of the 10-10-20 payload policy
- Brake performance check procedure fully integrated in the machine monitor and Komtrax
- · Maintenance-free batteries
- · Lightweight resin wheel chocks



### **Increased operator comfort features**

# New operator comfort features have been added in the cab to reduce fatigue throughout long shifts

- Full LED light package provides excellent visibility for operation in variable conditions
- Waiting brake automatically applies the brake retarder when the shift lever is put in neutral, helping to reduce fatigue throughout the loading and dumping phases
- Hill start assist reduces potential rollback when starting from a stop on a slope
- Throttle lock enables the operator to set the engine speed for long uphill hauls
- Seat belt reminder system provides the operator with in-cab auditory and visual reminders when the belt is not fastened, and an externally mounted beacon indicates seatbelt status
- · Automatic retard speed control (ARSC) system
- Komatsu Traction Control System (KTCS) system



#### Stay in the know with Komtrax

The Komatsu wireless monitoring system lets you monitor essential machine information on your computer, smartphone or tablet

- Komtrax Plus
- Satellite and wireless LAN access
- Insightful operational data and reports
- Data that empowers proactive preventative maintenance

# **Specifications**

#### Engine

Liigiile	
Model	Komatsu SAA6D170E-7
Туре	Water-cooled, 4-cycle
Aspiration	Variable geometry, turbo-charged, air-to-air after- cooled, cooled exhaust gas recirculation (EGR)
No. of cylinders	6
Bore	6.69 in 170 mm
Stroke	6.69 in 170 mm
Piston displacement	1,413 in <sup>3</sup> 23.15 L
Engine power	
SAE J1995	Gross 818 HP (610 kW) @ 2,000 rpm
ISO 9249 / SAE J1349	Net 791 HP (590 kW) @ 2,000 rpm
Fan drive type	Hydraulic
Maximum torque	3,016 ftlbs. 417 kgf-m
Fuel system	Direct injection
Governor	Electronically controlled
Lubrication system	
Method	Gear pump, force-lubrication
Filter	Full-flowtype
Air cleaner	Dry type with double elements, pre-cleaner and evacuator valve

<sup>\*</sup> EPA Tier 4 Final emission certified.

#### **Transmission**

Torque converter	3-elements, 1-stage, 2-phase		
Transmission	Full-automatic, planetary type		
Speed range	7 speeds forward and 1 reverse		
Lockup clutch	Wet, multiple-disc clutch		
Forward	Torque converter drive in 1st gear, direct drive in 1st lockup and all higher gears		
Reverse	Torque converter drive		
Shift control	Electronic shift control with automatic clutch modulation in all gears		
Maximum travel speed	43.5 mph 70.0 km/h		

#### **Axles**

Rear axle	Full-floating
Final drive type	Planetary gear
Ratios	
Differential	3.538
Planetary	4.737

#### **Suspension system**

Independent, hydropneumatic suspension cylinder with fixed throttle to dampen vibration		
Effective cylinder stroke (front suspension)	11.9 in	303 mm
Rear axle oscillation		
Oil stopper	6.8 in	173 mm
Mechanical stopper	7.7 in	196 mm

#### Steering system

Туре	Fully hydraulic power steering with two double-acting cylinders		
Supplementary steering	Manually controlled		
Minimum turning radius	28ft. 7 in 8.7 m		
Maximum steering angle	39 degrees		

#### Cab

Dimensions comply with ISO 3471 ROPS (rollover protective structure) standards

#### **Brakes**

Brakes meet ISO 3450 standards			
Service brakes			
Front	Dry type, single disc type full hydraulic		
Rear	Oil-cooled, multiple-disc type full hydraulic		
Parking breakes	Oil-cooled, multiple-disc type, spring operated, hydraulic releasing type		
Retarder	Oil-cooled, multiple-disc type full hydraulic		
Secondary brake	Manual pedal operation when hydraulic pressure drops below the rated level, parking brake is automatically actuated		

#### Main frame

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#### Hydraulic system

Standard tires

Hoist cylinder	Twin,	Twin, 2-stage telescopic type			
Relief pressure	2,988 psi	20.6 MPa 210 kgf-cm <sup>2</sup>			
Hoist time		11.5 sec			
Tires					

#### Service refill capacities

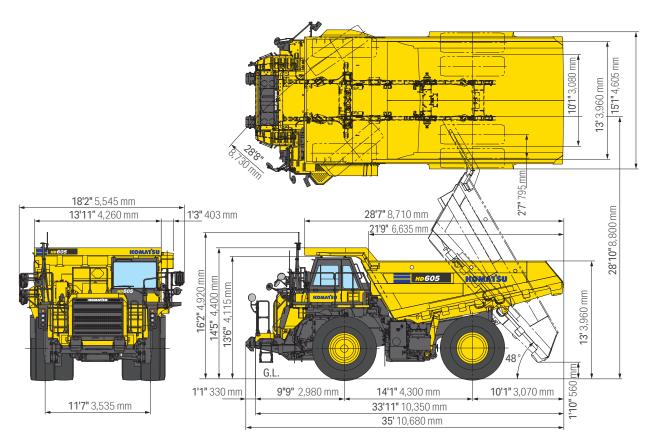
Fuel tank	211.3 gal	800 L
Engine oil	21.1 gal	80 L
Torque converter, transmission and retarder cooling	59.2 gal	224 L
Differential	25.1 gal	95 L
Final drives (total)	11.1 gal	42 L
Hydraulic system	39.4 gal	149 L
Suspension (total)	17.5 gal	66.2 L

#### Body General purpose body

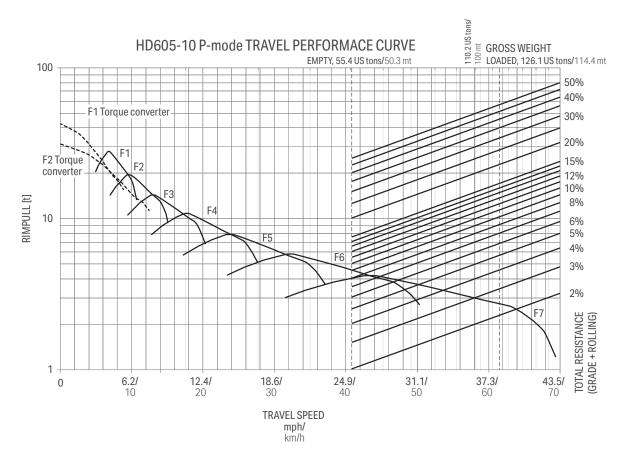
			unl	ined	lined	
Capacity	Heaped capacity (2 : 1)		56.2 yd³	43 m³	55.2 yd³	42.2 m <sup>3</sup>
	Struck capacity		42.2 yd³	32.3 m³	41.1 yd <sup>3</sup>	31.4 m <sup>3</sup>
	Target area		31.5 yd <sup>2</sup> /26.3 m <sup>2</sup> (21'10"/6,650 mm× 13'/3,960 mm)			
Weight	Empty weight		110,893 lbs.	50,300 kg	120,152 lbs.	54,500 kg
	Nominal payload		141,316 lbs.	64,100 kg	132,057 lbs.	59,900 kg
	Gross vehicle weight	Gross vehicle weight		114,400 kg	252,209 lbs	114,400 kg
	Maximum payload (120 %)		169,535 lbs.	76,900 kg	158,512 lbs.	71,900 kg
	Max. gross vehicle w	eight (120 %)	280,428 lbs.	127,200 kg	278,664 lbs.	126,400 kg
	Distribution	Front	54.2%		51.1%	
	(empty)	Rear	45.8%		48.9%	
	Distribution (Loaded)*nominal	Front	33.6%		33.5%	
		Rear	66.4%		66.5%	
Body (Liner) thickness	Bottom		.63"	16 mm"	.63" (.63")	16 (16) mm
	Front		.35"	9 mm	.35" (.35")	9 (9) mm
	Side		.35"	9 mm	.35" (.35")	9 (9) mm
Body material	Bottom & front		450 HB high tensile strength steel			
	Side		400 HB high tensile strength steel			

24.00 R35

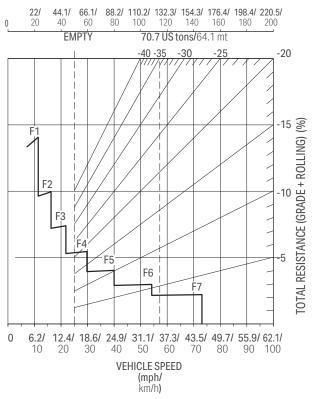
### HD605-10







#### GRADE DISTANCE: CONTINUOUS DESCENT GROSS VEHICLE WEIGHT (US tons/mt)



At ambient temperature 104 deg F/40 deg C Retarder performance varies depending on ambient temperature.

# Standard equipment for base machine

#### **Engine and related components**

Air cleaner, dry type, two stage

Auto idle shutdown

Automatic Idling Setting System (AISS)

Biodiesel fuel, B20

Body heat exhaust

Electric priming fuel pump

Engine, Komatsu SAA6D170E-7, 6 cylinder, turbocharged, air/air after-cooled, EGR cooled, diesel

Gross HP (SAE J1995): 818 HP (610 kW) @ 2,000 RPM

Net HP (ISO 9249/SAE J1349): 791 HP (590 kW) @ 2,000 RPM

Engine secondary shutdown switch

Fan, hydraulically driven, reversible

Komatsu Diesel Particulate Filter (KDPF) (qty. 2)

Mode selector switch (Power, Economy, Economy lite)

Radiator, lead-free, modular core

#### **Electrical system**

Alternator, 100 ampere, 24-volt

Back-up alarm

Batteries, maintenance free, 4 x 12-volt, 160 Ah

Battery disconnect switch

Electric circuit breakers, 24V

Emergency stop switch, ground level

Horn, electric

Lights

Beacon lamp, amber

LED access ladder lamp

LED back-up lamp, rear

LED dump lamp

LED engine compartment lamp

LED fog lamps

LED head lamps, high and low beam

LED side working lamps, LH and RH

LED stop and tail lamps

LED turn signal/hazard warning, front and rear

Starter disconnect switch

Starting motors,  $2 \times 7.5 \text{ kW}$  direct electric 24-volt

#### **Power train and controls**

7-speed transmission, fully automatic with K-ATOMiCS

Brake cooling oil recovery tank

Front brake, caliper disc type

Komatsu Traction Control System (KTCS)

Parking brake, integrated in rear brake

 $Rear\ brake,\ oil-cooled,\ multiple\ disc,\ hydraulically\ controlled$ 

Secondary brake, pedal actuated, variable

Skip shift function

#### **Operator environment**

Cab with built-in ROPS/FOPS

12-volt outlet (gty. 2)

Automatic climate control system with cab pressurization

Body hoist control, electric

Cigarette lighter, 12-volt, and ashtray

Dome light

Door, LH and RH

Lunch box and beverage holder

Machine monitor with 7-inch color LCD display

Operator seat, air suspension type, heated, ventilated with 3-point retractable seat belt (3"/75mm wide lap belt, 2" 50mm wide shoulder belt)

Power window, LH and RH

Radio, AM/FM with AUX input, USB input and Bluetooth

Rear window electronic defrost

Rearview mirror, outside cab mount, heated (LH & RH)

Rearview monitoring system, dedicated monitor

Secondary steering sytem

Steering wheel, tilt and telescopic

Sun visor, screen

Tinted glass (Front: laminated glass)

Trainer seat, folding, with 2-point retractable seat belt (3"/75mm wide)

Underview mirror

Wiper/washer front and rear, front intermittant

#### **Guard and cover group**

Cab and platform guards

Catwalk with handrails, skid resistant

Driveline guards, front & rear

Engine underguard

Exhaust side covers

Exhaust thermal guard

Mud flaps

Rock ejector bar

Transmission underguard

#### Other standard equipment

Anchor points, tie-off type (ISO 14567)

Angled front stairs with handrails

Automatic retard speed control (ARSC)

Centralized greasing points

Dump counter

Ecology guidance and ecology gauge

Fast fill coupler for fuel tank

Filler cap and cover lock

Front brake cut-off system

Haul road analysis system

Hill start assist

Hydropneumatic suspension (front & rear)

KOMTRAX Plus telematics package with integrated payload meter

(PLM), satellite communication and Wireless LAN

KOWA sampling ports

Machine immobilization switch

Overload prevention alarm

Overrun warning and prevention

Overturn warning system

PM service connectors

Rims for 24.00 R35 tires (qty. 6)

Safety pins (qty. 2)

Seatbelt reminder system

Wheel chock, resin, with storage bracket (qty. 2)

#### **Optional equipment**

Alternative exhaust configuration (RH side discharge)

Unlined dump body

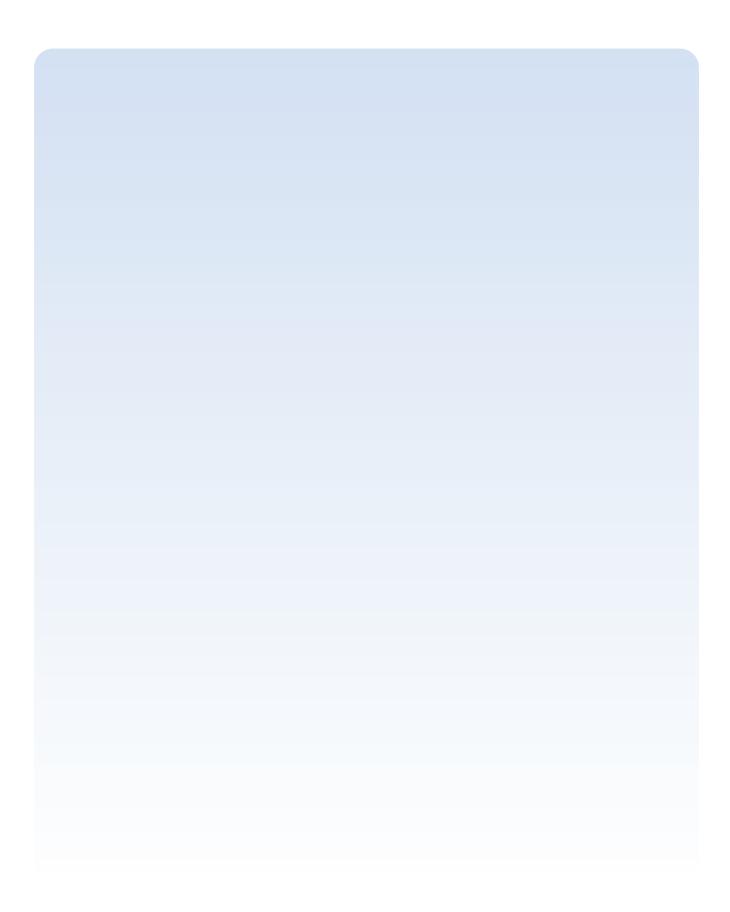
Lined dump body

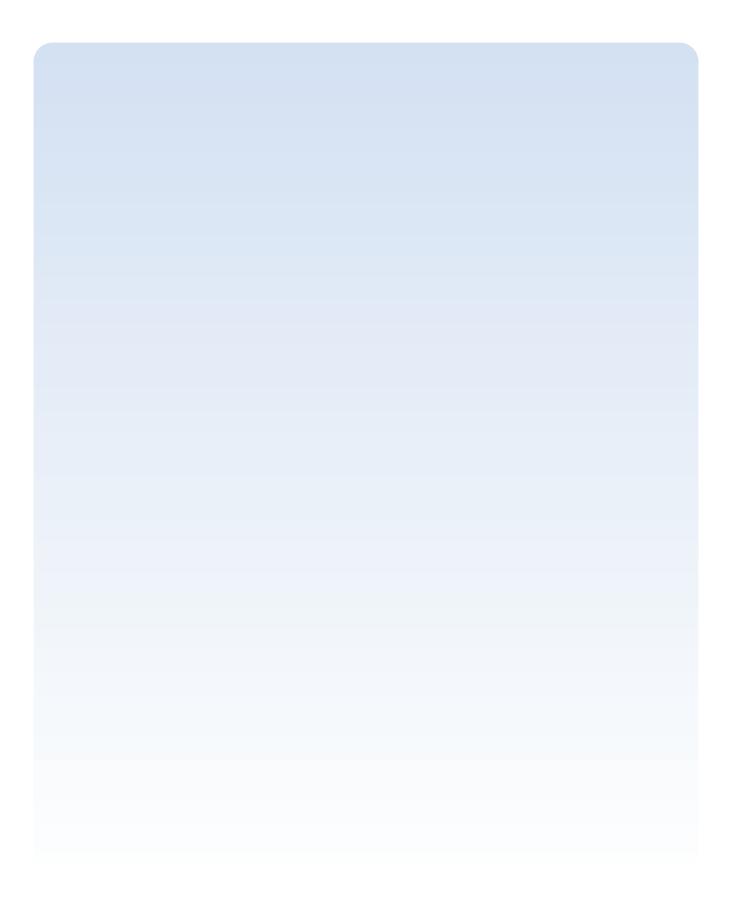
Michelin XTRA Load Grip tires

Bridgestone VRLS tires



# Notes





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