

DAFTAR LAMPIRAN

Lampiran L1 Brosur *Dump Truck*

Lampiran L2 *Slide Analysis Information*

LAMPIRAN I

BROSUR *DUMP TRUCK*



STANDARD EQUIPMENT FOR BASE MACHINE

ENGINE:

- Automatic Idling Setting System (AISS)
- Alternator, 90A/24V
- Batteries, 4 x 12V/170Ah
- EPA Tiera 2 emission regulation certified engine, Komatsu SAA12V140E-3
- Mode selection system with VHPC
- Starting motor, 2 x 7.5 kW

CAB:

- Ashtray
- Cigarette lighter
- Cup holder
- Electronic dump control system with body positioner
- Electronic maintenance display/monitoring system
- Laminated glass, front
- Operator seat, reclining, suspension type with retractable 78 mm 3" width seat belt
- Passenger seat with retractable seat belt
- Power window (LH)
- ROPS cab with FOPS, sound suppression type
- Space for lunch box
- Steering wheel, tilt and telescopic

- Sunvisor
- Two doors, left and right
- Windshield washer and wiper (with intermittent feature)

LIGHTING SYSTEM:

- Back-up light
- Hazard lights
- Headlights
- Indicator, stop and tail lights

GUARD AND COVERS:

- Cab guard
- Canopy spill guard
- Drive shaft guard (front and rear)
- Exhaust thermal guard
- Fire protective covers

SAFETY EQUIPMENT:

- Alarm, backup
- Anti-pitching 4-wheel oil-cooled multiple disc retarder (AP-FOUR)
- Automatic Retard Speed Control (ARSC)
- Automatic supplementary steering
- Coolant temperature alarm and light
- Hand rails for platform

- Horn, electric
- Ladders, left and right hand sides
- Overrun warning system
- Rearview mirrors and under view mirrors

OTHER:

- Centralized greasing
- Electric circuit breaker, 24V
- Disc wheels (Flange type rims)
- Mud guards
- Vehicle health monitoring system (VHMS)

BODY:

- Body exhaust heating
- Cab guard, left side
- Spill guard, 150mm 6"

TIRES:

- 27.00 R49



OPTIONAL EQUIPMENT

CAB:

- Air conditioner
- Heater and defroster
- Operator seat, air suspension type
- Power window (RH)
- Radio, AM/FM with cassette
- Sunvisor, additional

BODY:

- Body liners
- Platform guard, right hand side
- Muffler (without body heating)

LIGHTING SYSTEM:

- Buck-up light additional
- Back work lights, left and right sides
- Fog lights
- LED rear combination lights

SAFETY:

- Antilock Brake System (ABS)
- Automatic Spin Regulator (ASR)
- Exhaust retarder
- Rear view camera and monitor
- Tire stopper blocks

ARRANGEMENT:

- Batteries for cold area arrangement
- Cold area arrangement
- Sandy and dusty area arrangement

OTHER:

- Auto-greasing system
- Engine coolant heater
- Engine oil pan heater
- Engine side cover
- Engine underguard
- Fire extinguisher
- Fuel quick charge

- Payload meter
- Spare parts for first service
- Three-mode hydropneumatic suspension
- Tool kit
- Transmission underguard
- Vandalism protection
- VHMS with satellite communication kit

TIRES:

- 31/90 R49

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.

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HD785-7

GROSS HORSEPOWER

895 kW 1,200 HP

NET HORSEPOWER

879 kW 1,178 HP

MAXIMUM GVW

166000 kg 366,000 lb

**HD
785**

OFF-HIGHWAY TRUCK



Machine shown may include optional equipment.

WALK-AROUND

Productivity and Economy Features

- High performance Komatsu SAA12V140E-3 engine
Net horsepower **879kW** 1,178HP
- Mode selection system with variable horsepower control (VHPC)
- Two-speed selective reverse gears of RH and RL
- Anti-pitching 4-wheel oil-cooled multiple-disc retarder (AP-FOUR)
Retarder absorbing capacity
1092kW 1,464HP (Continuous descent)
- Automatic retard speed control (ARSC) as standard

Harmony with Environment

- Komatsu SAA12V140E-3 engine is
EPA Tier 2 emission regulation certified
- Lead-free radiator
- Low operation noise
- Low fuel consumption

Operator Environment and Safety

- Spacious cab with excellent visibility
- Ergonomically designed cab
- Easy-to-see instrument panel
- Synchronous control of engine and transmission
- Advanced K-ATOMiCS with "Skip-shift" function
- Viscous cab mounts
- Electric body dump control
- Built-in ROPS/FOPS cab
- Parking brakes on 4-wheels
- Supplementary steering
- Pedal-operated secondary brake
- Three-mode automatic hydropneumatic suspension (Option)

GROSS HORSEPOWER
895 kW 1,200 HP @ 1900 rpm

NET HORSEPOWER
879 kW 1,178 HP @ 1900 rpm

MAXIMUM GVW
166000 kg 366,000 lb



Reliability Features

- Flat face-to-face O-ring seals
- Sealed DT connectors

Easy Maintenance

- Oil-cooled multiple-disc brakes and fully hydraulic controlled braking system
- Extended oil change interval
- Disc Wheels (Flange type rims)
- Electric circuit breaker
- Vehicle Health Monitoring System (VHMS)

Machine shown may include optional equipment.

PRODUCTIVITY & ECONOMY FEATURES

High performance Komatsu SAA12V140E-3 engine

This engine delivers faster acceleration and higher travel speeds with high horsepower per ton. Advanced technology, such as High Pressure Common Rail injection system (HPCR), air-to-air aftercooler efficient turbo-charger enables the engine to be North American EPA Tier 2 emission certified. High torque at low speed, impressive acceleration, and low fuel consumption ensure maximum productivity.

Mode selection system with VHPC

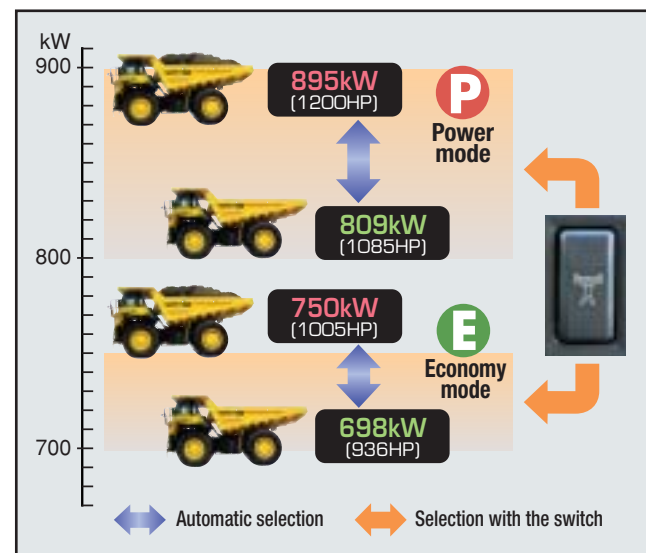
The system allows selection of the appropriate mode between two modes <Power mode> or <Economy mode> according to each working condition. The mode is easily selected with a switch in the operator's cab. When the key switch is turned on, Economy mode is selected automatically. Select Power mode by using the switch when needed.

VHPC (Variable horsepower control)

Both in Power and Economy modes, the VHPC system detects whether machine condition is loaded or unloaded and selects optimum horsepower setting mode, providing both high production and low fuel consumption.

● **Power mode:** Makes best use of the horsepower to attain optimal production. This mode is suitable for operation in job sites including uphill travel with load where throughput takes top priority.

● **Economy mode:** Sets the maximum horsepower at low level to reduce fuel consumption. The machine maintains sufficient power for normal operation in this mode.



F7-R2 (RH/RL) fully automatic transmission

The transmission is configured with 7 forward and 2 reverse gears. Fully automatic control is applied to all forward gears and an optimum gear is automatically selected according to the travel speed and engine speed. The shifting point is automatically selected depending on the acceleration of the machine to reduce excessive fuel consumption.



Two-speed selective reverse gears (RH/RL)

In order to meet various operating conditions, two reverse gears are provided. The switch on the panel allows the operator to select optimum reverse gear of RH or RL depending on the job site conditions at hand. Furthermore, the reverse gear is equipped with a lockup clutch, just like forward gear, allowing the operator to reverse the machine without worrying about overheating.

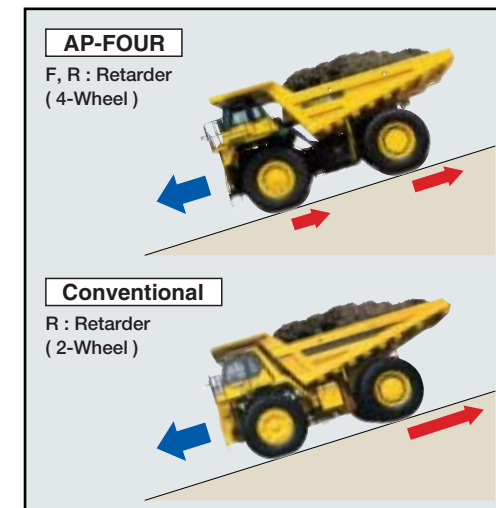
RH
Suitable for normal operation. Thanks to the lockup clutch, the machine can be reversed at higher speed than the current machine while having the same rimpull.

RL
Suitable for operation in job sites where there are steep grades.

AP-FOUR (Anti-pitching 4-wheel oil-cooled multiple disc retarder)

The machine is equipped with 4-wheel retarder "AP-FOUR (Anti-pitching 4-wheel oil-cooled multiple disc retarder)" that applies retarding force on all four wheels. With this retarder, the retarding force is shared between four wheels. This reduces the possibility of tire-lock and enables effective use of retarder capacity, allowing stable downhill travel. The machine descends slopes smoothly and comfortably without machine body pitching since retarding force on front and rear wheels is controlled independently.

- Retarder absorbing capacity
1092 kW 1,464 HP (continuous descent)
- Brake surface area
Front total : **37467 cm²** 5,807 in²
Rear total : **72414 cm²** 11,956 in²



Auto Retard Speed Control (ARSC)

ARSC allows the operator to simply set the downhill travel speed and go down slopes at a constant speed. As a result, the operator can concentrate on steering. The speed can be set in increments of **1 km/h** 0.6 MPH per click (± 5 km/h 3.1 MPH of setting speed adjustment) to match the optimum speed for the slope. Also, since the retarder cooling oil temperature is always monitored, the speed is automatically lowered.



OPERATOR ENVIRONMENT

Eliminating hydraulic losses & optimizing transmission control

Hydraulic circuits such as brake cooling, steering, body dump control, etc. are thoroughly reviewed and the transmission control is optimized to reduce fuel consumption. As a result, the fuel consumption for operation with medium and light load is improved.

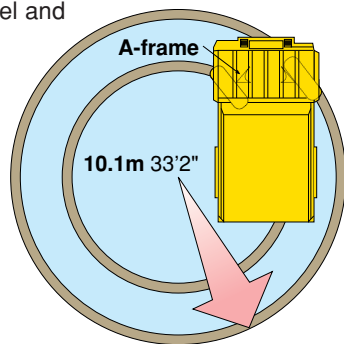
Automatic Idling Setting System (AISS)

This system facilitates quick engine warm-up and cab cooling/warming. When setting the system ON, engine idle speed is kept at 945 rpm when coolant temperature is 50°C 122°F or lower. Speed automatically returns to 750 rpm when coolant temperature reaches 50°C 122°F.



Small turning radius

The MacPherson strut type front suspension has a special A-frame between each wheel and the main frame. The wider space created between the front wheels and the main frame increases the turning angle of the wheels. The larger this turning angle, the smaller the turning radius of the truck.



Long wheelbase and wide tread

With an extra-long wheelbase, a wide tread and an exceptionally low center of gravity, the HD785-7 hauls the load at higher speed for greater productivity, and delivers superior driving comfort over rough terrain.

Large body

A wide target area makes for easy loading with minimal soil spillage and more efficient hauling.

Heaped capacity : 60.0m³ 78.5yd³
 Target area (inside length x width) :
 7065mm 23' 2" x 5200mm 17' 1"



Spacious cab with excellent visibility

Wide windows in the front, side and back, plus plenty of space in the richly upholstered interior, provide quiet, comfortable environment from which to see and control every aspect of operation. Front under view mirrors have been added to improve safety.



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 and greater productivity.

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. Problems are recorded in the monitor and indicated as service codes. This makes the machine user friendly and easy to service.

Ideal driving position settings

The 5-way adjustable operator seat and the tilt-telescopic steering column provide an optimum driving posture, for increased driving comfort and more control over machine operation. The suspension seat dampens vibrations transmitted from the machine and reduces operator fatigue as well as holding the operator securely to assure confident operation. 78mm 3" width seat belt is provided as standard equipment.



Machine shown may include optional equipment.

Synchronous control of engine and transmission

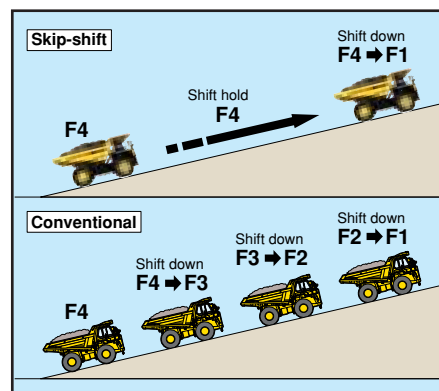
At the time of gear shifting, the engine speed is controlled to coincide with transmission rotation speed to reduce shifting shocks. The synchronous control contributes to improve durability of power train since it reduces torque fluctuation.

Advanced K-ATOMiCS

The electronically controlled all clutch modulation system “K-ATOMiCS” that optimizes the clutch engagement oil pressure at every gear is further improved so that the oil pressure at lockup clutch engagement is optimized to realize smooth shifting without torque off.

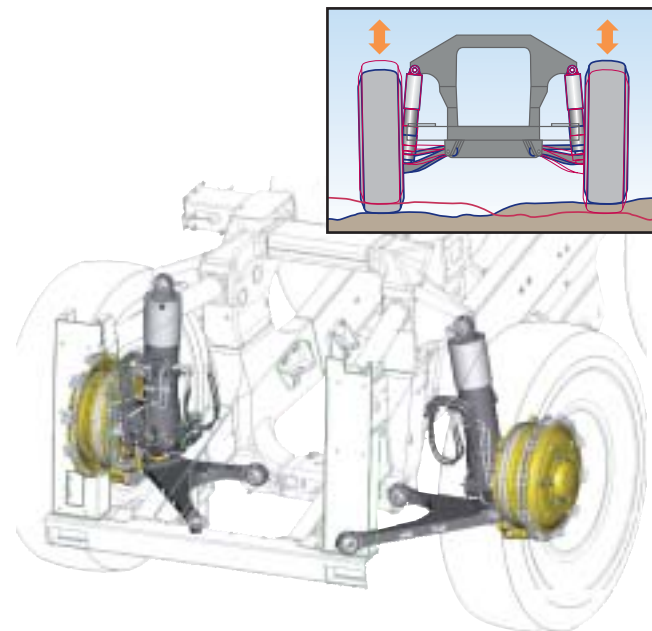
“Skip-shift” function

Automatically selects the gear according to the slope grade when driving uphill. It reduces the number of down-shifts, makes the driving smoother, improves the operator’s comfort and reduces spilling of material.



The MacPherson strut type front suspension

The MacPherson type independent suspension is installed to the front wheels. The linkage arrangement with less friction allows the front wheel to follow the undulation of road surface smoothly, realizing excellent riding comfort.

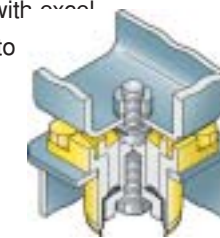


Three-mode Automatic hydropneumatic suspension (Option)

Suspension mode is automatically switched to one of three stages (soft, medium and hard) according to load and operating conditions, for a more comfortable and stable ride.

Viscous cab mounts

Large capacity viscous cab mounts with excellent damping performance are used to mount the cab. They reduce cab vibration significantly and provide comfortable cab space with superb quietness and less vibrations. Noise level at operator’s ear 75 dB(A)



Electric body dump control

Electric lever is used for body dump control. The lever is short in control travel and can be operated with light control effort. “Kick-out function” provided for the lever facilitates body dump operation, eliminating the need to hold the lever in dump position. Furthermore, body seating shock is significantly reduced because a sensor detects the body just before reaching the seat and reduces speed of decent.



SAFETY

Built-in ROPS/FOPS cab

These structures conform to ISO3471 ROPS standard, and ISO 3449 FOPS standard.



Pedal-operated secondary brake

If there should be a failure on the foot brake circuit, both front and rear parking brakes are activated as a pedal operated secondary brake. In addition, when hydraulic pressure drops below the rated level, the parking brake is automatically actuated.



Parking brakes on 4-wheels

The machine is equipped with spring applied parking brakes on 4-wheels. Wet multiple disc brakes built in both front and rear axles apply braking force to all four wheels. These brakes are highly reliable require no periodic maintenance.



Front brake



Rear brake

Antilock Braking System (ABS) (Option)

Using its outstanding electronics technology, Komatsu is the first in the industry to introduce ABS on construction machinery. This system prevents the tires from locking, thus minimizes skidding under slippery conditions while applying the service brake.

Automatic Spin Regulator (ASR) (Option)

ASR automatically prevents the rear tires on either side from slipping on soft ground for optimal traction.



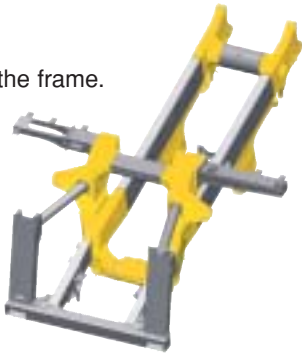
RELIABILITY FEATURES

Komatsu components

Komatsu manufactures the engine, torque converter, transmission, hydraulic units, and electrical parts on this dump truck. Komatsu dump trucks are manufactured with an integrated production system under strict quality control system guidelines.

High-rigidity frame

Front support is integrated with the frame. The frame rigidity is increased drastically. As a result, flexural rigidity and torsional rigidity that are indicators of drivability and riding quality are significantly improved.



Rugged and durable dump body design

The standard dump body is made of high-tensile-strength steel with a Brinell hardness of 400 for excellent rigidity and reduced maintenance cost. The V-shape and V-bottom design also increase structural strength. The side and bottom plates of the dump section are reinforced with ribs for added strength.

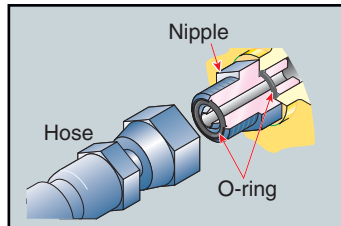


Reliable hydraulic system

A large capacity oil cooler is installed in each hydraulic circuit, improving the reliability of the hydraulic units during sudden temperature rises. Further, in addition to the main filter, $\beta_{10} = 3$ (min) line filter is located at the entrance to the transmission control valve. This system helps prevent secondary faults.

Flat face-to-face O-ring seals

Flat face-to-face O-ring seals are used to securely seal all hydraulic hose connections and to prevent oil leakage.



Sealed DT connectors

Main harnesses and controller connectors are equipped with sealed DT connectors providing high reliability, water resistance and dust resistance.



Protection functions supported by electronic control

Item	Function
Downshift inhibitor	Even if the driver downshifts accidentally, a speed appropriate to the current gear is automatically set, preventing over-runs.
Over-run inhibitor	When descending grades, if the vehicle's speed surpasses the maximum for the current gear, the rear brakes automatically operate, preventing over-runs.
Reverse inhibitor	The vehicle is prevented from moving backward when operating the body.
Forward/Reverse shift inhibitor	This device makes it impossible to shift from forward to reverse when the vehicle's speed surpasses 4 km/hour.
Anti-hunting system	When running near a shift point, smooth automatic shifting takes place.
Neutral safety	The engine is prevented from starting when the shift lever is not in neutral.

ECOLOGY

Lead-free radiator

In addition to compliance with emission regulations, a lead-free aluminum core is used for the radiator to meet global environmental requirements.

Brake cooling oil recovery tank

To protect the environment, a tank is installed to recover brake cooling oil in the event of brake floating seal leakage.



EASY MAINTENANCE

Advanced monitoring system

The Komatsu advanced monitoring system identifies maintenance items, reduces diagnostic times, indicates oil and filter replacement hours and displays abnormality codes. This monitor system helps to maximize machine production time.



Wet multiple-disc brakes and fully hydraulic controlled braking systems

realize lower maintenance costs and higher reliability. Wet disc brakes are fully sealed to keep contaminants out, reducing wear and maintenance. Brakes require no adjustments for wear, meaning even lower maintenance. The parking brake is also an adjustment-free, wet multiple-disc system for high reliability and long life. Added reliability is designed into the braking system by the use of three independent hydraulic circuits providing hydraulic backup should one of the circuits fail. Fully hydraulic braking systems eliminate the air system so air bleeding is not required, and water condensation that can lead to contamination, corrosion and freezing is eliminated.

Extended oil change intervals

In order to minimize operating costs, oil change intervals have been extended:

- Engine oil 500 hours
- Hydraulic oil 4000 hours

Centralized arrangement of filters

The filters are centralized so that they can be serviced easily.



Disc wheels (Flange type rims)

Disc wheels (Flange type rims) provide easy removal/installation for the tires.



Electric circuit breaker

A circuit breaker is adopted in important electric circuits that should be restored in a short time when a problem occurs in the electrical system.



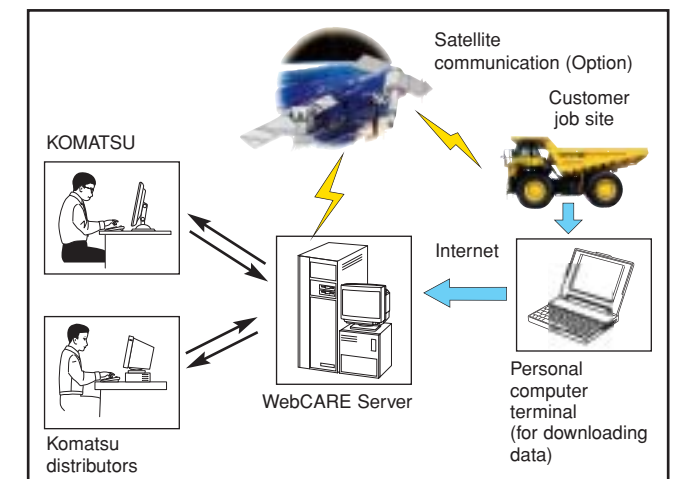
Centralized greasing points

Greasing points are centralized at three locations, it enables to approach from ground level.



Vehicle Health Monitoring System (VHMS)

VHMS controller monitors the health conditions of major components, enables remote analysis of the machine and its operation. This process is supported by the Komatsu distributors, factory and design team.



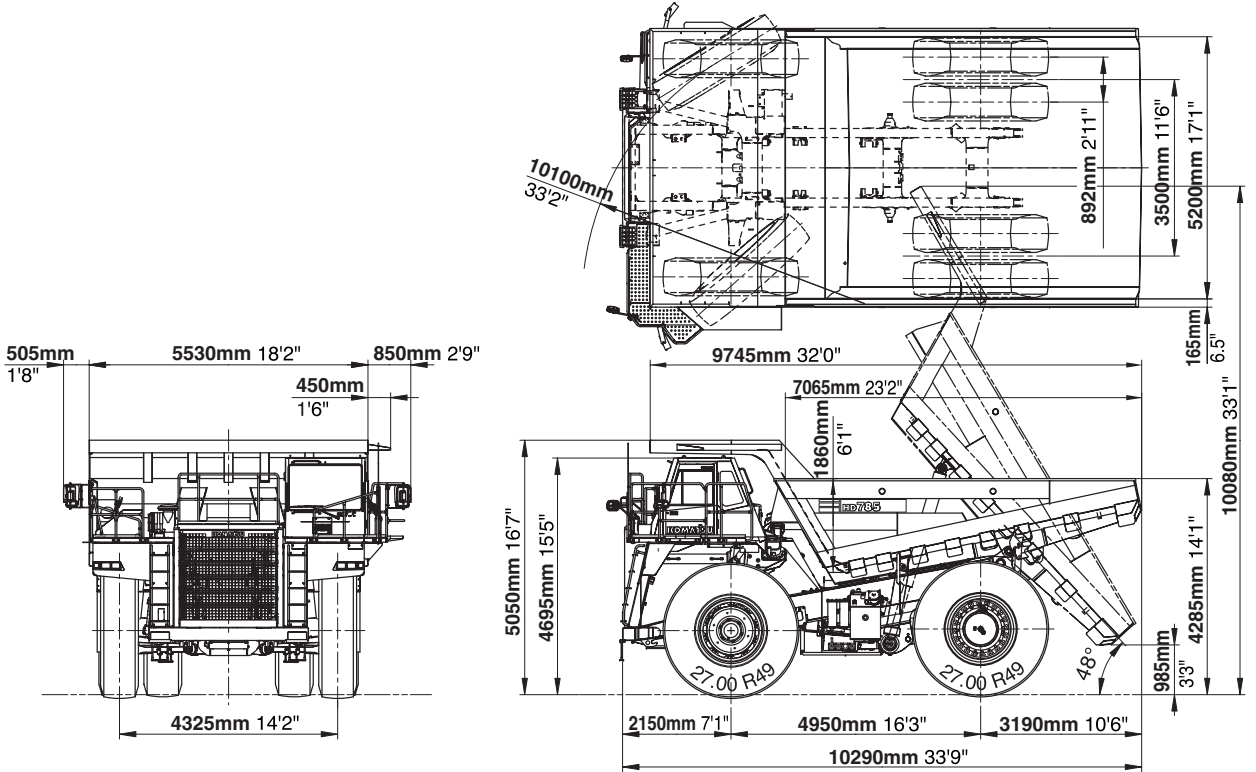
Payload Meter (PLM) (Option)

PLM allows the production volume and the working conditions on the dump truck to be analyzed and controlled directly via a personal computer. And also the loadage is indicated with the outside lamp. The system can store up to 2900 working cycles.



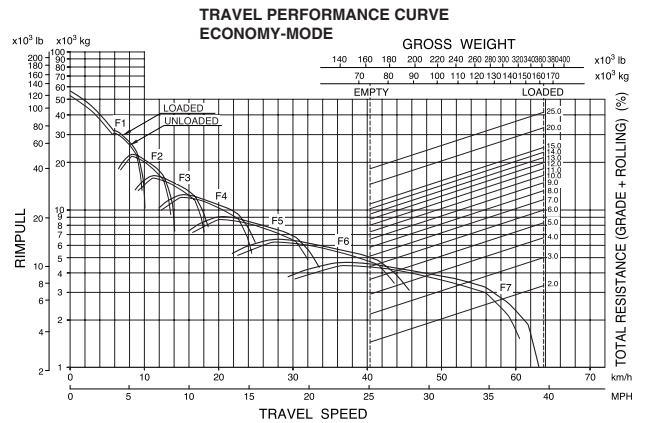
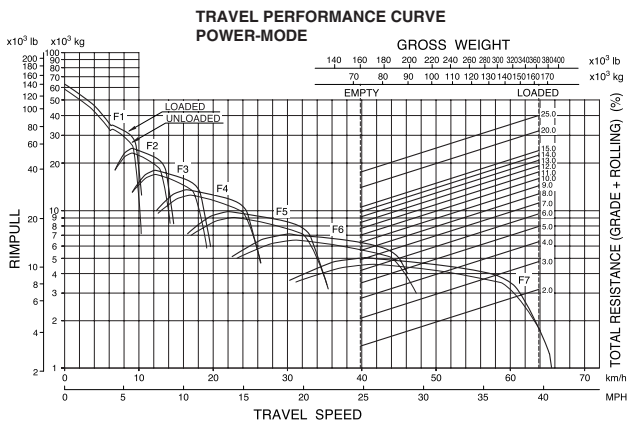


DIMENSIONS



TRAVEL PERFORMANCE

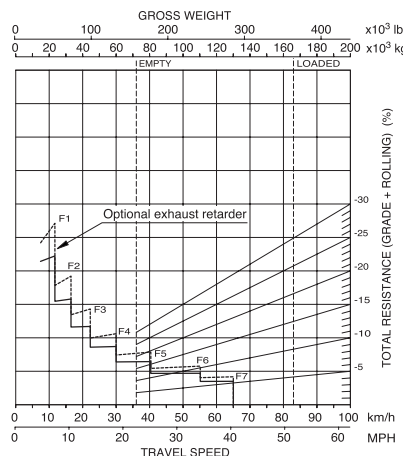
To determine travel performance: Read from gross weight down to the percent of total resistance. From this weight-resistance point, read horizontally to the curve with the highest obtainable speed range, then down to maximum speed. Usable rimpull depends upon traction available and weight on drive wheels.



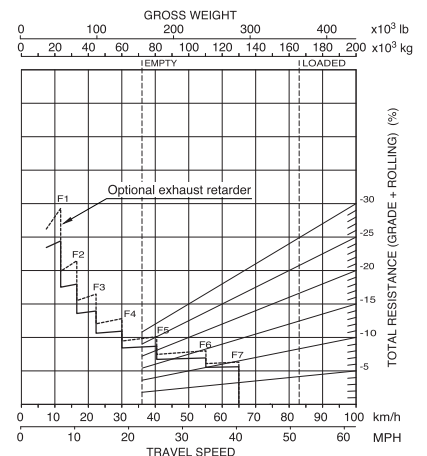
BRAKE PERFORMANCE

To determine brake performance: These curves are provided to establish the maximum speed and gearshift position for safer descents on roads with a given distance. Read from gross weight down to the percent of total resistance. From this weight resistance point, read horizontally to the curve with the highest obtainable speed range, then down to maximum descent speed the brakes can safely handle without exceeding cooling capacity.

Grade distance: Continuous Descent



Grade distance: 450 m (1,480 ft)



SPECIFICATIONS



ENGINE

Model	Komatsu SAA12V140E-3	
Type	Water-cooled, 4-cycle	
Aspiration	Turbo-charged, after-cooled	
Number of cylinders	12	
Bore x Stroke	140 mm x 165 mm 5.51" x 6.50"	
Piston displacement	30.48 ltr 1,860 in ³	
Horsepower		
SAE J1995	Gross	895 kW 1,200 HP
ISO 9249 / SAE J1349	Net	879 kW 1,178 HP
Rated rpm	1,900 rpm	
Fan drive type	Mechanical	
Maximum torque	518 kg·m 3,747 lb. ft	
Fuel system	Direct injection	
Governor	Electronic control	
Lubrication system		
Method	Gear pump, force-lubrication	
Filter	Full-flow type	
Air cleaner	Dry type with double elements and precleaner, with dust indicator	



TRANSMISSION

Torque converter	3-elements, 1-stage, 2-phase	
Transmission	Full-automatic, planetary-shaft type	
Speed range	7 speeds forward and 2 reverse (RH, RL)	
Lockup clutch	Wet, multiple-disk clutch	
Forward	Torque converter drive in 1st gear, direct drive in 1st lockup and all higher gears	
Reverse	Torque converter drive, direct drive (lockup)	
Shift control	Electronic shift control with automatic clutch modulation in all gear	
Maximum travel speed	65 km/h 40.4 mph	



AXLES

Rear axles	Full-floating	
Final drive type	Planetary gear	
Ratios:		
Differential	3.357	
Planetary	6.333	



SUSPENSION SYSTEM

Independent, hydropneumatic suspension cylinder with fixed throttle to dampen vibration.

Effective cylinder stroke:

Front suspension	320 mm 12.6"	
Rear suspension	127 mm 5.0"	
Rear axle oscillation	6.5°	



STEERING SYSTEM

Type	Fully hydraulic power steering with two double-acting cylinders	
Supplementary steering	Meets ISO 5010, SAE J1511	
Minimum turning radius	10.1 m 33'2"	
Maximum steering angle	41°	



CAB

Dimensions comply with ISO 3471 ROPS (Roll-Over Protective Structure) standard, and ISO 3449 FOPS standard.



MAIN FRAME

Type	Box-sectioned structure Integral front bumper	
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BRAKES

Brakes meet ISO 3450 standard.

Service brakes:

Front	Fully hydraulic control, oil-cooled multiple-disc type	
Rear	Fully hydraulic control, oil-cooled multiple-disc type	
Parking brake	Spring applied, multiple-disc type(actuates on all wheels)	
Retarder	Oil-cooled, multiple-disc front and rear brakes act as retarder.	
Secondary brake	Manual pedal operation.	
	When hydraulic pressure drops below the rated level, parking brake is automatically activated.	

Brake surface

Front	37467 cm² 5,807 in ²	
Rear	72414 cm² 11,224 in ²	



BODY

Capacity:

Struck	40 m³ 52.3 yd ³	
Heaped (2:1, SAE)	60 m³ 78.5 yd ³	
Payload	91.0 metric tons 100.3 U.S. tons	
Material	400 Brinell hardness high tensile strength steel	
Structure	V-shape body with V-bottom	
Material thickness:		
Bottom	19 mm 0.75"	
Front	12 mm 0.47"	
Sides	9 mm 0.35"	
Target area		
(inside length x width)	7065 mm x 5200 mm 23'2"x 17'1"	
Dumping angle	48°	
Height at full dump	10080 mm 33'1"	
Heating	Exhaust heating	



HYDRAULIC SYSTEM

Hoist cylinder	Twin, 2-stage telescopic type	
Relief pressure	20.6 MPa 210 kg/cm² 2,990 psi	
Hoist time		
Raise	13 sec	
Lower	14 sec	



WEIGHT (APPROXIMATE)

Empty weight	72000 kg 158,800 lb	
Max. gross vehicle weight	166000 kg 366,000 lb	
	Not to exceed max. gross vehicle weight, including options, fuel and payload.	
Weight distribution:		
Empty:		
Front axle	47%	
Rear axle	53%	
Loaded:		
Front axle	31.5%	
Rear axle	68.5%	



TIRES

Standard tire	27.00 R49	
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SERVICE REFILL CAPACITIES

Fuel tank	1308 ltr. 345.6 U.S. Gal	
Engine oil	129 ltr. 34.1 U.S. Gal	
Torque converter, transmission and retarder cooling	205 ltr. 54.2 U.S. Gal	
Differentials	137 ltr. 36.2 U.S. Gal	
Final drives (total)	128 ltr. 33.8 U.S. Gal	
Hydraulic system	175 ltr. 46.2 U.S. Gal	
Brake control	36 ltr. 9.5 U.S. Gal	
Suspension (total)	93 ltr. 24.6 U.S. Gal	

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HD785

Dump Trucks

Designed for hauling construction materials and excavated earth and rocks. In addition to rigid dump trucks, articulated dump trucks are available, which feature excellent performance of low ground pressure on rough roads.

- Available models may vary by region or country. Please contact your [local distributor](#) for the most suitable specifications in your area.
- Product specifications are subject to change without notice.








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Product Outline

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- [Dump Trucks](#)
- [Motor Graders](#)
- [Backhoe Loaders](#)
- [Skid Steer Loaders](#)
- [Mobile Crushers/Recyclers](#)
- [Special Applications](#)

Rigid Dump Trucks					
Model	Flywheel Horsepower		Maximum Gross Vehicle Weight (kg)	Maximum Payload (tonnes)	Brochure
	(kW)	(HP)			
HD255-5	235	316	47525	25	(2.2MB)
HD325-6	364	488	65200	36.5	(0.3MB)
HD325-7	371	498	69280	36.5	(0.8MB)
HD325-7R	371	498	69280	36.5	(0.8MB)
HD405-6	364	488	73175	41	-
HD405-7	371	498	75080	41	(1.3MB)
HD405-7R	371	498	75080	41	(0.8MB)
HD465-7	533	715	98800	55	(1.1MB)
HD465-7E0	533	715	99680	55	(1.1MB)
HD465-7R	533	715	99680	55	(0.9MB)
HD605-7	533	715	109900	63	-
HD605-7E0	533	715	110180	63	(2.6MB)
HD605-7R	533	715	110180	63	(1.0MB)
HD785-5	753	1010	166000	91	-
HD785-7	879	1178	166000	91	(1.5MB)
HD1500-7	1048	1406	249480	144 *1	(1.5MB)
730E	1388	1860	324322	184 *1	(0.4MB)

830E	1761	2360	385852	223 *1	 (0.5MB)
830E-AC	1761	2360	385848	222 *1	 (0.1MB)
930E-4	1902	2550	501974	292 *1	 (0.4MB)
930E-4SE	2558	3429	505755	290 *1	 (0.7MB)
960E-1	2495	3346	576072	327 *1	 (2.1MB)

*1 : Nominal payload

Articulated Dump Trucks					
Model	Flywheel Horsepower		Maximum Gross Vehicle Weight (kg)	Maximum Payload (tonnes)	Brochure
	(kW)	(HP)			
HM250-2	222	298	47680	24.0	 (0.8MB)
HM300-1	242	324	49875	27.3	 (0.8MB)
HM300-2	246	329	51420	27.3	 (0.8MB)
HM300-2R	246	329	51420	27.3	 (0.8MB)
HM350-1	290	389	60925	32.3	 (5.0MB)
HM350-2	294	394	63440	32.3	 (0.5MB)
HM350-2R	294	394	63440	32.3	 (0.5MB)
HM400-1	321	430	66875	36.5	 (2.0MB)
HM400-2	327	438	69040	36.5	 (0.5MB)
HM400-2R	327	438	69040	36.5	 (0.5MB)

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LAMPIRAN 2

SLIDE ANALYSIS INFORMATION

Slide Analysis Information

Document Name

File Name: DESIGN 03.sli

Project Settings

Project Title: SLIDE - An Interactive Slope Stability Program
Failure Direction: Left to Right
Units of Measurement: SI Units
Pore Fluid Unit Weight: 9.81 kN/m³
Groundwater Method: Water Surfaces
Data Output: Standard
Calculate Excess Pore Pressure: Off
Allow Ru with Water Surfaces or Grids: Off
Random Numbers: Pseudo-random Seed
Random Number Seed: 10116
Random Number Generation Method: Park and Miller v.3

Analysis Methods

Analysis Methods used:
Bishop simplified
Janbu simplified

Number of slices: 25
Tolerance: 0.005
Maximum number of iterations: 50

Surface Options

Surface Type: Circular
Radius increment: 10
Minimum Elevation: Not Defined
Composite Surfaces: Enabled
Reverse Curvature: Create Tension Crack

Loading

Seismic Load Coefficient (Horizontal): 0.03
4 Line Loads present:
Line Load Angle from horizontal: 277.55 degrees Magnitude: 1285.00 kN
Line Load Angle from horizontal: 277.55 degrees Magnitude: 1285.00 kN
Line Load Angle from horizontal: 275.28 degrees Magnitude: 1285.00 kN
Line Load Angle from horizontal: 275.28 degrees Magnitude: 1285.00 kN

Material Properties

Material: Sandstone 1
Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 24.63 kN/m³
Saturated Unit Weight: 24.76 kN/m³
Cohesion: 228 kPa

Friction Angle: 48.87 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Silty Claystone

Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 23.3 kN/m³
Saturated Unit Weight: 23.93 kN/m³
Cohesion: 699 kPa
Friction Angle: 32.75 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Claystone 1

Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 24.01 kN/m³
Saturated Unit Weight: 24.24 kN/m³
Cohesion: 699 kPa
Friction Angle: 32.75 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Claystone 2

Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 23.35 kN/m³
Saturated Unit Weight: 23.73 kN/m³
Cohesion: 274 kPa
Friction Angle: 16.2 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Sandstone 2

Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 23.76 kN/m³
Saturated Unit Weight: 24.01 kN/m³
Cohesion: 1272 kPa
Friction Angle: 29.81 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Silty sand 1

Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 25.03 kN/m³
Saturated Unit Weight: 25.16 kN/m³
Cohesion: 1272 kPa
Friction Angle: 29.81 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Siltyclay 1

Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 23.59 kN/m³
Saturated Unit Weight: 23.88 kN/m³
Cohesion: 2062 kPa
Friction Angle: 19.75 degrees
Water Surface: Water Table

Custom Hu value: 1

Material: Carbonaceous Coallyclay

Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 22.47 kN/m³
Saturated Unit Weight: 22.7 kN/m³
Cohesion: 2062 kPa
Friction Angle: 19.75 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Sandysilt

Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 24.23 kN/m³
Saturated Unit Weight: 24.4 kN/m³
Cohesion: 2062 kPa
Friction Angle: 19.75 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Siltstone

Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 24.83 kN/m³
Saturated Unit Weight: 24.96 kN/m³
Cohesion: 2062 kPa
Friction Angle: 19.75 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Sandy Claystone

Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 24.24 kN/m³
Saturated Unit Weight: 24.49 kN/m³
Cohesion: 2195 kPa
Friction Angle: 55.41 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Sandstone 3

Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 24.79 kN/m³
Saturated Unit Weight: 24.88 kN/m³
Cohesion: 2195 kPa
Friction Angle: 55.41 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Silty Claystone 2

Strength Type: Mohr-Coulomb
Unsaturated Unit Weight: 25.31 kN/m³
Saturated Unit Weight: 25.42 kN/m³
Cohesion: 1704 kPa
Friction Angle: 43.63 degrees
Water Surface: Water Table
Custom Hu value: 1

Material: Carbonaceous Coallyclay 2

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 21.25 kN/m³

Saturated Unit Weight: 21.35 kN/m³

Cohesion: 741 kPa

Friction Angle: 19.39 degrees

Water Surface: Water Table

Custom Hu value: 1

Material: Claystone 4

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 24.15 kN/m³

Saturated Unit Weight: 24.47 kN/m³

Cohesion: 741 kPa

Friction Angle: 19.39 degrees

Water Surface: Water Table

Custom Hu value: 1

Material: Silty Claystone 4

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 27.56 kN/m³

Saturated Unit Weight: 27.75 kN/m³

Cohesion: 22.03 kPa

Friction Angle: 18.38 degrees

Water Surface: Water Table

Custom Hu value: 1

Material: COAL

Strength Type: Mohr-Coulomb

Unsaturated Unit Weight: 13.6 kN/m³

Saturated Unit Weight: 13.6 kN/m³

Cohesion: 80 kPa

Friction Angle: 23 degrees

Water Surface: Water Table

Custom Hu value: 1