HITACHI

AH
500
400
350
300
250

ARTICULATED DUMP TRUCK

- **Engine Net Power** : AH500-D : 382 kW (512 HP)
  AH400-D : 308 kW (413 HP) / AH350-D : 283 kW (380 HP)
  AH300-D : 232 kW (311 HP) / AH250-D : 198 kW (265 HP)
- **Rated Payload** : AH500-D : 45 400 kg
  AH400-D : 37 000 kg / AH350-D : 32 500 kg
  AH300-D : 27 300 kg / AH250-D : 23 200 kg
- **Gross Vehicle Weight** : AH500-D : 79 920 kg
  AH400-D : 66 850 kg / AH350-D : 60 730 kg
  AH300-D : 45 990 kg / AH250-D : 41 600 kg
- **Body Capacity** : SAE,PCSA(2:1) Heaped : AH500-D : 27.5 m^3
  AH400-D : 22.6 m^3 / AH350-D : 20.1 m^3
  AH300-D : 16.6 m^3 / AH250-D : 13.8 m^3

Get more from your truck

If you're looking to deliver more to your bottom line, choose Hitachi Articulated Dump Trucks.

These D-series ADTs handle heaped payloads with faster cycle times and best-in-class fuel efficiency - so you'll move more material at lower cost. They're highly reliable, too, with high-strength, welded-alloy steel chassis and components that are durable and optimized for no unnecessary weight. And with their oscillating frame joint, articulated steering, and high-floatation tyres, these hard working haulers won't let wet weather or steep grades dampen your plans.

Add enhancements such as a Tier 3 emission-certified engine, solid state electrical system, spacious redesigned cab with refined controls, and you have everything you need to maximise uptime and productivity.

Extensive use of high-strength, lightweight materials gives these trucks the best payload-to-mass ratios and hauling efficiencies in each class.

With their oscillating frame and high-floatation tyres, Hitachi trucks won't leave you stuck on muddy, rutted or hilly terrain.

The redesigned sound-suppressed cab features fatigue-beating controls, advanced diagnostic monitor, a sealed-switch module for convenient and fingertip operation of numerous functions.

Fuel-efficient Tier 3 emission-certified engines deliver clean power without compromise in all conditions. Leading-edge emissions technology ensures rapid engine response and dependable cold-start performance.

Haul of Fame

Hitachi ADTs give you the competitive edge. Priding faster haul cycles and industry-leading fuel economy, they move material at lower cost per tonne. Best in-class payload-to-mass ratio gives you more power and agility to carry the load, for maximum productivity and profitability. What really sets these apart from other material movers is their ability to thrive on rough terrain, steep grades and mud. Try one to appreciate the difference.

Improved Performance

- Limited-slip differentials (AH250-D and AH300-D), controlled traction differentials (AH350-D to AH500-D) and transfer case diff-lock provide a traction boost in poor ground conditions.
- The best-in-class payload-to-weight ratio means that more of your fuel cost is spent moving the material, not the machine - decreasing your cost per tonne.
- The fully automatic six-speed planetary transmission with torque converter lock up maximises fuel efficiency.
- Automatic retardation slows the truck when the operator backs off the accelerator pedal - for more confidence on steep grades and enhanced brake life.
- Electronic unit injection and common rail fuel systems provide high injection pressures even at low engine speed for improved cold-starting ability, low-speed response, and reduced emissions.
- High-travel suspension keeps all tyres in constant ground contact for optimum traction.
- The short front end provides an industry-best approach angle that allows these ADTs to attack steep terrain.

Built for comfort

From the state-of-the-art multifunction monitor and fully customisable controls to air-suspension seat, tilt/telescoping steering wheel, the D-series provides everything your operators need to perform at their best. Unparalleled comfort. Try one to appreciate the difference.

Enhanced Operator Comfort

- The standard sound-suppression package significantly reduces noise levels and operator fatigue.
- The adaptive transmission control adjusts clutch engagement to ensure smooth, consistent shifts throughout the life of the truck.
- A fully adjustable air-suspension seat is optimally positioned behind the front axle to help smooth out the ride when the going gets rough.
- Easy-to-understand instruments and intuitive controls wrap around the operator so they're easier to view and operate.
- A heavy-duty bi-level climate-control system with automotive-style louvers keeps the glass clear and cab comfortable.
- The spacious center-mount seat and a comprehensive mirror package provide exceptional all-around visibility.
- You won't find retarder pedals or levers in a Hitachi truck. Retarder aggressiveness is simply set on the switch pad. Everything else is automatic.

Intuitive Monitor

An intuitive monitor reveals vital operating information, detailed diagnostic readings of most sensors and switches and dump body function settings.

Solid State Switch Pad

Convenient sealed switch pad provides fingertip control of numerous productivity enhancing functions including: Dump body upper limit. Soft stop / hard stop selection, I-Tip and Speed Control.

High Durability Means Long-Lasting Product Value

Built smarter to work harder, these lean machines boast the material-moving muscle you need without the mass to feed. Their lower mass reduces powertain and structural stress. Other uptime-boosting features include enhanced diagnostics, solid-state sealed switches and re-inforced articulation joints to list but a few.

Sophisticated Designs

- Automatic transmission retardation provides superior braking power and reduces service brake wear.
- Hydraulically actuated dry-disc brakes deliver consistent “on-the-mark” braking, even in cold weather. Simplified design makes them easy to maintain.
- Inboard wet-disc brakes on the AH500-D and AH400-D (optional on AH300-D) are virtually maintenance-free.
- AH500-D and AH400-D hydraulic, transmission, and service brake oil coolers employ a hydraulically driven fan that runs only as needed, helping conserve power and fuel.
- Efficient viscous direct-drive fans in all Hitachi trucks provide engine and charge-air cooling.

Here’s the lowdown on daily operating costs

You won’t have to dig deep to uncover the many ways we’ve simplified service and made the D-series less expensive to maintain. Easy-to-reach dipsticks, see-through reservoirs, sight gauges and grouped service points make quick work of the daily routine. High-hour oil and filter change intervals reduce costs and planned downtime. Quick-change filters and extended engine and hydraulic oil-service intervals reduce costs and provide more uptime. Plus, an advanced diagnostic monitor and diagnostic test ports help you troubleshoot problems and make informed maintenance decisions.

Simplified Maintenance

- The engine dipstick and oil fill, oil and fuel filters and coolant reservoir are readily accessible.
- Available environmental drains allow quick, no-spill changes.
- Engine, transmission and hydraulic oil-change intervals of 500 hrs and 2 000 hrs add up to more uptime and less expense.
- The load-sensing hydraulic system was designed with simplicity in mind. Fewer components result in greater reliability and service ease.

Accessible Drivetrain

The cab can be tilted without special tools in minutes, for convenient service access to drivetrain components.

Diagnostic Monitor

If something goes wrong, the diagnostic monitor provides service codes and supporting info to help you quickly pinpoint the problem.

Serviceable Test Ports

Easily accessible test ports allow technicians to troubleshoot problems more quickly.

An Array of Fuses

An in-cab load center simplifies fuse replacement. Fewer relays, connectors and harnesses mean higher reliability.

Safety is our Business too

By listening to our customers and reacting quicker to a changing workplace we provide a vehicle that exceeds application safety standards. All trucks can be set up to automatically sound the horn when starting or switching between forward and reverse.

On-Board Weighing

The exclusive on-board weighing option presents the operator with real time information on the payload while the machine is being loaded. A 'limp home' mode can also be activated if the machine is significantly over-loaded.

Enhanced Safety on Slope

The parking brake automatically applies on slope, even if you fail to apply it, so the truck can park in position, avoiding coasting.

Full Hand-Rails

Full hand-rails (to ISO 2876) on AH500-D and AH400-D (optional on AH350-D) provide even more safety when performing engine checks.

Sensing Truck Position

The incorporation of a Pitch and Roll sensor in the vehicle allows the body to not be operated if the truck is in an unsafe position.

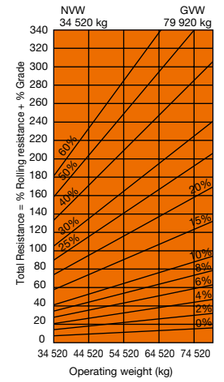
Selectable Speed Control

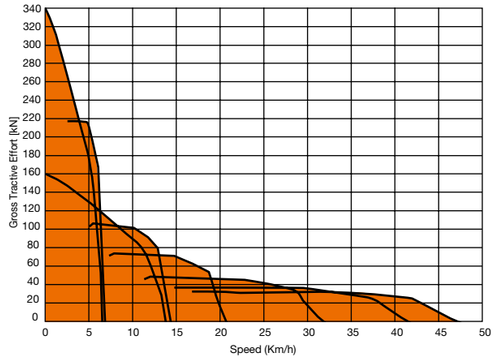
Both operator or site selectable maximum speed control allows the vehicle to automatically deaccelerate and apply the retarder to prevent onsite speeding.

DIMENSIONS / PERFORMANCE DATA

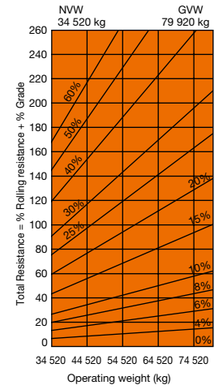
Unit: mm

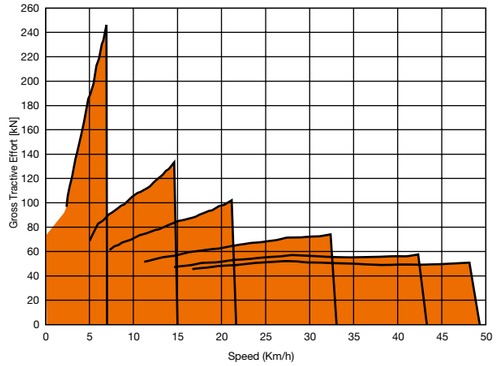
GRADEABILITY





RETARDATION

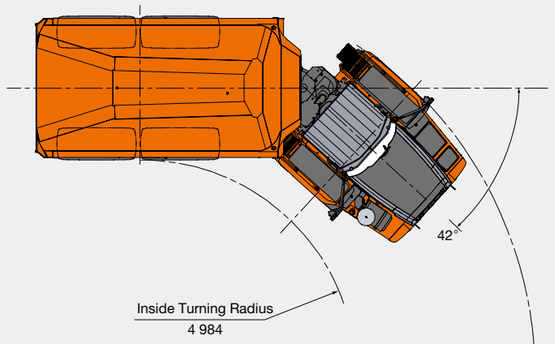


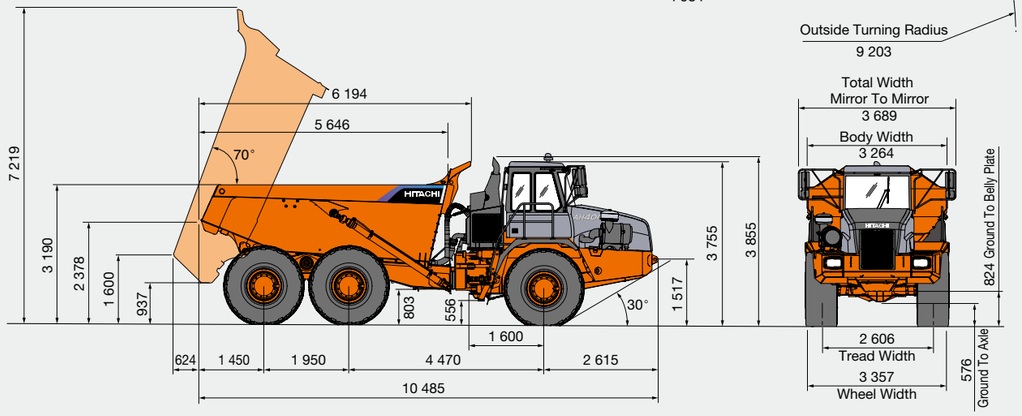


DIMENSIONS / PERFORMANCE DATA

Unit: mm

AH400-D





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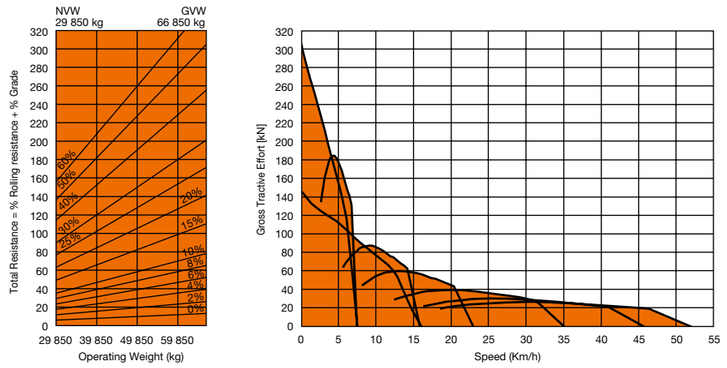

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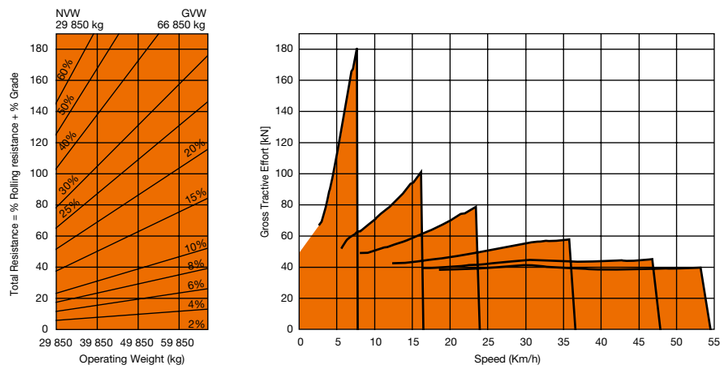
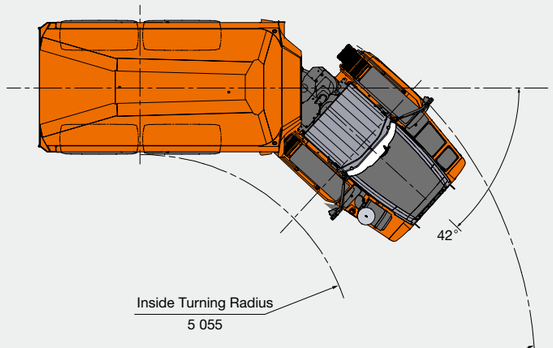
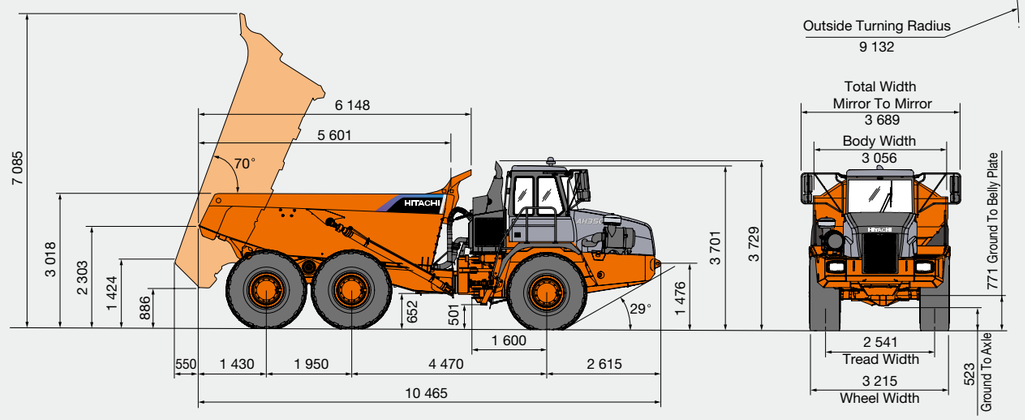


Unit: mm

AH350-D





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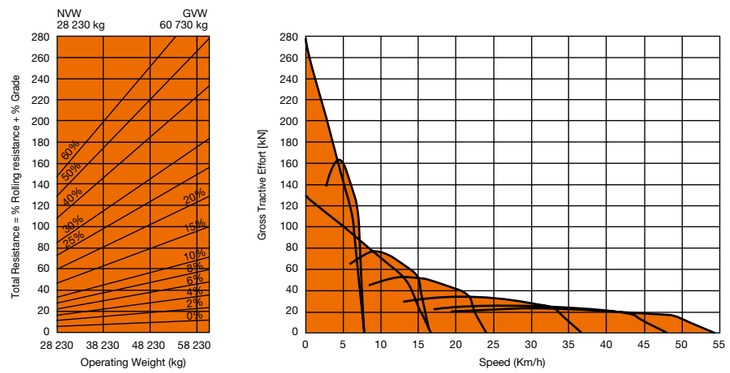

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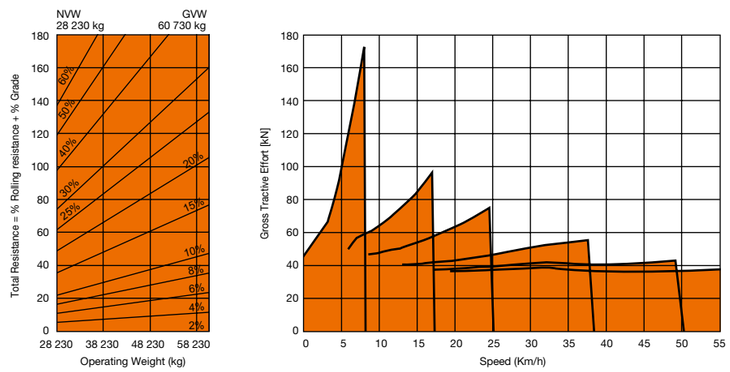
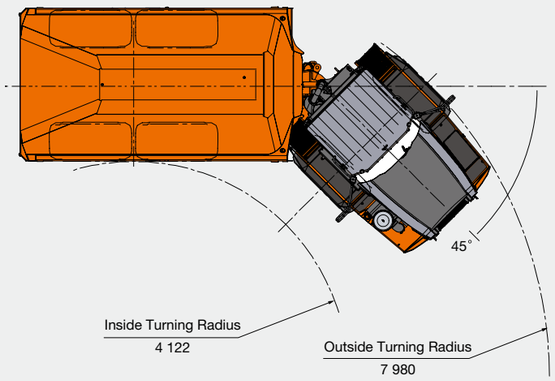


DIMENSIONS / PERFORMANCE DATA

Unit: mm

AH300-D



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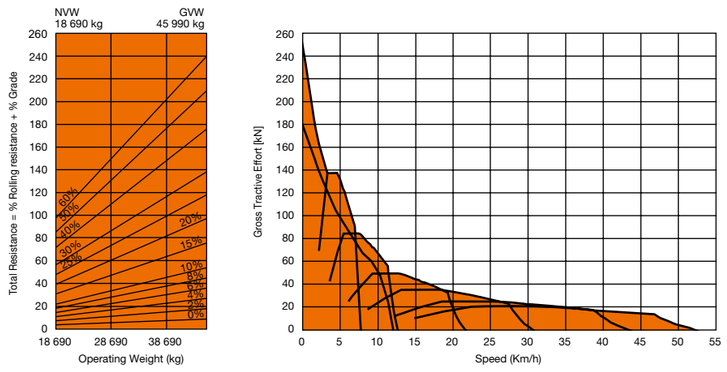

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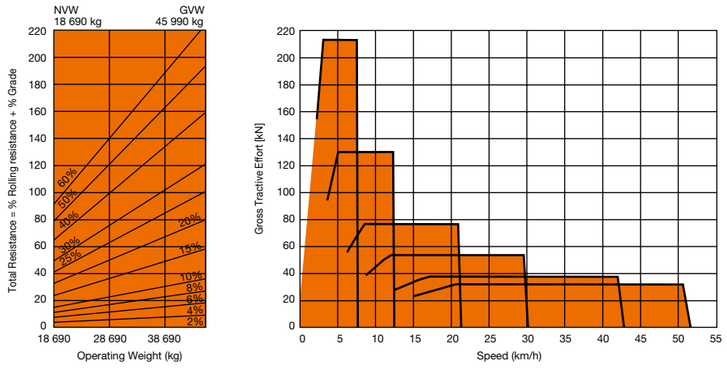
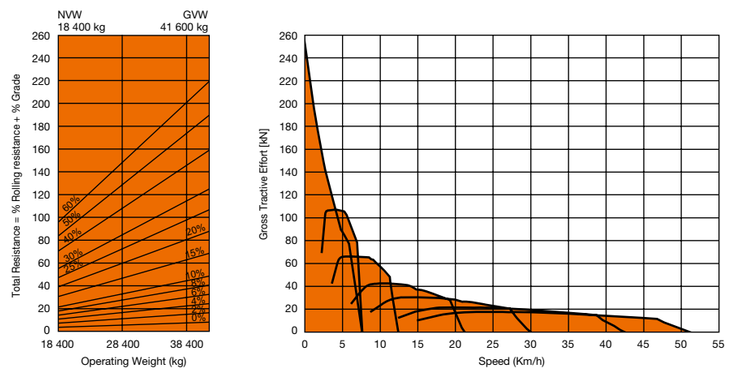


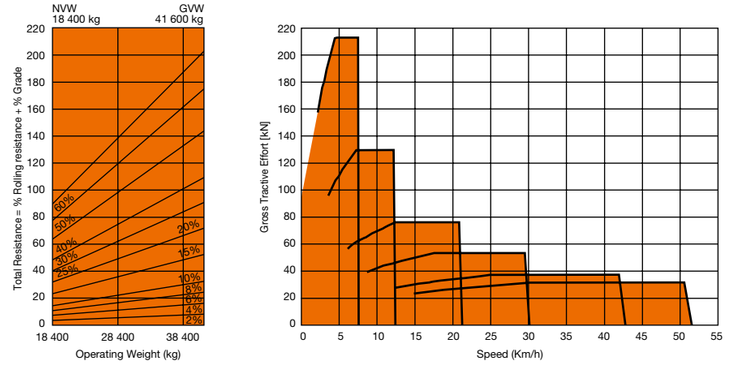
Unit: mm

AH250-D

GRADEABILITY



RETARDATION



SPECIFICATIONS

AH500-D / AH400-D / AH350-D

			AH500-D	AH400-D	AH350-D
RATED PAYLOAD			45 400 kg	37 000 kg	32 500 kg
BODY CAPACITY: HEAPED			27.5 m^3	22.6 m^3	20.1 m^3
ENGINE NET POWER			382 kW (512 HP)	308 kW (413 HP)	283 kW (380 HP)
BODY	Capacity:	Struck	21.6 m^3	18.0 m^3	15.9 m^3
		Heaped: SAE 2:1	27.5 m^3	22.6 m^3	20.1 m^3
	Rated Payload		45 400 kg	37 000 kg	32 500 kg
	Lowering time		9.9 s (60 degrees tip angle)	8 s	
	Raise time		11.2 s (60 degrees tip angle)	13 s	
	Tipping angle		70 degrees standard or any lower angle programmable		
OPERATING WEIGHTS	Unladen	Front	17 550 kg	14 650 kg	14 120 kg
		Middle	8 500 kg	7 810 kg	7 060 kg
		Rear	8 470 kg	7 390 kg	7 050 kg
		Total	34 520 kg	29 850 kg	28 230 kg
	Laden	Front	23 440 kg	19 590 kg	18 350 kg
		Middle	28 260 kg	23 840 kg	21 200 kg
		Rear	28 220 kg	23 420 kg	21 180 kg
		Total	79 920 kg	66 850 kg	60 730 kg
ENGINE	Model		MercedesBenz OM502LA	MercedesBenz OM501LA	
	Configuration		V-8 with Automatic exhaust brake and Engine Valve Brake (EVB)	V-6 with Automatic exhaust brake and Engine Valve Brake (EVB)	
	Emission Certification		Meets Europe (EU) Stage IIIA ratings		
	Aspiration		Turbocharged and intercooled		
	Gross power		390 kW (523 HP) @1 800 min^{-1}(rpm)	315 kW (422 HP) @1 800 min^{-1}(rpm)	290 kW (389 HP) @1 800 min^{-1}(rpm)
	Net Power		382 kW (512 HP) @1 800 min^{-1}(rpm)	308 kW (413 HP) @1 800 min^{-1}(rpm)	283 kW (380 HP) @1 800 min^{-1}(rpm)
	Net torque		2 147 N·m @1 200 min^{-1}(rpm)	1 974 N·m @1 300 min^{-1}(rpm)	1 824 N·m @1 300 min^{-1}(rpm)
	Displacement		15.93 L	11.95 L	
	Fuel tank capacity		640 L	485 L	
ELECTRICAL SYSTEM	Voltage		24 V		
	Battery capacity		2 X 105 Ah		
	Alternator rating		28V 80A		
TRANSMISSION	Model		Allison HD4560R Full automatic planetary transmission with integral retarder	Allison HD4500R ORS Full automatic planetary transmission with integral retarder	
	Layout		Engine mounted box with rear output		
	Gear layout		Constant meshing planetary gears, clutch operated		
	Clutch type		Hydraulically operated multiple disc		
	Control type		Electronic		
	Torque converter layout		Hydrodynamic, with lock-up in all gears		
	Vehicle speeds:	1st	6.9	7.4	8.0
	km/h	2nd	14.6	15.7	17.0
		3rd	21.2	22.8	24.0
		4th	32.4	34.8	37.0
		5th	42.4	45.6	48.0
		6th	48.2	52.0	54.0
		Reverse	5.7	6.3	6.3
TRANSFER BOX	Model		VGR 17100		
	Type		Three in-line helical gears. Interaxle 33/67 proportional differential, pneumatically/spring lockable whilst stationary or on the move.		
AXLES	Model		30T	25T	
	Type		High strength steel fabricated with spiral bevel type gears on the Controlled Traction differential (CTD) and heavy duty outboard planetary gears.		
BRAKING SYSTEM	Service brake		Dual circuit, full hydraulic oil immersed wet multi-disc brakes on all three axles	Dual circuit, hydraulically actuated wet disc brakes on front and middle axles.	Dual circuit, full hydraulic actuation caliper brakes on all wheels.
	Park & Emergency		Spring applied, air released driveline mounted disc		
WHEELS	Tire	Size	875/65 R29	29.5R25	26.5R25
		Type	Radial Earthmover		
SUSPENSION	Front type		Semi-independent leading A-frame supported by nitrogen and oil filled struts.		
	Rear type		Pivoting walking beams, distributing equal load through laminated rubber suspension blocks. Each axle is coupled to the chassis by a Tri-Link system of four rubber-bushed links for ideal vertical movement and a transverse link for lateral restraint.		
HYDRAULIC SYSTEM	Pump type		Variable displacement with load sensing system incorporating a ground driven emergency steering pump.		
	Application		Steering, tipping, hydraulic brake charging, suspension and cooling fan drive	Steering, tipping, hydraulic brake charging and cooling fan drive	
STEERING SYSTEM Articulated with two double acting hydraulic cylinders	Angle		42°side to side		
	Lock to lock turns		4.2	4.7	
PNEUMATIC SYSTEM			Air Drier with heater and integral unloader valve, serving park brake and auxiliary functions		

AH300-D / AH250-D

			AH300-D	AH250-D
RATED PAYLOAD			27 300 kg	23 200 kg
BODY CAPACITY: HEAPED			16.6 m^3	13.8 m^3
ENGINE NET POWER			232 kW (311 HP)	198 kW (265 HP)
BODY	Capacity:	Struck	12.9 m^3	10.8 m^3
		Heaped: SAE 2:1	16.6 m^3	13.8 m^3
	Rated Payload		27 300 kg	23 200 kg
	Lowering time		6 s	
	Raise time		12 s	
	Tipping angle		70 degrees standard or any lower angle programmable	
OPERATING WEIGHTS	Unladen	Front	9 710 kg	9 620 kg
		Middle	4 490 kg	4 420 kg
		Rear	4 490 kg	4 360 kg
		Total	18 690 kg	18 400 kg
	Laden	Front	13 350 kg	12 860 kg
		Middle	16 320 kg	14 400 kg
		Rear	16 320 kg	14 340 kg
		Total	45 990 kg	41 600 kg
ENGINE	Model		MercedesBenz OM926LA	MercedesBenz OM906LA
	Configuration		I-6 with exhaust brake and Engine Valve Brake (EVB)	
	Emission Certification		Meets Europe (EU) Stage IIIA ratings	
	Aspiration		Turbocharged and intercooled	
	Gross power		240 kW (322 HP) @2 200-1 600 min^{-1}(rpm)	205 kW (275 HP) @2 200 min^{-1}(rpm)
	Net Power		232 kW (311 HP) @2 200-1 600 min^{-1}(rpm)	198 kW (265 HP) @2 200 min^{-1}(rpm)
	Net torque		1 200 N·m @1 200-1 600 min^{-1}(rpm)	970 N·m @1 200-1 600 min^{-1}(rpm)
	Displacement		7.2 L	6.37 L
	Fuel tank capacity		340 L	
ELECTRICAL SYSTEM	Voltage		24 V	
	Battery capacity		2 X 105 Ah	
	Alternator rating		28V 80A	
TRANSMISSION	Model		ZF 6HP592C Ecomat 2 plus with integral retarder	
	Layout		Engine mounted box with rear output	
	Gear layout		Constant meshing planetary gears, clutch operated	
	Clutch type		Hydraulically operated multiple disc	
	Control type		Electronic	
	Torque converter layout		Hydrodynamic with lock-up in all gears	
	Vehicle speeds:	1st	8.0	
	km/h	2nd	13.0	
		3rd	22.0	
		4th	31.0	
		5th	44.0	
		6th	53.0	
		Reverse	8.0	
TRANSFER BOX	Model		VGR 13100	
	Type		Three in-line helical gears. 67/33 torque proportioning, pneumatically lockable on the move	
AXLES	Model		18T	15T
	Type		High strength steel fabricated with spiral bevel type gears on the Limited Slip locking differential (LSD) and heavy duty outboard planetary gears	
BRAKING SYSTEM	Service brake		Dual circuit, full hydraulic actuation caliper brakes on all wheels.	
	Park & Emergency		Spring applied, air released driveline mounted disc	
WHEELS	Tire	Size	23.5R25	
		Type	Radial Earthmover	
SUSPENSION	Front type		Semi-independent, quad rubber mounted leading arm linkages supported by nitrogen and oil filled struts.	
	Rear type		Pivoting walking beams, distributing equal load through laminated rubber suspension blocks. Each axle is coupled to the chassis by four rubber-bushed links for ideal vertical movement.	
HYDRAULIC SYSTEM	Pump type		Variable displacement with load sensing system incorporating a ground driven emergency steering pump.	
	Application		Steering, tipping, hydraulic brake charging and cooling fan drive	
STEERING SYSTEM Articulated with two double acting hydraulic cylinders	Angle		45°side to side	
	Lock to lock turns		4.1	
PNEUMATIC SYSTEM			Air Drier with heater and integral unloader valve, serving park brake and auxiliary functions	

EQUIPMENT

◎ : Standard equipment ○ : Optional equipment N/A: With no set up

	AH500-D	AH400-D	AH350-D	AH300-D	AH250-D
ENGINE					
Wet-sleeve cylinder liners	◎	◎	◎	◎	◎
Engine valve brake and exhaust brake	◎	◎	◎	◎	◎
Dual-element air cleaner with dust ejector valve	◎	◎	◎	◎	◎
Pre-cleaner	◎	◎	◎	◎	◎
Water separator	◎	◎	◎	◎	◎
Provision for fast fill	◎	◎	◎	◎	◎
Serpentine drive belt with automatic tensioner	◎	◎	◎	◎	◎
COOLING					
Crankshaft-mounted viscous-drive fan	◎	◎	◎	◎	◎
Remote proportionally controlled hydraulic fan drive	◎	◎	◎	N/A	N/A
Fan guard	◎	◎	◎	◎	◎
PNEUMATIC SYSTEM					
Engine-mounted compressor	◎	◎	◎	◎	◎
Air drier with heater	◎	◎	◎	◎	◎
Integral unloader valve	◎	◎	◎	◎	◎
ELECTRICAL SYSTEM					
Battery disconnect	◎	◎	◎	◎	◎
Drive lights	◎	◎	◎	◎	◎
Hooter	◎	◎	◎	◎	◎
Electric/Air Horn	◎	◎	◎	◎	◎
Reverse alarm	◎	◎	◎	◎	◎
Flashing beacon	◎	◎	◎	◎	◎
STEERING SYSTEM					
Ground-driven secondary steering pump	◎	◎	◎	◎	◎
BRAKE SYSTEM					
Wet disc brakes	◎	◎	N/A	○	N/A
Dry disc brakes	N/A	N/A	◎	◎	◎
Engine valve brake	◎	◎	◎	◎	◎
Transmission retarder	◎	◎	◎	◎	◎
CAB					
ROPS/FOPS certification	◎	◎	◎	◎	◎
Tilt cab	◎	◎	◎	◎	◎
Gas strut-supported door	◎	◎	◎	◎	◎
I-Tip programmable dump-body tip settings	◎	◎	◎	◎	◎
Air conditioner	◎	◎	◎	◎	◎
Heater	◎	◎	◎	◎	◎
AM/FM radio/CD player	◎	◎	◎	◎	◎
Rear window guard	◎	◎	◎	◎	◎
Wiper/washer with intermittent control	◎	◎	◎	◎	◎
Tilt and telescoping steering wheel	◎	◎	◎	◎	◎
Center-mount air-suspension seat	◎	◎	◎	◎	◎
Retractable seat belt	◎	◎	◎	◎	◎
Foldaway trainer seat with retractable seat belt	◎	◎	◎	◎	◎

	AH500-D	AH400-D	AH350-D	AH300-D	AH250-D
12-volt power outlet	◎	◎	◎	◎	◎
Cup holder	◎	◎	◎	◎	◎
Cooled/heated lunch box	◎	◎	◎	◎	◎
Ashtray	◎	◎	◎	◎	◎
Electric adjustable and heated mirrors	◎	◎	◎	◎	◎
Rear window wiper	◎	◎	◎	◎	◎
External windshield visor	◎	◎	◎	◎	◎
Seat covers	◎	◎	◎	◎	◎
Deluxe monitor : Analog speedometer / Fuel gauge/ Transmission oil temperature gauge / Engine coolant temperature gauge / LED function & warning indicators and audible alarm / Transmission gear selection / Tachometer / Battery voltage / Hour meter / Odometer / Fuel consumption / Tip counter / Trip timer / Trip distance / Metric or English units / Service codes & diagnostics	◎	◎	◎	◎	◎
Backlit sealed switch module functions: Wiper control / Lights / Heated mirrors / Retarding aggressiveness / Controlled traction differentials (AH350-D/AH400-D/AH500-D) / Transfer case differential lock / Transmission gear hold / Dump-body tip limit / Automatic dump-body tip settings / Air conditioner & Heater controls / Pre-selected Speed Control	◎	◎	◎	◎	◎
DUMP BODY					
Dump-body mechanical lock	◎	◎	◎	◎	◎
Body liners	○	○	○	○	○
Tailgate mechanical (auto gate)	○	○	○	○	○
Exhaust body heating	○	○	○	○	○
Less dump body and cylinders	○	○	○	○	○
OTHER					
23.5R25 radial earthmover tyres	N/A	N/A	N/A	◎	◎
26.5R25 radial earthmover tyres	N/A	N/A	◎	N/A	N/A
29.5R25 radial earthmover tyres	○	◎	N/A	N/A	N/A
875/65R29 radial earthmover tyres	◎	N/A	N/A	N/A	N/A
Automatic greasing	◎	◎	◎	◎	◎
Load lights	○	○	○	○	○
Reverse camera	◎	◎	◎	◎	◎
Full handrails	◎	◎	○	N/A	N/A
Antenna mounting bracket	◎	◎	◎	◎	◎
Work lights	◎	◎	◎	◎	◎
Headlight guard	◎	◎	◎	◎	◎
Artic reverse light (x1)	◎	◎	◎	◎	◎

These specifications are subject to change without notice.
Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, and all standard equipment with some differences in color and features.
Before use, read and understand the Operator's Manual for proper operation.

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