HITACHI

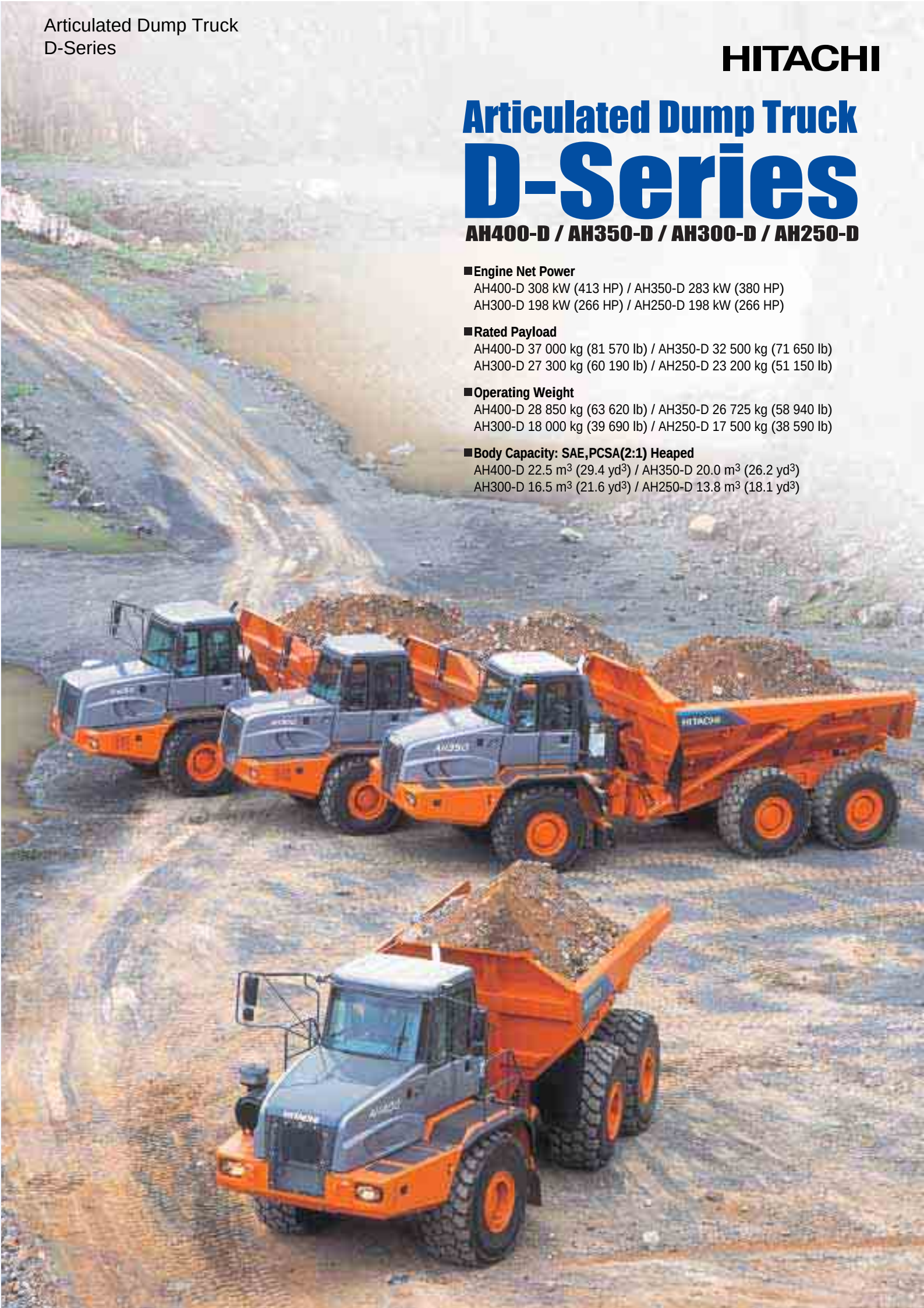
Articulated Dump Truck
D-Series
AH400-D / AH350-D / AH300-D / AH250-D

■ **Engine Net Power**
AH400-D 308 kW (413 HP) / AH350-D 283 kW (380 HP)
AH300-D 198 kW (266 HP) / AH250-D 198 kW (266 HP)

■ **Rated Payload**
AH400-D 37 000 kg (81 570 lb) / AH350-D 32 500 kg (71 650 lb)
AH300-D 27 300 kg (60 190 lb) / AH250-D 23 200 kg (51 150 lb)

■ **Operating Weight**
AH400-D 28 850 kg (63 620 lb) / AH350-D 26 725 kg (58 940 lb)
AH300-D 18 000 kg (39 690 lb) / AH250-D 17 500 kg (38 590 lb)

■ **Body Capacity: SAE,PCSA(2:1) Heaped**
AH400-D 22.5 m^3 (29.4 yd^3) / AH350-D 20.0 m^3 (26.2 yd^3)
AH300-D 16.5 m^3 (21.6 yd^3) / AH250-D 13.8 m^3 (18.1 yd^3)



Stable Powerful Economical

PERFORMANCE

High power and torque engines with the right torque curve characteristics are perfectly matched to smooth-shifting, efficient transmissions in a light, yet strong chassis, providing class leading power and payload to weight ratios, to maximize cycle speed and efficiency.
The AH400-D's higher standard specification includes new wet disc, full-hydraulic activated brakes which boost braking force and decrease stopping distances, while providing unaffected performance in deep mud applications.
EVB(Engine Valve Brake) and exhaust brake as primary retarders are stronger and more efficient, and substantially contribute to strong downhill retardation. In addition, D-series has the transmission output retarder as main retarder.

PRODUCTIVITY

Hitachi machines feature high power to weight ratios, and now combined with larger payloads, more stopping power and comfortable cabs, operators will be able to produce faster cycle times, delivering more material throughout the longest shifts.

ECONOMY

Highly fuel-efficient, electronically managed diesel engines coupled to efficient planetary automatic transmissions in a light overall package deliver higher torque at lower revs where less fuel is burned.
The transmission spends as much time as possible in lock-up mode to save fuel.

OFF-ROAD PERFORMANCE

Six-wheel drive ADT's perform best when they are built light, with evenly laden axles, equal torque split to each axle, high suspension travel and good ground clearance and approach angles.

Better comfort and ease of operation boosts operator performance.

COMFORT

The all-new ROPS and FOPS steel framed operator cabins, have fewer pillars for excellent all-round vision. Inside, the soft touch, wrap around dashboard gives an automotive feel, and all controls are clustered and within easy reach.

A dedicated ADT instrument cluster provides all operational data, along with diagnostic displays and malfunction warnings.

The latest full-hydraulic orbital steering system provides smooth, low effort, yet direct steering.

(This picture is for AH400-D / AH350-D)

SIMPLE, AUTOMATIC AND ABUSE-PROOF OPERATION

It is Hitachi's mission to provide the market with simple to operate machines, as skilled plant operators are hard to come by.

Starting with the fully automatic transmission with *touch pad shift control, automatic gear downshifts and retarder activation to the *abuse-proof CTD(Controlled Traction Diffs) differentials - operators are able to concentrate on the job at hand, while giving the owners peace of mind from possible costly machine damage.

*AH400-D / AH350-D Only

(AH400-D Mining Body)

LOW MAINTENANCE AND HIGH SERVICEABILITY

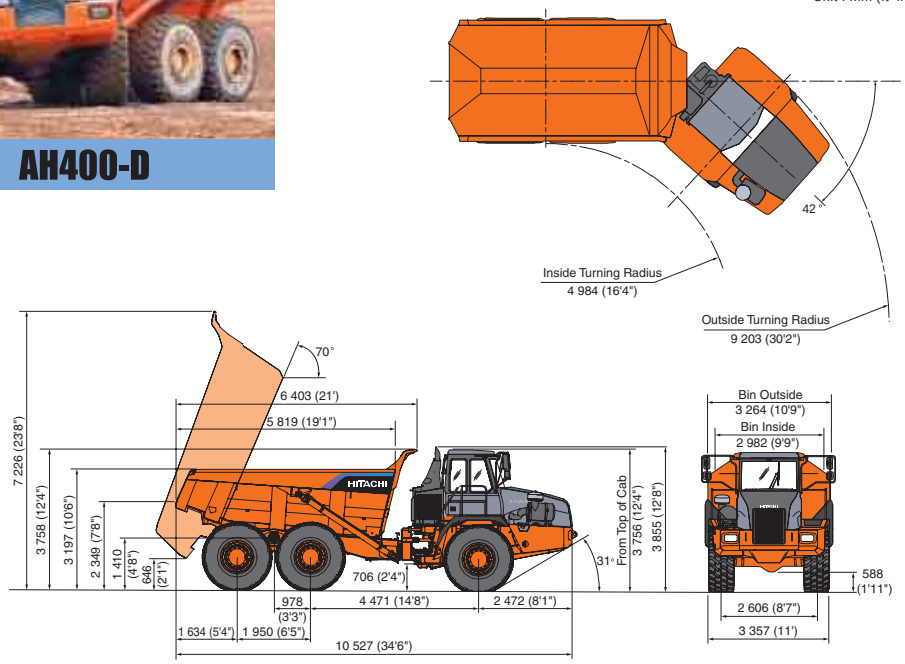
Extended service intervals and the use of modern, low maintenance bearing materials, long life synthetic transmission and transfer case oils have reduced the D-Series maintenance requirements.

The entire driveline, electric and hydraulic components as well as all electronics are fully accessible via easy to get to tilt bonnets and cabs, belly plates and hinged door panels.

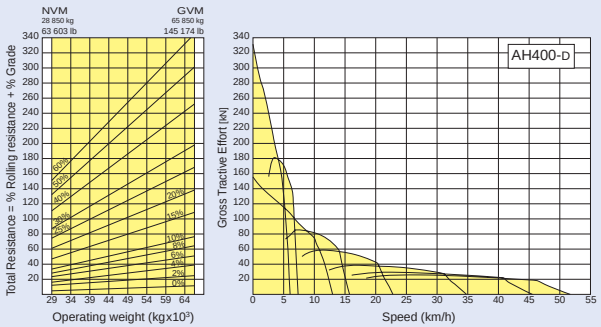
AH400-D

DIMENSIONS

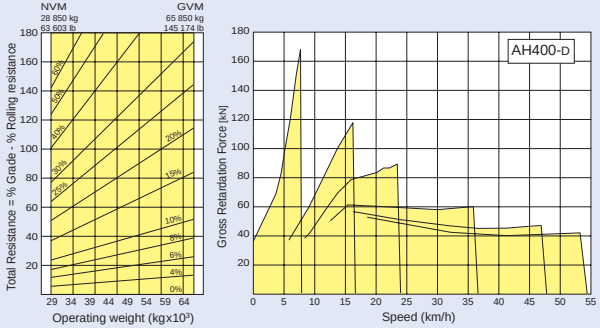
Unit : mm (ft in)



GRADEABILITY



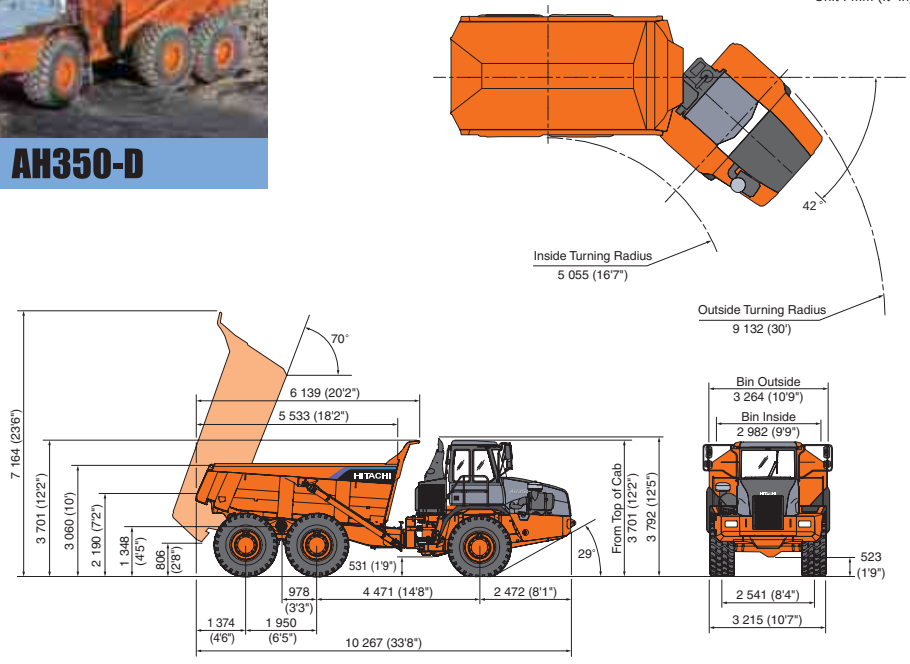
RETARDATION



AH350-D

DIMENSIONS

Unit : mm (ft in)



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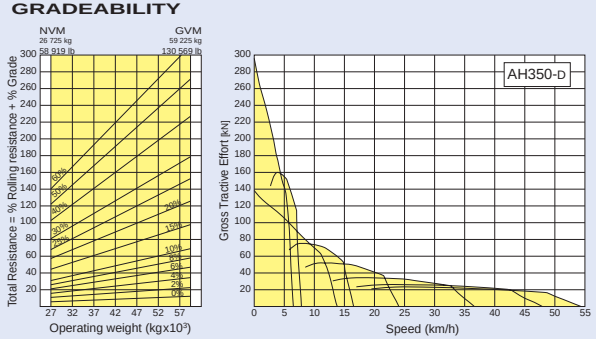

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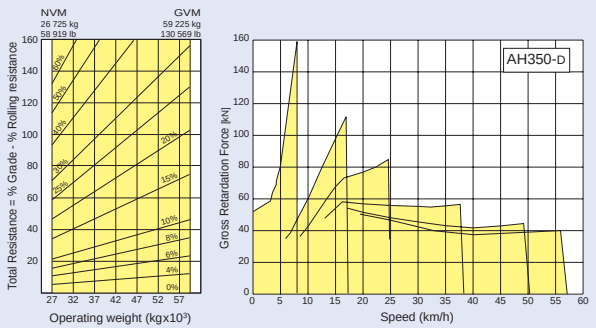
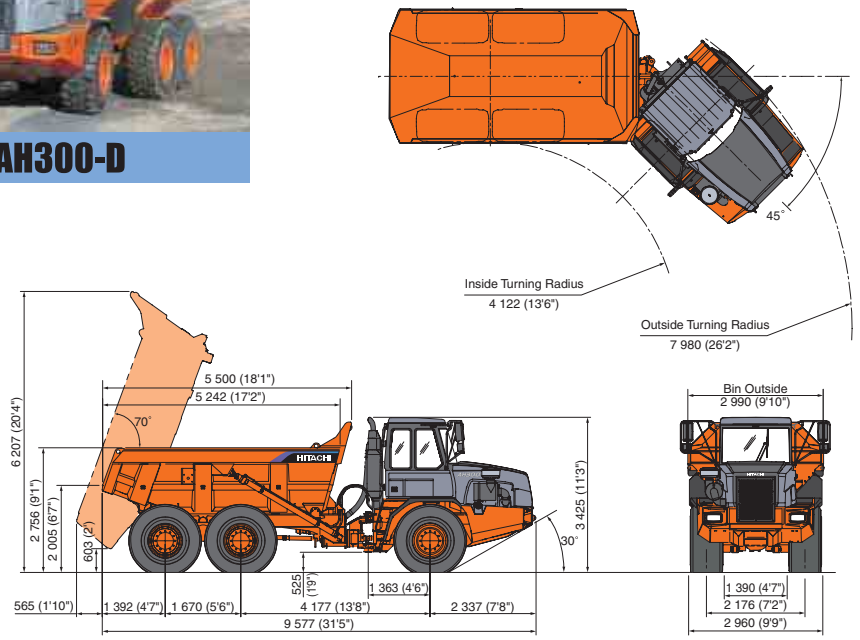


AH300-D

DIMENSIONS

Unit : mm (ft in)



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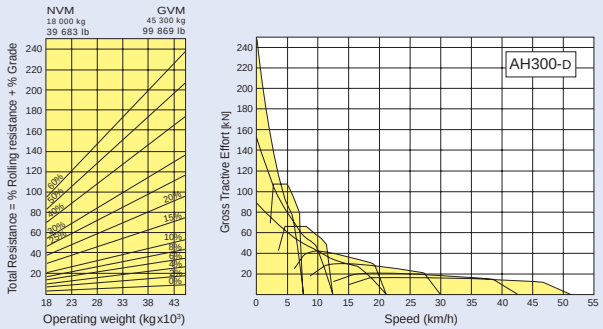
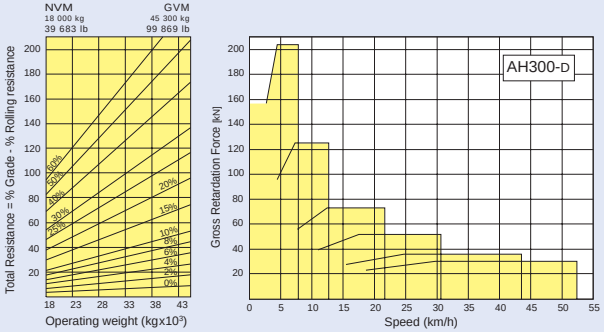


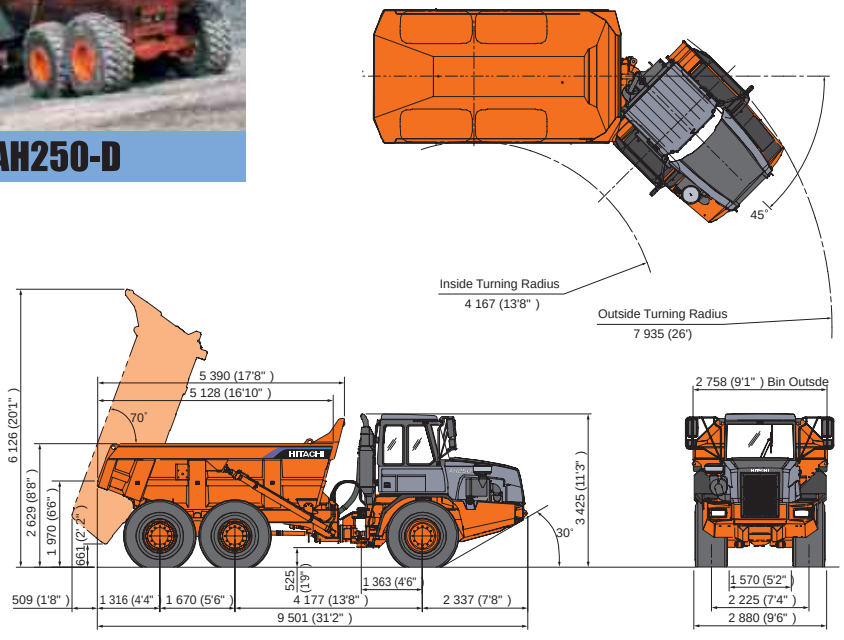
RETARDATION



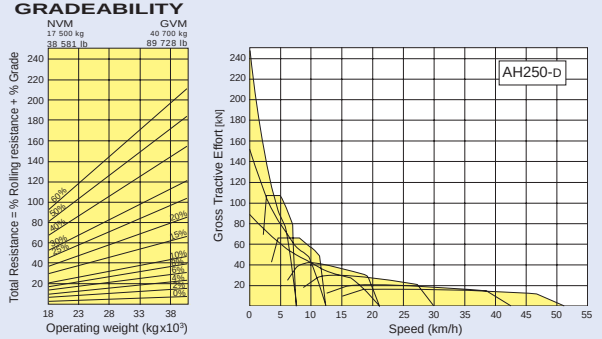
AH250-D

DIMENSIONS

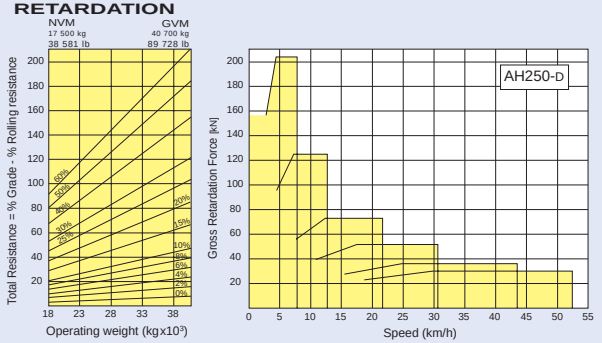
Unit : mm (ft in)



GRADEABILITY



RETARDATION



SPECIFICATIONS

			AH400-D	AH350-D
RATED PAYLOAD			37 000 kg (81 570 lb)	32 500 kg (71 650 lb)
BODY CAPACITY: HEAPED			22.5 m^3 (29.4 yd^3)	20.0 m^3 (26.2 yd^3)
ENGINE NET POWER			308 kW (413 HP)	283 kW (380 HP)
BODY	Capacity :	Struck	16.9 m^3 (22.1 yd^3)	15.2 m^3 (19.9 yd^3)
		Heaped: SAE 2:1	22.5 m^3 (29.4 yd^3)	20.0 m^3 (26.2 yd^3)
	Rated payload		37 000 kg (81 570 lb)	32 500 kg (71 650 lb)
	Power down time		7.6 seconds	
	Raise time		13 seconds	
	Tipping angle		70 degrees	
OPERATING WEIGHTS	Empty	Front	14 615 kg (32 220 lb)	13 600 kg (29 990 lb)
		Middle	7 280 kg (16 050 lb)	6 565 kg (14 480 lb)
		Rear	6 955 kg (15 340 lb)	6 560 kg (14 470 lb)
		Total	28 850 kg (63 600 lb)	26 725 kg (58 920 lb)
	Laden	Front	19 395 kg (42 760 lb)	18 510 kg (40 810 lb)
		Middle	23 390 kg (51 570 lb)	20 360 kg (44 890 lb)
		Rear	23 065 kg (50 850 lb)	20 355 kg (44 880 lb)
		Total	65 850 kg (145 200lb)	59 225 kg (130 570 lb)
ENGINE	Model		DaimlerChrysler MercedesBenz OM501LA	
	Configuration		V-6 with exhaust brake and Engine Valve Brake (EVB)	
	Aspiration		Turbocharged and intercooled	
	Cooling system		Liquid cooled with single pass radiator as well as charge air cooler	
	Gross power (SAE J1349)		315 kW (422 HP) @ 1 800 min^{-1} (rpm)	290 kW (389 HP) @ 1 800 min^{-1} (rpm)
	Net power (SAE J1349)		308 kW (413 HP) @ 1 800 min^{-1} (rpm)	283 kW (379 HP) @ 1 800 min^{-1} (rpm)
	Net torque		1 974 N·m (1 456 lbf·ft) @ 1 080 min^{-1} (rpm)	1 824 N·m (1 345 lbf·ft) @ 1 080 min^{-1} (rpm)
	Displacement		11.95 L (730 in^3)	
	Fuel tank capacity		485 L (128 US gal)	
ELECTRICAL SYSTEM	Voltage		24V	
	Battery capacity		2 x 105 Ah	
	Alternator rating		28V 80A	
TRANSMISSION	Model		Allison HD4560 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		Hydrodynamically with lock-up in all gears	
	Vehicle speeds:	1st	7.4 (4.6)	7.8 (4.9)
	km/h (mph)	2nd	15.7 (9.8)	16.5 (10.3)
		3rd	22.8 (14.3)	24.0 (15.0)
		4th	34.8 (21.8)	36.6 (22.8)
		5th	45.6 (28.5)	47.9 (29.9)
		6th	52.0 (32.5)	54.4 (34.0)
		Rear	6.3 (3.9)	6.6 (4.1)
TRANSFER BOX	Output differential		VGR 17000 / Three in-line gears. Interaxle 33/67 proportional differential, pneumatically lockable whilst stationary or on the move.	
AXLES	Differential type		25T / Spiral bevel type with Controlled Traction Diffs(CTD)	
	Final drive type		Outboard heavy-duty planetary	
BRAKING SYSTEM	Service brake		Dual circuit, full hydraulic actuation oil-cooled wet disc brakes on front and center axle.	Dual circuit, full hydraulic actuation caliper brakes on all wheels.
	Park & Emergency		Spring applied, air released driveline mounted disc.	
	Auxiliary brake		Transmission retarder, automatic exhaust brake and Engine Valve Brake (EVB)	
WHEELS	Tire	Size	29.5R25	26.5R25
		Type	Radial Earthmover	
	Max. ground pressure (laden)		Middle : 156 kPa (1.59 kgf/cm^2, 23 psi)	
SUSPENSION	Front type		Semi-independent leading A-frame supported by nitrogen/oil struts.	
	Rear type		Pivoting walking beams equalize the load on each axle with laminated suspension blocks.	
HYDRAULIC SYSTEM	Pump type		Variable displacement, loadsensing piston	
	Application		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		4.7	
PNEUMATIC SYSTEM			Air drier with heater and integral unloader valve, serving park brake and auxiliary functions	

			AH300-D	AH250-D
RATED PAYLOAD			27 300 kg (60 190 lb)	23 200 kg(51 150 lb)
BODY CAPACITY: HEAPED			16.5 m^3 (21.6 yd^3)	13.8m^3 (18.1 yd^3)
ENGINE NET POWER			198 kW (266 HP)	198 kW (266 HP)
BODY	Capacity :	Struck	12.6 m^3 (16.5 yd^3)	10.5 m^3 (13.7 yd^3)
		Heaped: SAE 2:1	16.5 m^3 (21.6 yd^3)	13.8m^3 (18.1 yd^3)
	Rated payload		27 300 kg (60 190 lb)	23 200 kg (51 150 lb)
	Power down time		6.0 seconds	
	Raise time		12.0 seconds	
	Tipping angle		70 degrees	
OPERATING WEIGHTS	Empty	Front	9 550 kg (21 050 lb)	9 350 kg (20 620 lb)
		Middle	4 300 kg (9 480 lb)	4 150 kg (9 150 lb)
		Rear	4 150 kg (9 150 lb)	4 000 kg (8 820 lb)
		Total	18 000 kg (39 690 lb)	17 500 kg (38 580 lb)
	Laden	Front	13 200 kg (29 100 lb)	12 400 kg (27 340 lb)
		Middle	16 125 kg (35 550 lb)	14 225 kg (31 360 lb)
		Rear	15 975 kg (35 220 lb)	14 075 kg (31 030 lb)
		Total	45 300 kg (99 870 lb)	40 700 kg (89 730 lb)
ENGINE	Model		DaimlerChrysler MercedesBenz OM906LA	
	Configuration		I-6 with exhaust brake and Engine Valve Brake (EVB)	
	Aspiration		Turbocharged and intercooled	
	Cooling system		Liquid cooled with single pass radiator as well as charge air cooler	
	Gross power (SAE J1349)		205 kW(275 HP)@2 200 min^{-1}(rpm)	
	Net power (SAE J1349)		198 kW(265 HP)@2 200 min^{-1}(rpm)	
	Net torque		1 070 N·m (788 lbf·ft) @ 1 200 - 1 600 min^{-1} (rpm)	970 N·m (714 lbf·ft) @ 1 050 - 1 850 min^{-1} (rpm)
	Displacement		6.37 L (389 in^3)	
	Fuel tank capacity		340 L (90 US gal)	
ELECTRICAL SYSTEM	Voltage		24V	
	Battery capacity		2 x 105Ah	
	Alternator rating		28V 80A	
TRANSMISSION	Model		ZF 6HP592C with integral retarder	
	Layout		Engine mounted box with rear output	
	Gear layout		Constant meshing planetary gears, clutch operated	
	Clutch type		Hydraulically operated multi disc	
	Control type		Electronic	
	Torque converter layout		Hydrodynamic, with lock-up in all gears	
	Vehicle speeds:	1st	8 (5)	
	km/h (mph)	2nd	13 (8)	
		3rd	22 (14)	
		4th	31 (19)	
		5th	44 (27)	
		6th	53 (33)	
		Rear	8 (5)	
TRANSFER BOX	Output differential		VGR 13 100 / Three in-line helical gears, Interaxle 33/67 proportional differential, pneumatically lockable whilst stationary or on the move.	
AXLES	Differential type		18T/ Spiral bevel type with Limited Slip	15T/Spiral bevel type with Limited Slip
	Final drive type		Outboard heavy-duty planetary	
BRAKING SYSTEM	Service brake		Dual circuit, full hydraulic actuation caliper brakes on all wheels	
	Park & Emergency		Spring applied, air released driveline mounted disc.	
	Auxiliary brake		Transmission retarder, automatic exhaust brake and Engine Valve Brake (EVB)	
WHEELS	Tire	Size	23.5R25	
		Type	Radial Earthmover	
	Max. ground pressure (laden)		Middle : 145 kPa (1.48 kgf/cm^2, 21 psi)	Middle : 135 kPa (1.38 kgf/cm^2, 19.6 psi)
SUSPENSION	Front type		Semi-independent leading arm type linkages supported by nitrogen/oil struts	
	Rear type		Pivoting walking beams equalize the load on each axle with laminated suspension blocks.	
HYDRAULIC SYSTEM	Pump type		Variable displacement, loadsensing piston	
	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	

Articulated Dump Truck
D-Series

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

STANDARD & OPTIONAL EQUIPMENT

	AH400-D	AH350-D	AH300-D	AH250-D
WHEELS AND TYRES				
23.5 R25	N/A	N/A	◎	◎
26.5 R25	N/A	◎	N/A	N/A
29.5 R25	◎	N/A	N/A	N/A
Tyre valve guards	◎	◎	◎	◎
DRIVELINE				
Control traction differential	◎	◎	N/A	N/A
Limited slip differential	N/A	N/A	◎	◎
Inter axle differential lock	◎	◎	◎	◎
Engine valve brake (EVB)	◎	◎	◎	◎
Engine exhaust brake	◎	◎	◎	◎
Transmission Retarder	◎	◎	◎	◎
Wet disc brakes	◎	N/A	N/A	N/A
Dry disc brakes	N/A	◎	◎	◎
CHASSIS AND LOAD BODY				
STD wheel base	◎	◎	◎	◎
Mining body without liners	○	○	N/A	N/A
Body without liners	◎	◎	◎	◎
Body liners	○	○	○	○
OPERATORS STATION				
Air suspension seat	◎	◎	◎	◎
Arm Rests for Operators Seat	◎	◎	◎	◎
Lockable doors	◎	◎	◎	◎
Door hold open strut	◎	◎	◎	◎
Tinted safety glass windows	◎	◎	◎	◎
Electric rear view mirror	◎	◎	◎	◎
Seat belts ISO tested	◎	◎	◎	◎
Document pocket	◎	◎	◎	◎
Ash trays	◎	◎	◎	◎
Drinks holder	◎	◎	◎	◎
Sun visor	◎	◎	◎	◎
ROPS cab - air conditioner	◎	◎	◎	◎
Air cooled compartment	◎	◎	◎	◎
Trainer seat (ISO tested)	◎	◎	◎	◎
Cigar lighter/power point 12V	◎	◎	◎	◎
Tilt /telescopic steering column	◎	◎	◎	◎

	AH400-D	AH350-D	AH300-D	AH250-D
FUNCTION READOUTS				
Tachometer and speedo	◎	◎	◎	◎
Engine coolant temp	◎	◎	◎	◎
Engine oil press	◎	◎	◎	◎
Fuel level	◎	◎	◎	◎
Trans oil temp	◎	◎	◎	◎
Hour meter reading	◎	◎	◎	◎
Air pressure guage	◎	◎	◎	◎
Current gear readout	◎	◎	◎	◎
Trip time (min)	◎	◎	◎	◎
Trip distance (km)	◎	◎	◎	◎
Bin tip counter	◎	◎	◎	◎
Odometer	◎	◎	◎	◎
Trans lock up status	◎	◎	◎	◎
Throttle position	◎	◎	◎	◎
Retarder oil temp	◎	◎	◎	◎
Bin position	◎	◎	◎	◎
Hydraulic oil temp	◎	◎	◎	◎
Wet brake oil temp	◎	N/A	N/A	N/A
GENERAL				
Antenna mounting bracket	◎	◎	◎	◎
Rear tow pin	◎	◎	◎	◎
Auto grease system	○	○	N/A	N/A
Two extra batteries	○	○	○	○
Work lights	○	○	○	○
Fuel heater	○	○	○	○
Tailgate mechanical (Auto gate)	○	○	○	○
Bin heating connection	○	○	○	○
Head light guard	◎	◎	◎	◎
CE Mark	◎	◎	◎	◎
Air horn	◎	◎	◎	◎
Emergency steering (Ground)	◎	◎	◎	◎
S/brake caliper mud scrapers	N/A	◎	◎	◎
S/Brake caliper mud covers	N/A	◎	◎	◎
EPA emission certified	◎	◎	◎	◎

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, go through Operator's Manual for proper operation.

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