

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 (81 571 lb) / AH350-D 32 500 kg (71 650 lb)

AH300-D 27 300 kg (60 190 lb) / AH250-D 23 200 kg (51 156 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 (38 588 lb)

■ **Body Capacity: SAE,PCSA(2:1) Heaped**

AH400-D 22.5 m³ (29.4 yd³) / AH350-D 20.0 m³ (26.2 yd³)

AH300-D 16.5 m³ (21.6 yd³) / AH250-D 13.8 m³ (18.1 yd³)





Stable Powerful Determined

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.



(AH400-D / AH350-D Only)

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.

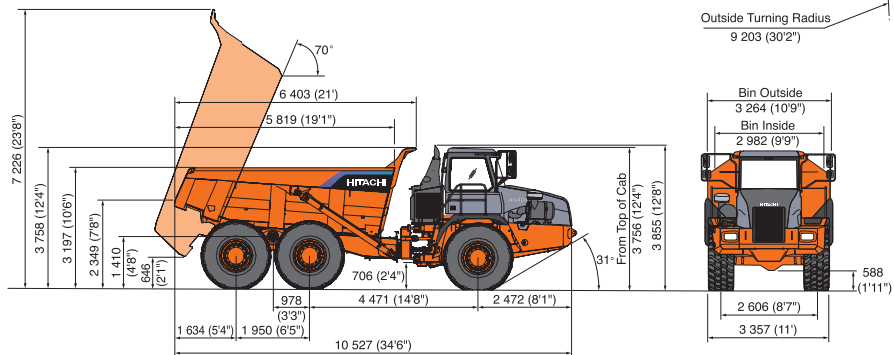
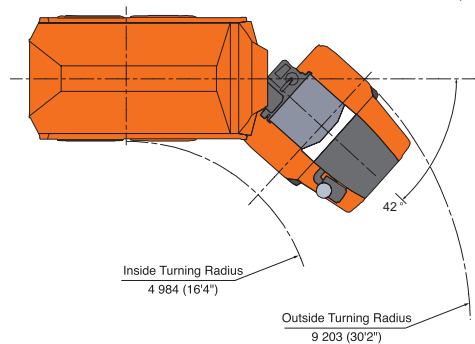




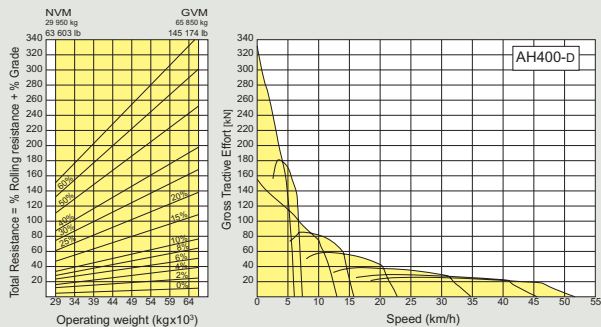
AH400-D

DIMENSIONS

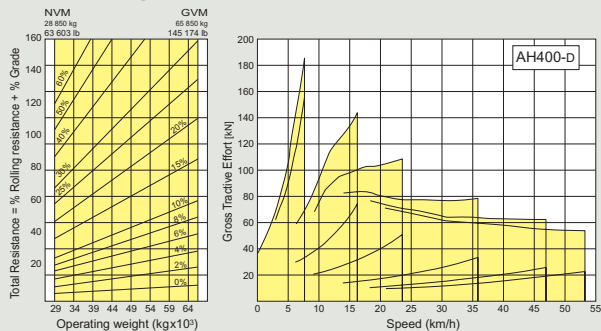
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GRADEABILITY



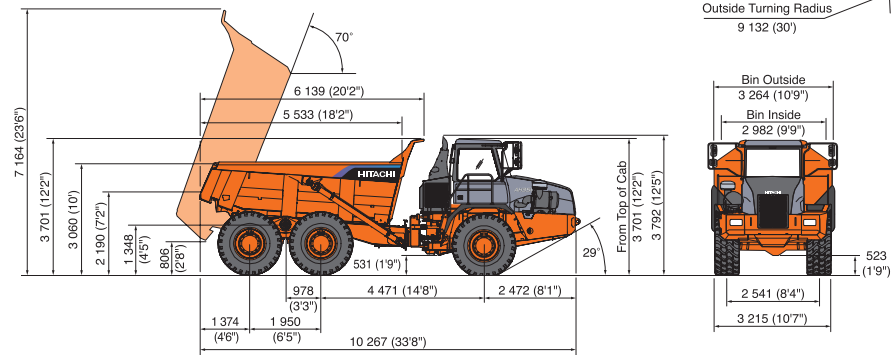
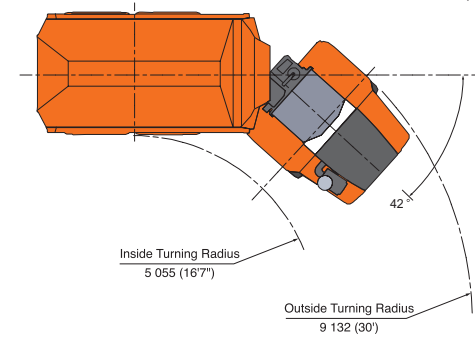
RETARDATION



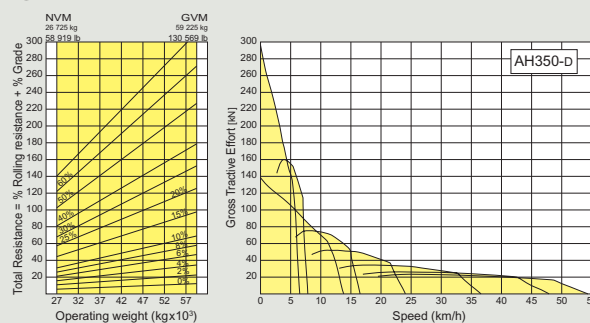
AH350-D

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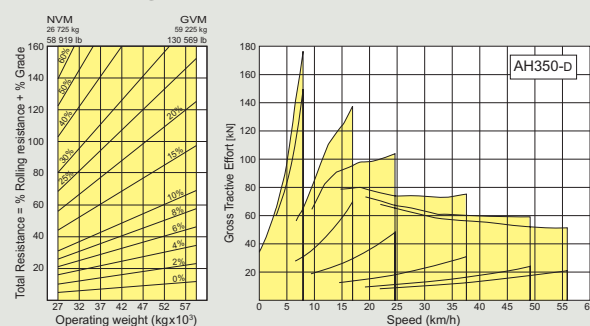
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GRADEABILITY



RETARDATION

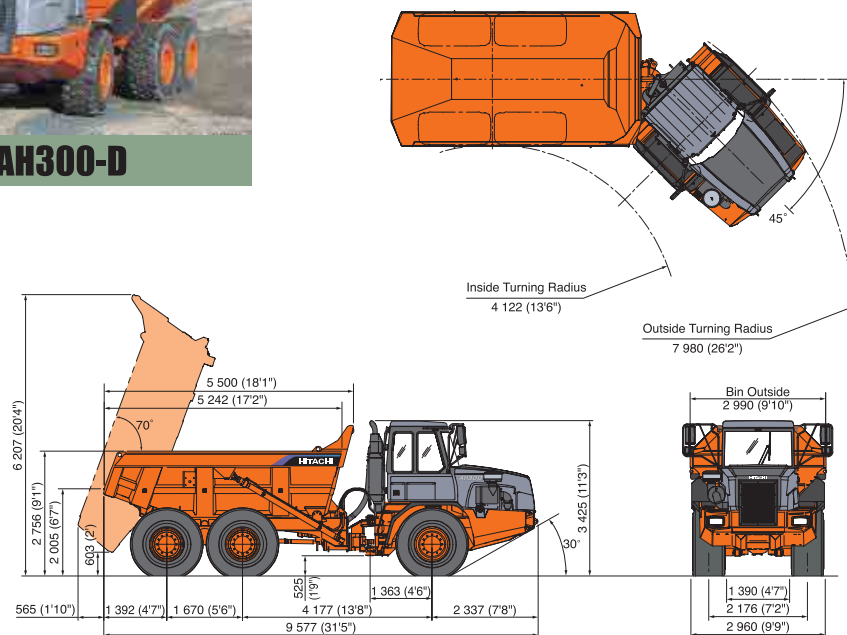




AH300-D

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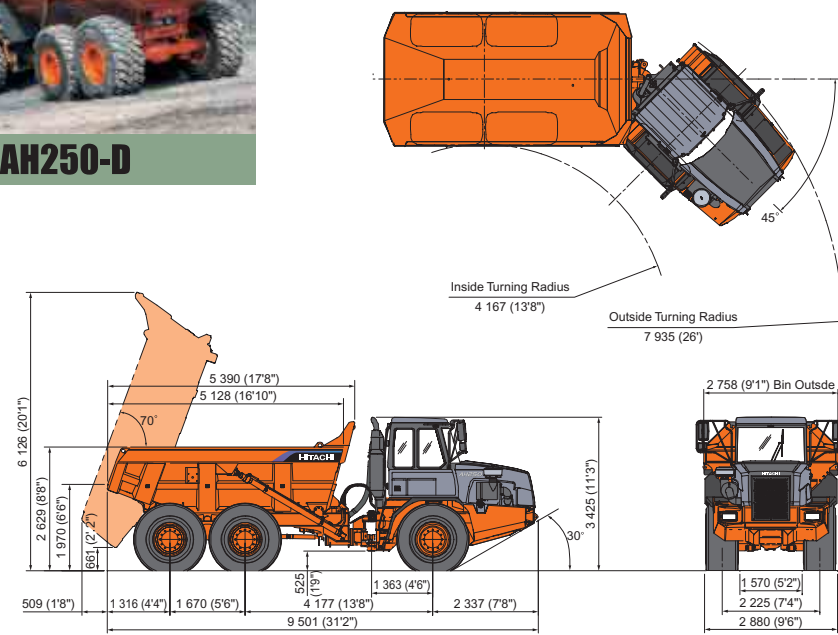
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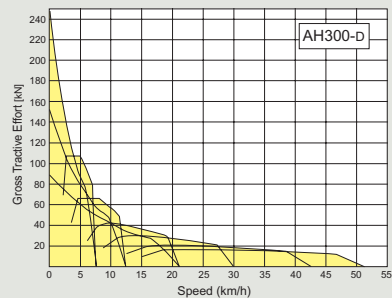
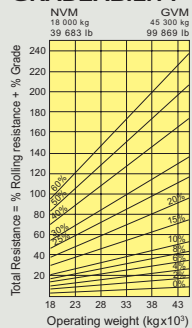
AH250-D

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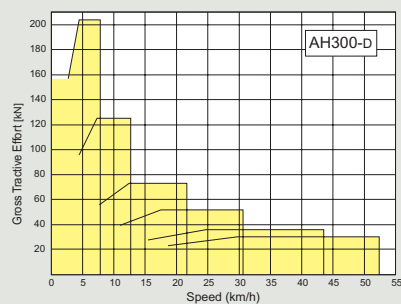
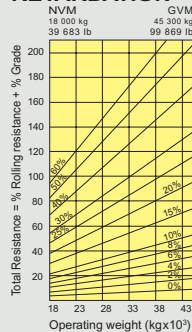
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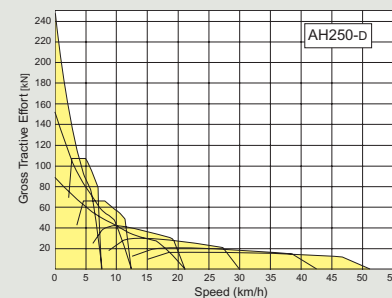
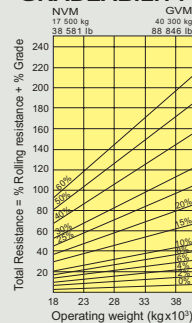
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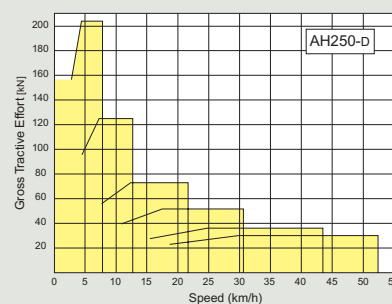
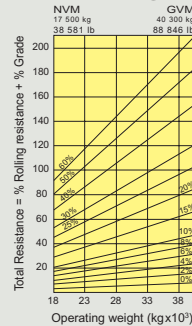
RETARDATION



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)
	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 (32 230 lb)
		MIDDLE	7 280 kg (16 050 lb)
		REAR	6 955 kg (15 340 lb)
		TOTAL	28 850 kg (63 620 lb)
	LADEN	FRONT	19 395 kg (42 770 lb)
		MIDDLE	23 390 kg (51 570 lb)
		REAR	23 065 kg (50 860 lb)
		TOTAL	65 850 kg (145 200lb)
	MODEL		DaimlerChrysler MercedesBenz OM501LA
	CONFIGURATION		V-6 with exhaust brake and Engine Valve Brake (EVB)
ENGINE	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 (380 hp) @ 1 800 min ⁻¹ (rpm)
	NET TORQUE	1 974 N·m (1 453 lbf·ft) @ 1 080 min ⁻¹ (rpm)	1 824 N·m (1 343 lbf·ft) @ 1 080 min ⁻¹ (rpm)
	DISPLACEMENT		11.95 L (730 in ³)
	FUEL TANK CAPACITY		485 L (128 US gal)
	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 km/h (mph)	2ND	7.4 (4.6)
		3RD	15.7 (9.8)
		4TH	22.8 (14.3)
		5TH	34.8 (21.8)
		6TH	45.6 (28.5)
		REAR	52.0 (32.5)
		REAR	6.3 (3.9)
		REAR	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.
	AXELS		25T / Spiral bevel type with Controlled Traction Diffs(CTD)
BRAKING SYSTEM	FINAL DRIVE TYPE		Outboard heavy-duty planetary
	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.	
WHEELS	AUXILIARY BRAKE		Transmission retarder, Automatic exhaust brake and Engine Valve Brake (EVB)
	TIRE	SIZE	29.5R25
		TYPE	Radial Earthmover
SUSPENSION	MAX. GROUND PRESSURE (LADEN)		Middle : 156 kPa (1.59 kgf/cm ² , 23 psi)
	FRONT TYPE		Semi-independent leading A-frame supported by nitrogen/oil struts.
HYDRAULIC SYSTEM	REAR TYPE		Pivoting walking beams equalize the load on each axle with laminated suspension blocks.
	PUMP TYPE		Variable displacement, loadsensing piston
STEERING SYSTEM	APPLICATION		Steering, tipping, hydraulic brake charging and cooling fan drive
	ANGLE		42° side to side
PNEUMATIC SYSTEM	LOCK TO LOCK TURNS		4.7
	PNEUMATIC SYSTEM		Air drier with heater and integral unloader valve, serving park brake and auxilliary 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)
	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)
		MIDDLE	4 300 kg (9 480 lb)
		REAR	4 150 kg (9 150 lb)
		TOTAL	18 000 kg (39 690 lb)
	LADEN	FRONT	13 200 kg (29 100 lb)
		MIDDLE	16 125 kg (35 550 lb)
		REAR	15 975 kg (35 220 lb)
		TOTAL	45 300 kg (99 880 lb)
	MODEL		DaimlerChrysler MercedesBenz OM906LA
	CONFIGURATION		I-6 with exhaust brake and Engine Valve Brake (EVB)
ENGINE	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(266 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)
	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 km/h (mph)	2ND	8 (5)
		3RD	13 (8)
		4TH	22 (14)
		5TH	31 (19)
		6TH	44 (27)
		REAR	53 (33)
		REAR	8 (5)
		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.
	AXELS		18T/ Spiral bevel type with Limited Slip
BRAKING SYSTEM	FINAL DRIVE TYPE		15T/Spiral bevel type with Limited Slip
	OUTBOARD heavy-duty planetary		
	SERVICE BRAKE		Dual circuit, full hydraulic actuation caliper brakes on all wheels
WHEELS	PARK & EMERGENCY		Spring applied, air released driveline mounted disc.
	AUXILIARY BRAKE		Transmission retarder, Automatic exhaust brake and Engine Valve Brake (EVB)
	TIRE		23.5R25
SUSPENSION	MAX. GROUND PRESSURE (LADEN)		Middle : 145 kPa (1.48 kgf/cm ² , 21 psi)
	FRONT TYPE		Semi-independent leading arm type linkages supported by nitrogen/oil struts
HYDRAULIC SYSTEM	REAR TYPE		Pivoting walking beams equalize the load on each axle with laminated suspension blocks.
	PUMP TYPE		Variable displacement, loadsensing piston
STEERING SYSTEM	APPLICATION		Steering, tipping, hydraulic brake charging and cooling fan drive
	ANGLE		45° side to side
PNEUMATIC SYSTEM	LOCK TO LOCK TURNS		4.1
	PNEUMATIC SYSTEM		Air drier with heater and integral unloader valve, serving park brake and auxilliary functions

Articulated Dump Truck D-Series



STANDARD EQUIPMENT

CAB

- ROPS/FOPS certification
- CE Marking
- Air conditioner
- Adjustable air suspension seat with retractable seat belt
- Fold-away trainer seat with retractable seat belt
- Electric adjust and heated rear view mirrors (one per side)
- Tilt cab for service access
- Head light guard
- Tilt and telescoping steering wheel
- Ciger lighter/Power point 12V
- Windshield washer/wiper & defogger
- Air horn
- Drinks holder and cooled/heated lunchbox
- S/brake caliper mud scraper & mud cover
- Emergency steering
- Antenna mounting bracket

ENGINE

- EPA Emission certification

RETARDER

- Transmission retarder

BRAKE

- Engine exhaust brake
- Engine valve brake(EVB)
- Oil immersed wet multi-disc brakes (AH400-D Only)
- Dry disc brakes (Except AH400-D)

MISCELLANEOUS

- Rear tow pin

OPTIONAL EQUIPMENT

- Automatic tailgate
- Body heating connection
- Two extra batteries
- Orange rotating beacon
- Artic reverse light
- Body liners
- Auto grease system (AH400-D/AH350-D Only)
- Electric horn
- Work lights
- Fuel heater (AH400-D/AH350-D Only)
- Mining Body (AH400-D/AH350-D Only)

*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 Operators Manual for proper operation.*

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