

Articulated Dump Truck *AH500*

- **Engine Net Power**
372 kW (499 HP)
- **Rated Payload**
45 400 kg (100 000 lb)
- **Operating Weight**
36 153 kg (79 700 lb)
- **Body Capacity: Heaped SAE 2:1**
28.2 m³ (36.9 yd³)

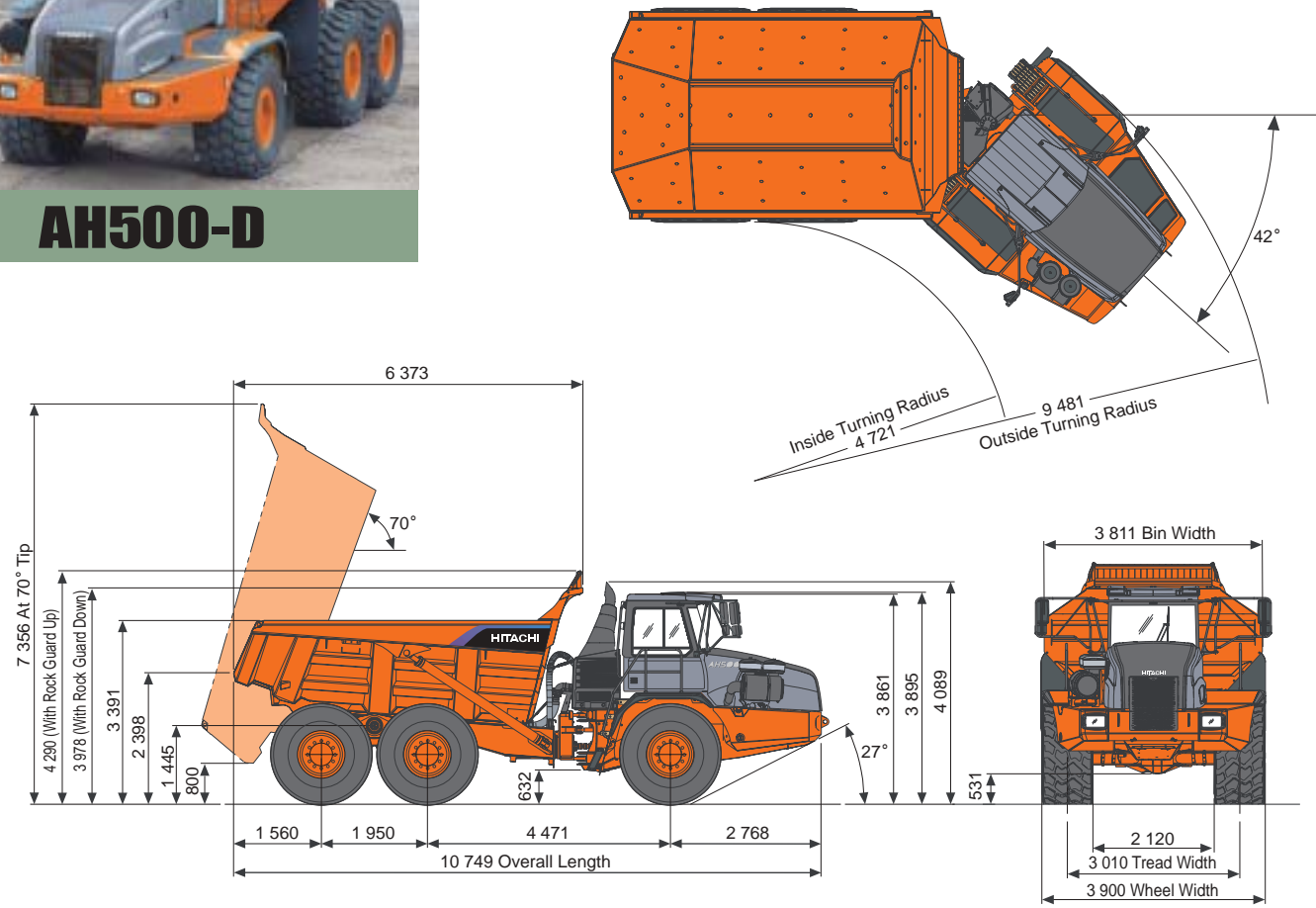




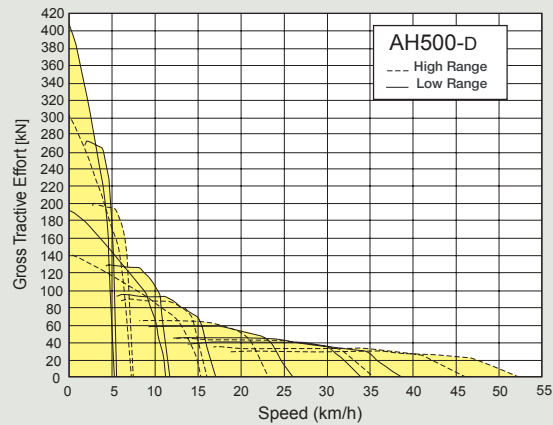
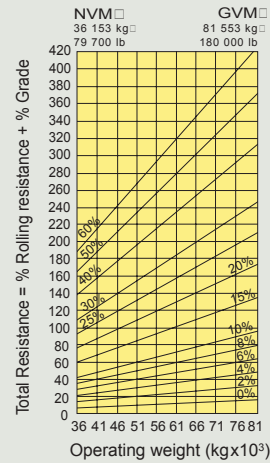
AH500-D

DIMENSIONS

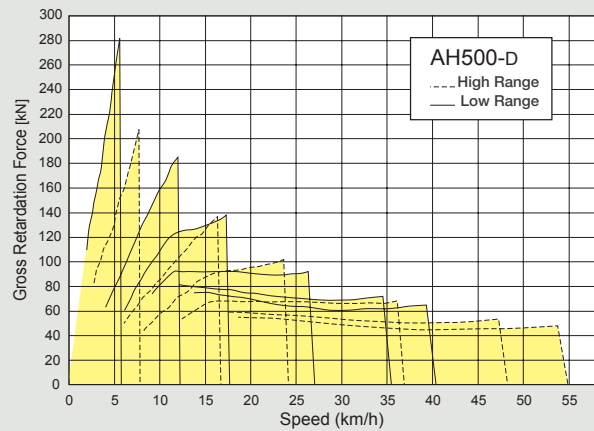
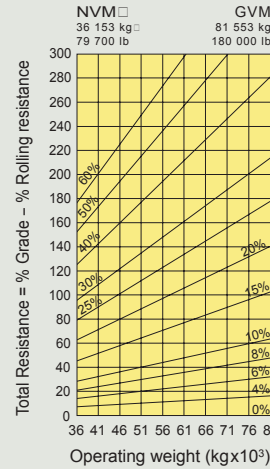
Unit : mm



GRADEABILITY



RETARDATION



		AH500-D		
RATED PAYLOAD		45 400 kg (100 000 lb)		
BODY CAPACITY: HEAPED		28.2 m³ (36.9 yd³)		
ENGINE NET POWER		372 kW (499 HP)		
BODY	CAPACITY :	STRUCK	21.4 m³ (28.0 yd³)	
		HEAPED: SAE 2:1	28.2 m³ (36.9 yd³)	
	RATED PAYLOAD	45 400 kg (100 090 lb)		
	POWER DOWN TIME	9.9 seconds (60 degrees tip angle)		
	RAISE TIME	11.2 seconds (60 degrees tip angle)		
	TIPPING ANGLE	70 degrees standard or any lower angle programmable		
OPERATING WEIGHTS	EMPTY	FRONT	17 710 kg (39 000 lb)	
		MIDDLE	9 433 kg (20 800 lb)	
		REAR	9 010 kg (19 900 lb)	
		TOTAL	36 153 kg (79 700 lb)	
	LADEN	FRONT	23 954 kg (52 800 lb)	
		MIDDLE	29 011 kg (64 000 lb)	
		REAR	28 588 kg (63 000 lb)	
		TOTAL	81 553 kg (180 000 lb)	
	ENGINE	MODEL	DaimlerChrysler MercedesBenz OM502LA	
		CONFIGURATION	V-8 with Engine Valve Brake (EVB) and Exhaust butterfly Brake (EXB)	
ASPIRATION		Turbocharged and intercooled		
COOLING SYSTEM		Liquid cooled with single pass radiator as well as charge air cooler		
GROSS POWER (SAE J1349)		380 kW (510 HP) @ 1 800 min⁻¹ (rpm)		
NET POWER (SAE J1349)		372 kW (499 HP) @ 1 800 min⁻¹ (rpm)		
NET TORQUE		2 147 N·m (1 584 lbf·ft) @ 1 200 min⁻¹ (rpm)		
DISPLACEMENT		15.93 L (972 in³)		
FUEL TANK CAPACITY		640 L (169 US gal)		
ELECTRICAL SYSTEM		VOLTAGE	24V	
	BATTERY CAPACITY	2 x 105 Ah		
	ALTERNATOR RATING	28V 100A		
TRANSMISSION	MODEL	Allison HD4560R Full automatic planetary transmission with integral retarder		
	LAYOUT	Engine mounted 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:	Low range		High range
		1ST	5.5 km/h (3.4 mph)	7.5 km/h (4.7 mph)
		2ND	11.7 km/h (7.3 mph)	15.9 km/h (9.9 mph)
		3RD	16.9 km/h (10.5 mph)	23.0 km/h (14.3 mph)
4TH		25.8 km/h (16.0 mph)	35.2 km/h (21.9 mph)	
5TH		33.8 km/h (21.0 mph)	46.0 km/h (28.6 mph)	
6TH		38.4 km/h (23.9 mph)	52.3 km/h (32.5 mph)	
REAR		4.7 km/h (2.9 mph)	-	
TRANSFER BOX	OUTPUT DIFFERENTIAL	AGR 17100 / Three in-line helical gears. Interaxle 33/67 proportional differential, pneumatically / spring lockable whilst stationary or on the move		
AXLES	DIFFERENTIAL TYPE	27T / Two-speed spiral bevel type		
	FINAL DRIVE TYPE	Outboard heavy-duty planetary on all axles		
BRAKING SYSTEM	SERVICE BRAKE	Dual circuit, full hydraulic oil immersed wet multi-disc brakes on all three axles		
	PARK & EMERGENCY	Spring applied, air released driveline mounted disc		
	AUXILIARY BRAKE	Engine Valve Brake (EVB) and Exhaust butterfly Brake (EXB)		
WHEELS	TIRE	SIZE	875/65 R29	
		TYPE	Radial Earthmover	
SUSPENSION	MAX. GROUND PRESSURE (LADEN)	Middle : 161 kPa (1.23 kgf/cm², 23 psi)		
	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. Each axle is coupled to the chassis by a Tri-Link system of three rubber-bushed links for ideal vertical movement and a transverse link for lateral restraint		
HYDRAULIC SYSTEM	PUMP TYPE	Variable displacement, load-sensing piston		
	APPLICATION	Steering, tipping, hydraulic brake charging, suspension and cooling fan drive		
STEERING SYSTEM	ANGLE	42° side to side		
	LOCK TO LOCK TURNS	4.2		
PNEUMATIC SYSTEM	Air drier with heater and integral unloader valve, serving park brake and auxiliary functions			



STANDARD EQUIPMENT

CAB

- ROPS/FOPS certification
 - 74dBA sound pressure
- Protective rear window guard
- Handrails on fenders
- Tilt cab for service access
- Gas strut supported door
- Tinted safety glass
- Sliding windows
- Rear view mirrors- regular and wide angle
- Electric adjust and heated mirrors (one per side)
- Wiper/washer with intermittent control
- Tilt and telescoping steering wheel
- Adjustable air suspension seat with retractable seat belt, adjustable damper & automatic height positioning
- Operator and trainer grab handles
- Fold-away trainer seat with retractable seat belt & adjustable damper
- HVAC climate control system with filtered and ducted air
- Air horn
- Overhead console for FM and 2-way radio, compartments for storage, electrical relays and circuit breakers and control & modules
- Toolbox
- Clothing hooks strap
- 12V power outlet/12V cigarette lighter
- Ashtrays
- Drinks holders
- Cooled/heated lunchbox
- Wheel spanner set

- Analogue gauges
 - Engine coolant temperature
 - Engine oil pressure
 - System air pressure
 - Transmission oil temperature
 - Fuel
 - Speedometer
- LCD Display
 - Transmission gear selection
 - Tachometer
 - Battery voltage
 - Hourmeter
 - Odometer

BRAKES

Spring applied air release park brake on rear driveshaft

OTHER

- Automatic central lubrication system
- Body liners
- Sand/dust covers
- Work lights
- Artic reverse light
- Electrical horn

OPTIONAL EQUIPMENT

- (Factory and field installed)
- Exhaust body heating
 - Autogate
 - Tires (size, type & rating)

*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.*

Hitachi Construction Machinery Co., Ltd.

Head Office: 5-1 Koraku 2-chome, Bunkyo-ku,
Tokyo 112-8563, Japan

Telephone : 81-3-3830-8050

Facsimile : 81-3-3830-8204

URL : <http://www.hitachi-c-m.com>