

# ARTICULATED DUMP TRUCK



## Specifications

Maximum Payload	38 tonne (41.9 US Ton)
Heaped Capacity	23.0m <sup>3</sup> (30.3yd <sup>3</sup> )
Gross Power	331 kW (444 hp)

## Features

- ▶ Improved operator environment and comfort.
- ▶ Calibrated with the correct balance of power and gearing for effective productive drive to the wheels on all working applications
- ▶ Moves high levels of materials quickly and efficiently
- ▶ Lean burning engine for low cost of ownership
- ▶ Available with EPA Tier 4 Final, EU Stage 4 or Tier 2 compliant engines
- ▶ EU Stage 4/EPA Tier 4 Final emissions achieved with no Diesel Particulate Filter
- ▶ Terex Trucks articulated hauler – the cost effective choice for all working applications

**COMMITTED TO THE LONG HAUL**

GENERATION  
**10**

ENGINE	
Engine	Scania DC13
Type	6 cylinder, in-line, four cycle, direct injection diesel, water cooled, turbo charged with air-to-air charge cooling, electronic engine management and engine exhaust brake.
Piston Displacement litres (in <sup>3</sup> )	12.7 (775)
Bore x Stroke mm (in)	130 x 160 (5.12 x 6.37)
Gross Power kW (hp) @ rpm	331 (444) @ 2100
Net Power kW (hp) @ rpm	330 (443) @ 2100
Maximum Torque Nm (lbf ft) @ rpm	2255 (1663) @ 1300
Gross Power Rated	ISO 3046
Engine Emissions	US EPA Tier 4F, EU Stage 4 and Tier 2 derivatives
Electrical	24 volt electric start. 100 A alternator. Two 12 volt 180 Ah batteries.
Air Cleaner	Dry-type 3 stage air cleaner with safety element, automatic dust ejector and restriction indicator.
Fan	Modulating fan reduces noise level and consumes engine power as required. Note: Net hp with fan clutch disengaged.
Altitude m (ft) (Electronic derate from)	3250-4000 (10663-13123)

TRANSMISSION					
Type	Allison HD4560 with integral retarder mounted directly to the engine, fully automatic transmission with planetary gearing, electronic control with six forward and one reverse gear.				
Assembly	Remote mounted 2-speed transfer gearbox taking drive from the transmission and feeding it via a lockable differential to front and rear wheels.				
Speeds km/h (mph)	Ratio 1	Ratio 2			
	Gear	Forward	Reverse	Forward	Reverse
	1	6.0 (3.7)	5.0 (3.1)	9.5 (6.0)	7.8 (4.8)
	2	11.3 (7.0)	-	16.0 (10.0)	-
	3	16.5 (10.3)	-	25.3 (15.7)	-
	4	25.6 (16.0)	-	39.2 (24.4)	-
	5	33.9 (21.0)	-	51.9 (32.3)	-
	6	41.7 (26.0)	-	63.8 (40.0)	-

AXLES	
Type	Three axles in permanent all-wheel drive (6x6) with differential coupling between each axle to prevent driveline wind-up. Heavy duty axles with full floating axle shafts and outboard planetary reduction gearing. Automatic limited slip differentials in each axle. Leading rear axle incorporates a through drive differential to transmit drive to the rearmost axle. This differential and the dropbox output differential are locked simultaneously using one switch selected by the operator.
Differential Ratio	3.70 : 1
Planetary Reduction	6.35 : 1
Overall Drivetrain Reduction	23.50 : 1

SUSPENSION	
Front	Four trailing links and a panhard rod locate the front axle giving a high roll centre. The optimized front axle position along with the wide spaced main and rebound mounts, mounted directly above the axle and long suspension travel, combine with the two heavy duty dampers each side to give excellent handling and ride.
Rear	Each axle is coupled to the frame by three rubber-bushed links with lateral restraint by a transverse link. Pivoting inter-axle balance beams equalise load on each rear axle. Suspension movement is cushioned by rubber/ metal laminated compression units between each axle and underside of balance beam ends. Pivot points on leading and trailing links are rubber-bushed and maintenance-free.

STEERING	
Type	Hydrostatic power steering by two double-acting cushioned steering cylinders with pressure supplied by a variable displacement / load sensing piston pump. Secondary steering pressure provided by a ground driven pump.
Steering Angle to Either Side	45°
Lock to Lock Turns, Steering Wheel	2-5
System Pressure bar (lbf/in <sup>2</sup> )	240 (3480)
SAE Turning Radius mm (ft-in)	9185 (30-1)
Clearing Radius mm (ft-in)	9675 (31-9)

**FRAME**

Type	Front and rear frames are all-welded high grade steel fabrications with rectangular box-section beams forming the main side and cross members. Inter-frame oscillation is provided by a large diameter cylindrical coupling which houses nylon bushings. Frames articulated 45° to either side for steering by means of two widely-spaced pivot pins in back-to-back sealed taper roller bearings.
------	--

**BODY**

Type	All-welded construction, fabricated from high hardness (min 360 BHN) 1000 Mpa (145,000 lbf/in <sup>2</sup> ) yield strength steel. Dual slope tailchute improves material ejection from body.	
Plate Thickness:		
Floor and Tailchute	mm (in)	15.0 (0.58)
Sides	mm (in)	12.0 (0.47)
Front	mm (in)	8.0 (0.31)
Volume:		
Struck	m <sup>3</sup> (yd <sup>3</sup> )	17.4 (22.8)
Heaped 2:1 (SAE)	m <sup>3</sup> (yd <sup>3</sup> )	23.0 (30.3)

**HOIST**

Type	Two single-stage, double-acting hoist cylinders, cushioned at the base end. Variable displacement / load sensing piston pump driven from power take-off on transmission. Full flow return line filtration. Full electro-hydraulic hoist control, with electronic detent in power down.	
System Pressure	bar (lbf/in <sup>2</sup> )	240 (3480)
Pump Output Flow Rate	litre/sec (gal/sec)	5.4 (1.43)
Raise (loaded)	seconds	12.5
Lower	seconds	8

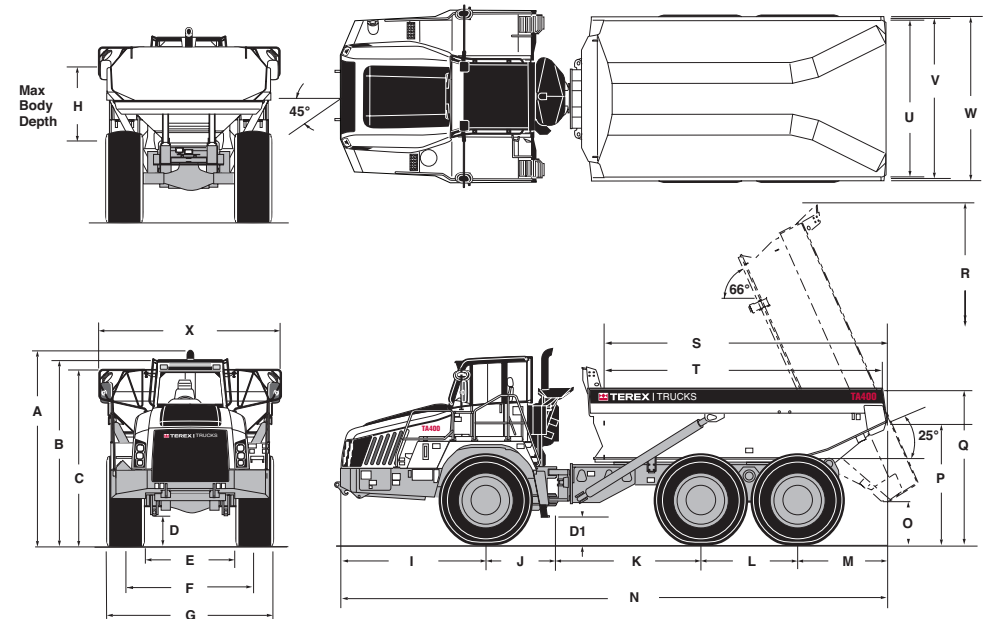
**TYRES AND WHEELS**

Tyres	Standard 29.5
Rims	Standard 25 x 25.00
Wheels	3-piece earthmover rims with 19 stud fixing.

**BRAKES**

Tyres	All hydraulic braking systems with multiplate sealed and oil cooled brake packs at each wheel. Independent circuits for front and rear brake systems.
Parking	Spring-applied, hydraulic-released disc on rear driveline.
Secondary	Secondary brake control actuates service and parking brakes.
Retarder	Exhaust brake and transmission retarder.

**DIMENSIONS**



	mm	(ft-in)
A	3954	(13-0)
B	3752	(12-4)
C	3561	(11-8)
D	539	(1-9)
D1	540	(1-9)
E	1834	(6-0)
F	2596	(8-6)
G	3358	(11-0)
H	1495	(4-11)

	mm	(ft-in)
I	3087	(10-1)
J	1310	(4-4)
K	2987	(9-10)
L	1950	(6-5)
M	1779	(5-10)
N	11,115	(36-5)
O	916	(3-0)
P	2479	(8-2)
Q	3152	(10-4)

	mm	(ft-in)
R	6933	(22-9)
S	5658	(18-6)
T	5575	(18-3)
U	3129	(10-3)
V	3318	(10-11)
W	3364	(11-0)
X	3633	(11-11)

WEIGHTS	Tier 4 Final/EU Stage 4 Models		Tier 2 Models	
	kg	(lb)	kg	(lb)
<b>Net Distribution</b>				
Front Axle	17,000	(37,478)	16,743	(36,912)
Bogie Axle, Leading	7,385	(16,281)	7,385	(16,281)
Bogie Axle, Trailing	7,521	(16,581)	7,521	(16,581)
Vehicle, Net	31,906	(70,340)	31,649	(69,773)
Payload	38,000	(83,775)	38,000	(83,775)
<b>Gross Distribution</b>				
Front Axle	18,812	(41,473)	18,742	(41,319)
Bogie Axle Leading, Trailing	25,515/25,579	(56,250/56,391)	25,422/25,485	(56,045/56,184)
Vehicle Gross	69,906	(154,115)	69,649	(153,548)
Bare Chassis	24,760	(54,444)	24,760	(54,444)
Body	5,400	(11,905)	5,400	(11,905)
Hoists, pair	660	(1,455)	660	(1,455)

**GROUND PRESSURE**

These figures are at 15% shrinkage of unloaded radius and specified weights using:

Tyres	(29.5 R25)	
<b>Unloaded</b>	kPa	(Psi)
Front	112	(16.2)
Rear	53	(7.7)
<b>Loaded</b>	kPa	(Psi)
Front	121	(17.5)
Rear	180	(26.1)

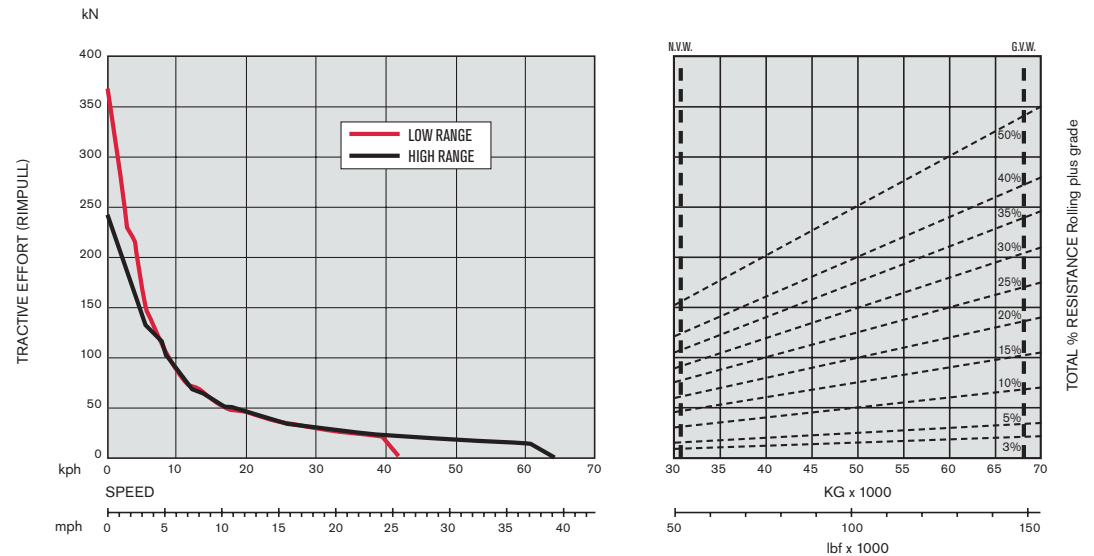
**CAPACITIES**

	litres	(gal)
Fuel Tank	500	(132)
Hydraulic System (Steering & Body)	341	(90)
Engine Crankcase	45	(11.8)
Cooling System	70	(18.5)
Transmission (inc filters and cooler)	48	(12.7)
Differential - Front & Rear (each)	38	(10)
Differential - Centre	39	(10.3)
Planetaries - (each)	8.5	(2.2)
Brake Cooling System	188	(49.7)
DEF System*	38	(13.7)
Drop Box	17	(4.5)

\* only applicable on Tier 4 Final/ EU Stage 4

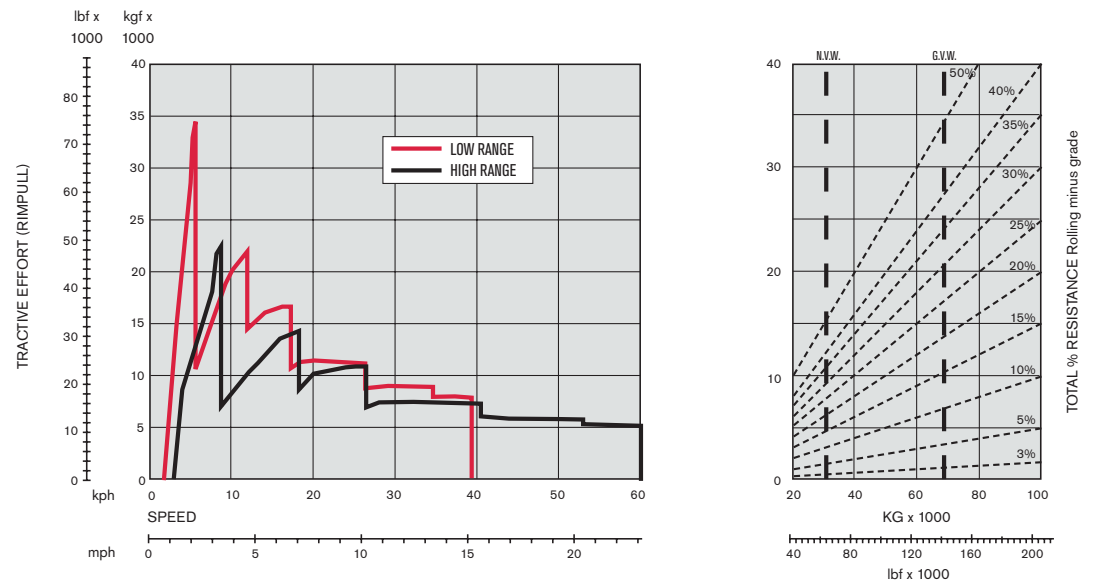
**GRADEABILITY**

Unit equipped with 29.5 R25 Tyres. Graphs based on 2% rolling resistance.



**RETARDATION**

Instructions: From intersection of vehicle weight with percentage resistance line read across to determine maximum gear attainable, and then downwards for vehicle speed.



**STANDARD EQUIPMENT**
**CAB AND OPERATOR**

Air Conditioning	✓
Air Filter Restriction Indicator	✓
Auxiliary Power Outlets 12V & 24V	✓
CD/Tuner/MP3 Connectivity	✓
Coat Hook	✓
Engine/Transmission/Hydraulic Diagnostic Facility	✓
Heating, Ventilation & Air Conditioning System (HVAC)	✓
Insulation, Thermal and Acoustic	✓
Interior Light	✓
Mirror Rear View (4)	✓
Mug Holder	✓
Rear Vision Camera/Monitor	✓
ROPS/FOPS Protection ISO3471/3449	✓
Seat Belts Retractable J386	✓
Seat, Operator, Air Suspension, High Back, Headrest and Adjustable Armrests	✓
Seat, Trainer	✓
Steering Wheel, tilt/telescopic	✓
Storage Compartment	✓
Sun Visor (internal)	✓
Tinted Glass	✓
Window Protection Grille, Rear	✓
Wiper and Washer, Front and Rear Windows	✓

**WARNING LIGHTS & AUDIBLE ALARM**

Alternator Charging	✓
Body Up	✓
Brake Cooling Oil Pressure	✓
Brake Cooling Oil Temperature	✓
Differential Lock	✓
Direction Indicators	✓
Dropbox High/Low Oil Pressure	✓
Dropbox High/Oil Temperature	✓
Dropbox High/Ratio Selected	✓
Dropbox Low/Ratio Selected	✓
Engine Air Filter Change	✓
Engine 'CHECK'	✓

**WARNING LIGHTS & AUDIBLE ALARM (cont'd)**

Engine Coolant Level Low	✓
Engine Oil Pressure Low	✓
Engine Over-speed Active	✓
Engine 'STOP'	✓
Exhaust Brake	✓
Front Brake Accumulator Pressure	✓
Headlight High Beam	✓
Headlights Active	✓
Hydraulic Oil Filter Change	✓
Hydraulic Oil Level Low	✓
Low Fuel	✓
Parking Brake	✓
Rear Brake Accumulator Pressure	✓
Secondary Steering	✓
Transmission Check	✓
Transmission High Oil Temperature	✓
Transmission Retarder	✓

**GENERAL**

Articulation and Oscillation Lock	✓
Battery Master Switch	✓
Body Prop	✓
Brakes Fully Hydraulic Dual Circuit System	✓
Diagnostic Pressure Test Points	✓
Differential Locks	✓
Electronic Assisted Body Hoist Control	✓
Engine/Transmission/Hydraulic Electronic Management System	✓
Exhaust Brake	✓
Exhaust Muffler	✓
Independent Suspension	-
Handrails on Fenders	✓
Horn, Electric 117db	✓
Hydraulic Filter Restriction Indicator	✓
Hydraulic Oil Cooler	✓
Manual Body Lower - EU Stage 4 Only	✓
Modulating Cooling Fans	✓

**GENERAL (cont'd)**

Neutral Start Interlock	✓
Pivot Protection Guard	✓
Rear Light Guards	✓
Reverse Alarm Audible J994	✓
Secondary Steering	✓
Security Kit	✓
Tilting Cab for Maintenance	✓
Tow Points, Front and Rear	✓
Transmission Downshift Inhibitor	✓
Transmission Oil Cooler	✓
Transmission Retarder	✓
Transmission Sump Guard	✓
Tyre Inflation Nitrogen	✓

**GAUGES**

Body Tip Counter	✓
Brake Oil Temperature	✓
DEF Level Gauge (T4 variant only)	✓
DEF Level Warning (T4 variant only)	✓
Engine Coolant Temperature	✓
Fuel Consumption/Usage	✓
Fuel Level	✓
Hourmeter	✓
Hydraulic oil Temperature	✓
Speedometer/Digital Odometer/Tripmeter	✓
Tachometer	✓
Transmission Oil Temperature	✓

**LIGHTS**

Direction and Hazard Warning Indicators (LED on Rear)	✓
Front Working Lights, Roof Mounted	✓
Reverse Warning	✓
Side and Tail (LED)	✓
2 Halogen Headlamps Dipped Beam	✓
2 Halogen Headlamps Main Beam	✓

**OPTIONAL EQUIPMENT**
**BODY OPTIONS**

Body Side Extensions	✓
Heated Body	✓
Liner Plates	✓
Manual Body Lower for Tier 4 Final/T2 variations	✓
Spillguard Extension	✓
Chain Operated, Scissor Type, Rear Tailgate	✓

**MIRRORS**

Mirror Front Mounted	✓
Mirror with Wide Angle	✓
Mirrors Heated	✓

**LIGHTS**

Beacon Flashing	✓
Fog Rear	✓
Rear Working Lights, Roof Mounted	✓
Reverse Flashing	✓

**OTHER OPTIONS**

Automatic Lubrication	✓
Fire Extinguisher	✓
First Aid Kit	✓
Parking Brake Guard	✓
Payload Monitoring System	✓
Seat Heated	✓
Tool Kit	✓
Haultrack Telematics *	✓

\* Fitted as standard on EPA Tier 4 Final and EU Stage 4 engine machines. Ask for details.

Effective Date: February 2017. Product specifications and prices are subject to change without notice or obligation. The photographs and/or drawings in this document are for illustrative purposes only. Refer to the appropriate Operator's Manual for instructions on the proper use of this equipment. Failure to follow the appropriate Operator's Manual when using our equipment or to otherwise act irresponsibly may result in serious injury or death. The only warranty applicable to our equipment is the standard written warranty applicable to the particular product and sale and Terex Trucks makes no other warranty, express or implied. © 2017 Terex Trucks. Ref. no.: TTADTEN

**Terex Equipment Ltd**

Newhouse Industrial Estate, Motherwell, ML1 5RY

Tel: +44 (0) 1698 732121 Fax : +44 (0) 1698 734046

