

ARTICULATED DUMP TRUCK



Specification

Maximum Payload	41.9 tons (38 t)
Heaped Capacity	30.3 yd ³ (23.3 m ³)
Horsepower	444 hp (331 kW)

Features

- ▶ High powered, heavy-duty truck providing class leading performance and ability to go where others can't follow
- ▶ World class operator's environment
- ▶ More fuel efficient than its predecessor
- ▶ Rigorously tested in extreme conditions for proven power, productivity and reliability

WORKS FOR YOU.™

SPECIFICATIONS

ENGINE

Engine	Scania DC13
Type	6 cylinder, in-line, 4 cycle, direct injection diesel, water-cooled, turbocharged w/ air to air charge cooling, electronic engine mgmt and engine exhaust brake
Piston Displacement	775 in ³ (12.7 L)
Bore x Stroke	5.12 x 6.37 mm (130 x 160 in)
Gross Power @ 2100 rpm	444 hp (331 kW)
Net Power @ 2100 rpm	430 hp (321 kW)
Max Torque @ 1350 rpm	1548 lbf ft (2100 Nm)
Gross Power rated	SAE J1995 Jun 90
Engine Emissions	US Tier 4i/EU Stage 3B. Variant available to meet US Tier 2/EU Stage 2.
Electrical	24 volt electric start. 100A alternator. Two 12 volt 175 Ah batteries
Air Cleaner	Dry-type air cleaner w/ safety element, auto dust ejector & restriction indicator
Fan	Modulating fan reduces noise level and consumes engine power as required. Note: Net hp with fan clutch disengaged
Altitude	9842 ft (3000 m)

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

Gear	Forward	Reverse	Forward	Reverse
1	3.6 mph (5.8 km/h)	3.1 mph (5.0 km/h)	5.5 mph (8.9 km/h)	4.8 mph (7.8 km/h)
2	7.6 mph (12.2 km/h)		11.5 mph (18.5 km/h)	
3	10.9 mph (17.6 km/h)		16.6 mph (26.7 km/h)	
4	16.5 mph (26.5 km/h)		24.9 mph (40.0 km/h)	
5	21.6 mph (34.7 km/h)		31.4 mph (50.5 km/h)	
6	24.1 mph (38.8 km/h)		34.5 mph (55.6 km/h)	

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 center. 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 equalize load on each rear axle. Suspension movement is cushioned by rubber/metal laminated compression units between each axle & underside of balance beam ends. Pivot points on leading & trailing links are rubber-bushed for minimum maintenance.

FRAME

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.

STEERING

Hydrostatic power steering by two double-acting cushioned steering cylinders with pressure supplied by a variable displacement / load sensing piston pump. Secondary steering pressure is provided by a ground driven pump. An audible alarm and warning light indicates should the secondary system activate.

Steering Angle to either side	45°
Lock to lock turns, steering wheel	4
System Pressure	3480 lbf/in ² (240 bar)
SAE Turning Radius	30 ft 1 in (9185 mm)
Clearing Radius	29 ft 4 in (9675 mm)

BODY

All-welded construction, fabricated from high hardness (min 360 BHN) 1000 Mpa (145000 lbf/in²) yield strength steel. Dual slope tailchute improves material ejection from body.

Plate thickness:	Floor and tailchute	0.58 in (15.0 mm)
	Sides	0.47 in (12.0 mm)
	Front	0.31 in (8.0 mm)
Volume:	Struck	22.8 yd ³ (17.4 m ³)
	Heaped 2:1 (SAE)	30.3 yd ³ (23.3 m ³)

HOIST

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	3480 lbf/in ² (240 bar)
Pump output flow rate	85.6 gal/min (5.4 liter/sec)
Raise (loaded)	12.5 seconds
Lower	8 seconds

TIRES AND WHEELS

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

BRAKES

All hydraulic braking systems with multi-plate 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

CAPACITIES

Fuel Tank	130.5 gal	494 L
Hydraulic System (Steering & Body)	90 gal	341 L
Engine Crankcase	14.2 gal	54 L
Cooling System	18.4 gal	70 L
Transmission (including filters and cooler)	12.6 gal	48 L
Differential - Front & Rear (each)	10 gal	38 L
Differential - Center	10.3 gal	39 L
Brake Cooling System	2.2 gal	8.5 L
Planetaries (each)	49.6 gal	188 L
DEF System*	13.7 gal	52 L
Drop Box	4.4 gal	17 L

*only applicable on Tier 4i model

STANDARD EQUIPMENT

TIER 4 TA400

GENERAL

Articulation and Oscillation Lock	Mirrors Heated
Battery Master Switch	Modulating Cooling Fans
Body Prop	Mudflaps at Front and Center
Brakes Fully Hydraulic Dual Circuit System	Neutral Start Interlock
Diagnostic Pressure Test Points	Pivot Protection Guard
Differential Locks	Rear Light Guards
Electronic Assisted Body Hoist Control	Reverse Alarm Audible J994
Engine/Transmission/Hydraulic Electronic Mgmt Systems	Secondary Steering
Engine Underguard	Security Kit
Exhaust Brake	Spillguard Extension
Exhaust Muffler	Tilting Cab for Maintenance
Handrails on Fenders	Tow Points, Front and Rear
Horn, Electric 117db	Transmission Downshift Inhibitor
Hydraulic Filter Restriction Indicator	Transmission Oil Cooler
Hydraulic Oil Cooler	Transmission Retarder
Mirror Front Mounted	Transmission Sump Guard
Mirror with Wide Angle	Tire Inflation Nitrogen

GAUGES

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

LIGHTS

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

OPTIONAL EQUIPMENT

BODY OPTIONS

Body Side Extensions	Liner Plates
Heated Body	Chain Operated Top Mounted Tailgate

LIGHTS

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

OPERATOR CABIN

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

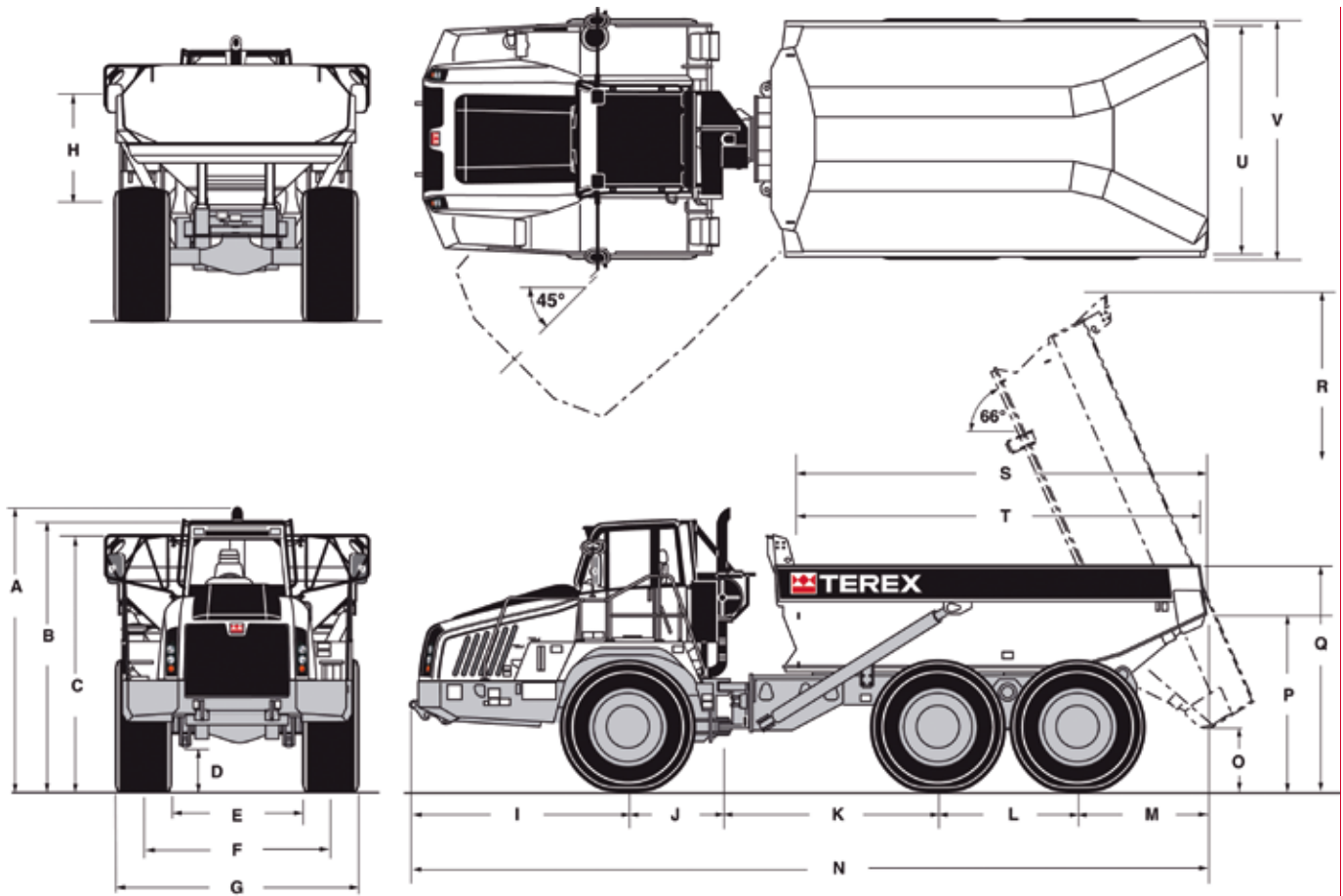
WARNING LIGHTS & ALARMS

Alternator Charging	Engine 'STOP'
Body Up	Exhaust Brake
Brake Cooling Oil Pressure	Front Brake Accumulator Pressure
Brake Cooling Oil Temperature	Headlight High Beam
Differential Lock	Headlights Active
Direction Indicators	Hydraulic Oil Filter Change
Dropbox High/Low Oil Pressure	Hydraulic Oil Level Low
Dropbox High Oil Temperature	Low Fuel
Dropbox High Ratio Selected	Parking Brake
Dropbox Low Ratio Selected	Rear Brake Accumulator Pressure
Engine Air Filter Change	Secondary Steering
Engine 'CHECK'	Transmission Check
Engine Coolant Level Low	Transmission High Oil Temperature
Engine Oil Pressure Low	Transmission Retarder
Engine Over-speed Active	

OTHER OPTIONS

Automatic Lubrication	Telematics Systems
Fire Extinguisher	Seat Heated
First Aid Kit	Tool Kit
Parking Brake Guard	Cold Weather Starting Packages

DIMENSIONS



DIMENSIONS

A	12 ft 11 in	3945 mm
B	12 ft 3 in	3740 mm
C	11 ft 8 in	3550 mm
D	2 ft 0 in	605 mm
E	6 ft 0 in	1840 mm
F	8 ft 6 in	2595 mm
G	11 ft 3 in	3360 mm
H	4 ft 11 in	1495 mm
I	10 ft 1 in	3087 mm
J	4 ft 4 in	1310 mm
K	9 ft 10 in	2990 mm
L	6 ft 5 in	1950 mm
M	5 ft 10 in	1780 mm
N	36 ft 4 in	11117 mm
O	2 ft 9 in	905 mm
P	8 ft 1 in	2470 mm
Q	10 ft 4 in	3140 mm
R	22 ft 9 in	6930 mm
S	18 ft 7 in	5658 mm
T	18 ft 3 in	5570 mm
U	10 ft 3 in	3130 mm
V	10 ft 11 in	3315 mm

WEIGHTS

Net Distribution			
Front Axle	36155 lbs	16400 kg	
Bogie Axle, Leading	16500 lbs	7500 kg	
Bogie Axle, Trailing	16368 lbs	7440 kg	
Vehicle, Net	69203 lbs	31390 kg	
Payload	83775 lbs	38000 kg	
Gross Distribution			
Front Axle	38845 lbs	17620 kg	
Bogie Axle, Leading / Trailing	56438 lbs	25600 kg	
Vehicle Gross	151500 lbs	68820 kg	
Bare Chassis	54444 lbs	24760 kg	
Body	11905 lbs	5400 kg	
Hoists, pair	1455 lbs	660 kg	

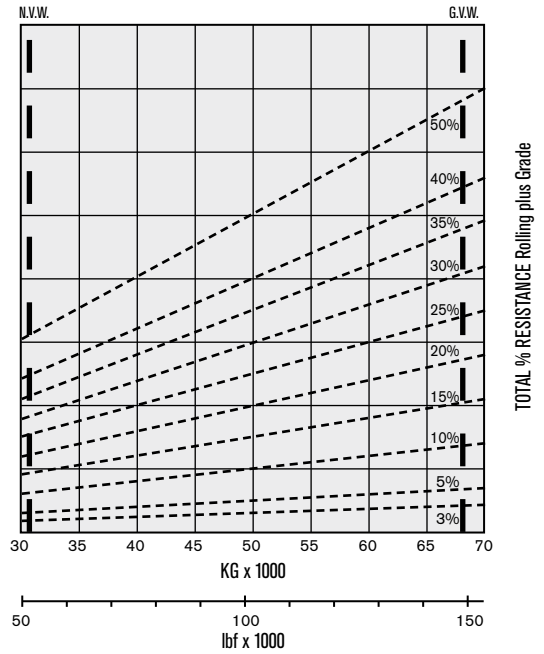
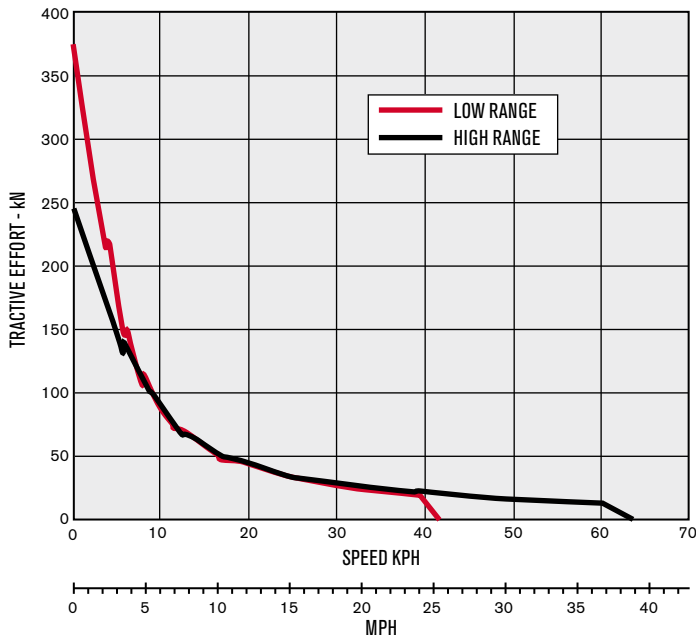
GROUND PRESSURE

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

Tires		23.5 R25			
		Unloaded		Loaded	
Front	16.2 psi	112 kPa	17.5 psi	121 kPa	
Rear	7.7 psi	53 kPa	26.1 psi	180 kPa	

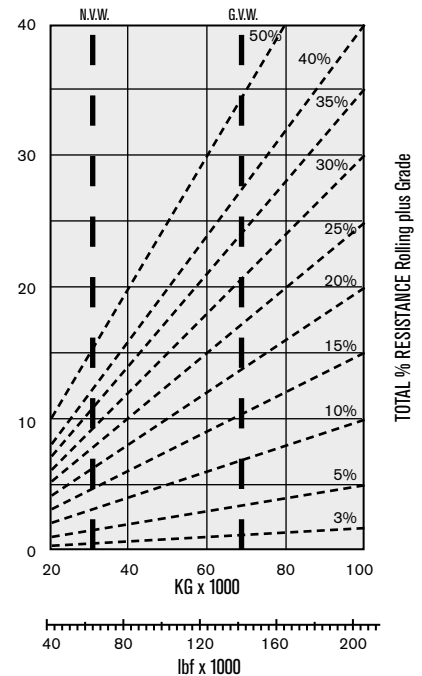
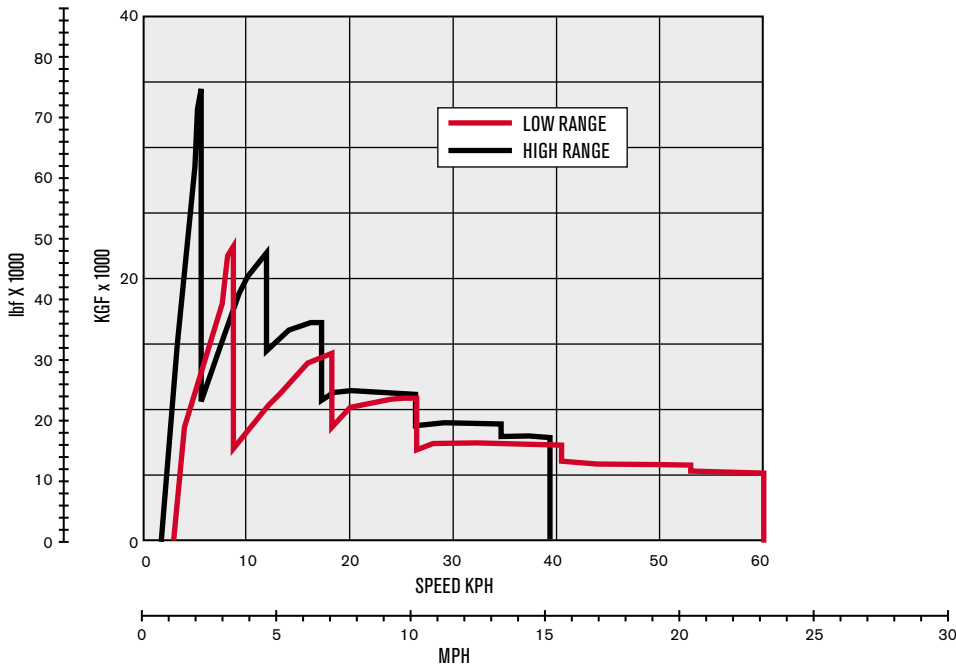
GRADEABILITY

Unit equipped with 23.5 R25 tires. 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 speed.



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Effective Date: August 2011. 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 makes no other warranty, express or implied. Products and services listed may be trademarks, service marks, or trade names of Terex Corporation and/or its subsidiaries in the USA and other countries. All rights are reserved. Terex is a registered trademark of Terex Corporation in the USA and many other countries. © 2011 Terex Corporation.

Terex Construction 8800 Rostin Road, Southaven, MS 38671 USA
Tel +1 (888) 90-TEREX www.terexconstruction.com



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