TEREX®

TR100

Rigid Haul Truck

MAX. GROSS VEHICLE WEIGHT	147,710- 347,715 lbs (47,690 - 112,690 kg)
NET ENGINE POWER	943 hp (703 kW)
MAX. PAYLOAD	100 Tons (91 t)
HEAPED CAPACITY	74.5 Yd^3 (57.0 m^3)

RIGID HAUL TRUCK TR100

Specifications

Engine

Model	Detroit Diesel MTU 16V-2000TA DDEC
Type	4 cycle turbocharged/charge air cooled
Gross power @ 2,100 rpm (SAE J 1995)	1,050 hp (783 kW)
Net power @ 2,100 rpm	943 hp (703 kW)
Engine requires no deration up to 10,200 ft (3,110 m) altitude.	
Engine emission meets Tier 2 USA EPA/CARB MOH 40 CFR 89.	
Maximum torque @ 1,350 rpm	3,415 lbf ft (4,630 Nm)
Cylinders / configuration	16V
Bore x stroke	5.12 x 5.91in (130 x 150 mm)
Displacement	1,945 in^3 (31.9 L)

24 volt negative ground electrical system. Four 12 volt 210 Ah batteries with master disconnect switch. Two 8.9 kW starters. Neutral start. 70A alternator with integral voltage regulator.

Transmission

Allison M8610 with CEC 2 Shift Manager Program, Automatic Electronic Control. Remote mounted in the frame with integral TC 890 torque converter and planetary gearing. Six speeds forward, one reverse. Automatic lock-up in all speed ranges. Downshift inhibitor. Hydraulic retarder. Speeds with standard planetary:

	Forward						Reverse
Gear	1st	2nd	3rd	4th	5th	6th	R1
Ratio	4.24	2.32	1.69	1.31	1.00	.73	5.75
mph	5.1	9.3	12.8	16.6	21.6	30.1	3.8
km/h	8.2	15.0	20.6	26.7	34.8	48.5	6.0

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Specifications

Frame

Full box section frame rails, integral front bumper, closed-loop crossmember and torque tubes of 42,000 psi (290 MPa) yield strength steel. Crossmember connections are 95,000 psi (655 MPa) steel castings.

Axles

Heavy duty axle with full floating axle shafts, single reduction spiral bevel gear differential, and planetary reduction at each wheel.

Ratios:	Standard	Optional
Differential	2.16:1	2.16:1
Planetary	13.75:1	10.50:1
Total reduction	29.70:1	22.68:1

Tires and Wheels

Standard: Front and rear	27.00-49 (48 Pr) e-4	rim width 19.5"

Consult tire manufacturers for optimum tire selection and correct ton-mile/h (t-km/h) capacity for application.

Suspension

Front: King pin strut type independent front wheel suspension uses self-contained, variable rate, nitrogen/oil cylinders.

Rear: Variable rate nitrogen/oil cylinders with A-frame linkage and lateral stabilizer bar.

Maximum strut stroke:	Front 9.25 in (235 mm) Rear 6.90 in (175 mm)
Maximum rear axle oscillation	± 7.0°

Brakes

SERVICE – All hydraulic brake system control. Transmission mounted pressure compensating piston pump provides hydraulic pressure for brakes and steering. Independent circuits front and rear. Each circuit incorporates a nitrogen/hydraulic accumulator which stores energy to provide instant braking response.

Front	Dry Disc, diameter	38" (965 mm)
	Pad area, total	320 in^2 (2,015 cm^2)
Rear	TEREX oil cooled, multiple disc, completely sealed from dirt and water.	
	Breaking Surface, total	13,573 in^2 (87,567 cm^2)

PARKING – Rear brakes applied by spring loaded opposing piston on disc pack, hydraulically released.

RETARDATION – Modulated lever control of rear disc brakes or hydraulic retarder in transmission. 1,234 hp (920 kW) continuous.

SECONDARY – Park push button solenoid control applies service and parking brakes. Automatically applies when engine is switched off. Parking brake applies when system pressure falls below a pre-determined level.

Brakes conform to ISO 3450, (SAE J 1473 Oct 90).

Steering

Independent hydrostatic steering with closed-center steering valve, accumulator and pressure compensating piston pump. Accumulator provides uniform steering regardless of engine speed. In the event of loss of engine power it provides steering of approximately two lock-to-lock turns. A low pressure indicator light warns of system pressure below 1,200 psi (83 bar). Steering conforms to ISO 5010, (SAE J 53).

Maximum tire steering angle	39°

Hoist

Two body hoist cylinders are mounted between the frame rails. Cylinders are two-stage with power down in the second stage. The body hydraulic system is independent of the steering hydraulic system.

System relief pressure	2,750 lbf/in^2 (190 bar)
Body hydraulic pump flow rate @ 2,100 rpm engine	97 gpm (365 L/min)
Body raise / lower time	16.3 seconds / 18.0 seconds

Body

Longitudinal 'V' type floor with integral transverse box-section stiffeners. The body is exhaust heated and rests on resilient impact absorption pads. Full time exhaust is optional. Body wear surfaces are high hardness (360-440BHN) abrasion resistant steel of yield strength 145,000 lbf/in^2 (1,000 MPa)

Thickness:	Floor	0.75 in (19 mm)
	Side	0.39 in (10 mm)
	Front, lower	0.39 in (10 mm)
ROPS Cabguard SAE J1040 Feb 86. ISO 3471		
Volumes:	Struck (SAE std)	54.4 yd^3 (41.6 m^3)
	Heaped 2:1 (SAE std)	74.5 yd^3 (57.0 m^3)

Service Capacities

Engine crankcase and filters	28.5 gal (108.0 L)
Transmission and filters	26.0 gal (100.0 L)
Cooling system	73.0 gal (276.0 L)
Fuel tank	336.8 gal (1,275.0 L)
Steering hydraulic tank	16.1 gal (61.0 L)
Steering hydraulic system (total)	19.0 gal (72.0 L)
Body hydraulic tank	78.5 gal (297.0 L)
Body hydraulic system and brake cooling system	147.1 gal (557.0 L)
Planetaries (total)	15.1 gal (57.0 L)
Differential	16.1 gal (61.0 L)
Front ride strut (each)	7.1 gal (27.0 L)
Rear ride strut (each)	4.8 gal (18.0 L)
Power take off	1.1 gal (4.0 L)

Standard Equipment

CAB
- Acoustic lining
- Air conditioner R 134A 18,500 BTU/hr (5.4 kW)
- Armrest, operators door
- Door locks
- Floor mat
- FOPS protection (ISO 3449/SAE J 231)
- Front brake pressure reduction selector
- Heater and defroster (10.3 kW - 35,000 BTU/hr)
- Interior light/courtesy light
- Mug holder
- Radio/cassette player
- ROPS protection (body cabguard) (ISO 3471/ SAE J1040)
- Air suspension seat with high back, headrest and 4-point harness
- Seat, passenger
- Seat belts SAE J386
- Steering column, adjustable
- Sun visor, full cab width
- Tinted glass
- Utility compartment
- Window, electric - operators door
- Windshield wipers - 2 speed and washers

CONTROLS
- Battery isolator
- Auto transmission shift
- Transmission test button
- Power/economy key switch
- Manual mode key switch

GAUGES
- Converter temp
- Engine coolant temp
- Engine oil pressure
- Fuel
- Speedometer/odometer
- Tach/hourmeter
- Transmission oil pressure

INDICATOR LIGHTS & ALARM
- Brake pressure, front
- Brake pressure, rear
- Steering pressure
- Steering/brakes oil level
- Transmission "do not shift"

INDICATOR LIGHTS ONLY
- Air cleaner restriction
- Alternator not charging
- Body up
- Brake oil temp
- Converter drive
- Coolant level
- Coolant temp
- Direction indicators
- Engine oil pressure
- Headlamps, main beam
- Parking brake on
- Retarder on
- Steering filter restriction
- Transmission "check"
- Transmission filter restriction
- Transmission manual mode
- Transmission oil temperature
- Warning light test

GENERAL
- Accumulator steering
- Air cleaners (2), two stage
- Automatic transmission
- Body down signal
- Body heating, exhaust
- Body hoist, servo actuated
- Coolant filter
- Diagnostic pressure test points
- Downshift inhibitor
- Dual brake system
- Electric start
- Engine pre-lube starter
- Engine management system
- Engine pan guard
- Exhaust muffler (body up)
- Exhaust muffler, part time
- Front brake pressure reduction sensor
- Fuel sight gauge
- Headlights - quartz halogen (4)
- Horn, dual electric, 117db (SAE J 1105)
- Mud flaps
- Nitrogen inflated tires
- Operator arm guard
- Parking brake (all wheels)
- Radiator, replaceable tube core
- Rear view mirrors - 4
- Transmission retarder or oil-cooled rear disc brakes
- Retarder light - amber, rear
- Reverse alarm
- Reversing light- quartz halogen
- Rock ejectors
- Secondary brake system (all wheels)
- Security kit
- Separate steering and body hoist hydraulic systems
- Shed plates, rear tires
- Side, tail, stop, direction indicators and hazard warning lights
- Tow points, front and rear
- Transmission guard

Optional Equipment

GENERAL
- Automatic lubrication
- Beacon, flashing amber
- Body, heavy duty
- Body wear plates (floor, end, side and front protection)
- Cold start kit
- Differential, no spin
- Exhaust muffler, full-time
- Fan clutch
- Fast fuel adapter
- Fire extinguisher
- Fire suppression system
- Flashing strobe reverse light
- Oil drain kit, engine and transmission sumps
- On-board weighing system
- Planetary ratio 10.5:1
- Spillguard extension, folding
- Tachograph
- Television monitor, rear view
- Tool kit, hand
- Traction bias differential

Weights

Chassis, with hoists	114,595 lbs (51,980 kg)
Body, standard	33,115 lbs (15,020 kg)
Net Weight	147,710 lbs (67,000 kg)
Payload, maximum	**200,000 lbs (90,720 kg)**
Maximum Gross Weight*	**347,715 lbs (157,720 kg)**

FOR UNIT EQUIPPED WITH OPTIONAL HEAVY DUTY BODY:	
Chassis, with hoists	114,595 lbs (51,980 kg)
Body, heavy duty, rock	45,300 lbs (20,550 kg)
Net weight	159,895 lbs (72,530 kg)
PAYLOAD, maximum	**187,810 lbs (85,190 kg)**
Maximum gross weight*	**347,715 lbs (157,720 kg)**

*Maximum permissible gross vehicle weight with options, attachments, full fuel tank and payload.

WEIGHT DISTRIBUTION	**Front Axle**	**Rear Axle**
Empty	49%	51%
Loaded	34%	66%

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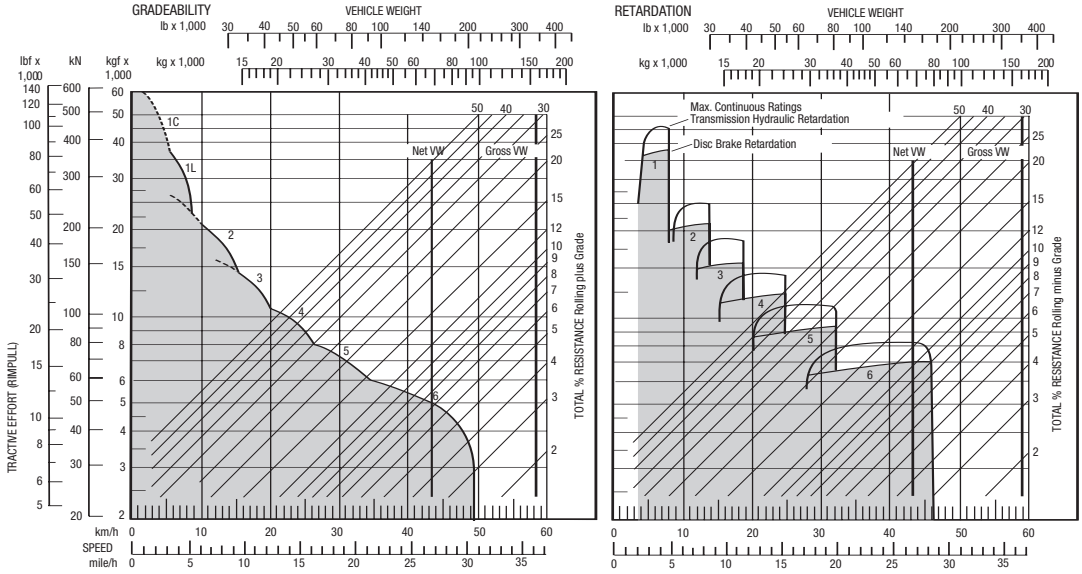
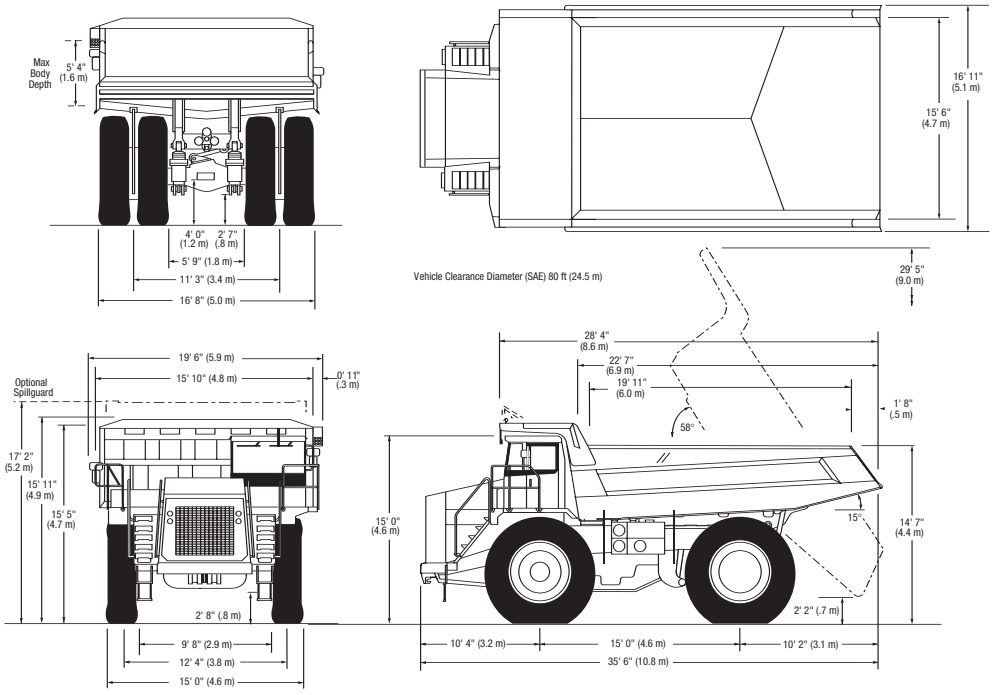
Performance Data (Graphs Based On 0% Rolling Resistance)



Dimensions



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For more information, product demonstration, or details on purchase, lease and rental plans, please contact your local Terex Distributor.

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