

**Rigid Haul Truck**

<b>MAX. GROSS VEHICLE WEIGHT</b>	171,870 lbs (77,960 kg)
<b>NET ENGINE POWER</b>	495 hp (370 kW)
<b>MAX. PAYLOAD</b>	45 Tons (41 t)
<b>HEAPED CAPACITY</b>	34 Yd <sup>3</sup> (26 m <sup>3</sup> )


**Specifications**
**Frame**

Full box section frame rails, integral front bumper, closed-loop crossmember and torque tubes of 42,000 lbf/in<sup>2</sup> (290 MPa) yield strength steel. Cross member connections are 95,000 lbf/in<sup>2</sup> (655 MPa) steel castings.

**Engine**

Make / Model	Cummins QSK19-C525
Type	4 cycle, turbocharged / CAC
Gross power @ 2,100 rpm (SAE J1995)	525 hp (392 kW)
Net power @ 2,100 rpm	495 hp (370 kW)
Engine emission meets Tier III USA EPA/CARB MOH 40 CFR 89 and EU non-road mobile machinery directive. Stage 3.	
Maximum torque @ 1,300 rpm	1,775 lbf ft (2,441 Nm)
Cylinders/Configuration	6 in line
Bore x stroke	6.25 x 6.25 in (159 x 159 mm)
Displacement	1,150 in <sup>3</sup> (18.9 L)
24 volt negative ground electrical system. Two 12 volt 165 Ah batteries with master disconnect switch. 8.9 kW starter. Neutral start. 70A alternator with integral voltage regulator.	

**Transmission**

Allison M5610AR automatic electronic control with Soft Shift feature. Mounted mid-frame for ease of access. Integral torque converter and planetary gearing. Six speeds forward, two reverse. Automatic lock-up in all speed ranges. Downshift inhibitor. Hydraulic retarder.

Gear	Forward						Reverse	
	1st	2nd	3rd	4th	5th	6th	R1	R2
Ratio	4.00	2.68	2.01	1.35	1.00	0.67	5.12	3.46
mph	7.0	10.5	13.9	20.8	28.1	40.4	4.4	8.0
km/h	11.3	16.8	22.4	33.4	45.2	65.0	7.1	12.9

**Suspension**

Front: Terex manufactured kingpin strut-type independent front wheel suspension using self-contained, variable rate, nitrogen/oil cylinders.

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

Maximum strut stroke:	
Front	9.9 in (251 mm)
Rear	7.2 in (182 mm)
Maximum rear axle oscillation	± 6.5 Degrees

## Specifications

Drive Axle		
Terex heavy duty axle with single reduction spiral bevel gear differential, full floating axle shafts, and planetary reduction at each wheel.		
Ratios:	Standard	Optional
Differential	3.15:1	3.73:1
Planetary	5.66:1	5.66:1
Total Reduction	17.83:1	21.11:1

Tires		
Standard: Front and rear	21.00-35 bias ply	rim width 15"
Consult tire manufacturers for optimum tire selection and correct ton-mile/h (t-km/h) capacity for application. Tires subject to availability.		

Brakes		
SERVICE – All hydraulic brake system. 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 consistent braking response.		
Front:	Dry disc, diameter	26 in (660 mm)
	Swept area, front, total	928 in <sup>2</sup> (5 985 cm <sup>2</sup> )
	Pad area, total	216 in <sup>2</sup> (1 395 cm <sup>2</sup> )
Rear: Terex multi-plate oil-immersed brakes continuously cooled by oil flow supplied by a tandem pump on engine power take-off, and passing through a high capacity oil/water heat exchanger. Brake packs are sealed from contamination and are self adjusting.		
Friction discs		14 total
Diameter		25.5 in (648 mm)
Braking Surface, total		5,938 in <sup>2</sup> (38,310 cm <sup>2</sup> )
Cooling flow, maximum		146 gpm (553 Lpm)
PARKING – Application of rear brakes by springs in brake disc pack. Hydraulically released.		
RETARDATION – Modulated lever control of rear disc brakes or hydraulic retarder in transmission. 700 hp (522 kW) continuous.		
SECONDARY BRAKE SYSTEM – Push button solenoid control applies service and parking brakes. Automatically applies when engine is switched off. Parking brake applies should system pressure fall below a pre-determined level.		
Brakes conform to ISO 3450, SAE J1473 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 J53).	
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 <sup>2</sup> (190 bar)
Body hydraulic pump flow rate @ 2,100 rpm engine speed	60 gpm (227 Lpm)
Body raise / lower time	13 seconds / 9 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 <sup>2</sup> (1,000 MPa)		
Thickness:	Floor	0.75 in (19 mm)
	Side	0.39 in (10 mm)
	Front, lower	0.39 in (10 mm)
ROPS cab guard SAE J1040 Feb 86. ISO 3471		
Volumes:	Struck (SAE)	25.6 yd <sup>3</sup> (19.6 m <sup>3</sup> )
	Heaped 2:1 (SAE)	34.0 yd <sup>3</sup> (26.0 m <sup>3</sup> )

Service Capacities		
Engine crankcase and filters	16.4 gal	(62.0 L)
Transmission and filters	18.0 gal	(68.0 L)
Cooling system	38.0 gal	(144.0 L)
Fuel tank	160.0 gal	(606.0 L)
Steering hydraulic tank	16.0 gal	(61.0 L)
Steering hydraulic system (total)	22.5 gal	(85.0 L)
Body hydraulic tank	57.0 gal	(216.0 L)
Body hydraulic and brake cooling system	97.0 gal	(368.0 L)
Planetaries (total)	17.4 gal	(66.0 L)
Differential	15.8 gal	(60.0 L)
Front ride strut (each)	3.7 gal	(14.0 L)
Rear ride strut (each)	4.5 gal	(17.0 L)
Power take off	1.0 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)  
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 management system  
Engine pan guard  
Exhaust muffler (body up)  
Exhaust muffler, part time  
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)  
Rear view mirrors - 4  
Transmission retarder or oil-cooled rear disc brakes  
Retarder light - amber, rear  
Reverse alarm  
Reversing light- quartz halogen

Rock ejectors	Shed plates, rear tires
Secondary brake system (all wheels)	Side, tail, stop, direction indicators and hazard warning lights
Security kit	Tow points, front and rear
Separate steering and body hoist hydraulic systems	Transmission guard

## Optional Equipment

### GENERAL

Automatic lubrication  
Beacon, flashing amber  
Body, heavy duty  
Body wear plates (floor, end, side and front protection)  
Body, 40-ton (36.3t) payload  
Cold start kit  
Differential, no spin  
Differential 3.73:1  
Engine pre-lube starter  
Exhaust muffler, full-time  
Fan clutch  
Fast fuel adapter

Fire extinguisher  
Fire suppression system  
Flashing strobe reverse light  
Front brake pressure reduction selector  
Front brake pressure reduction sensor  
Oil drain kit, engine and transmission sumps  
On-board weighing system  
Spillguard extension, folding  
Tachograph  
Television monitor, rear view  
Tool kit, hand

## Weights

Chassis with hoists	61,365 lbs	(27,835 kg)
Body, standard	20,500 lbs	(9,300 kg)
Net Weight	81,870 lbs	(37,135 kg)
<b>Payload, maximum</b>	<b>90,000 lbs</b>	<b>(40,825 kg)</b>
<b>Maximum Gross Weight*</b>	<b>171,870 lbs</b>	<b>(77,960 kg)</b>

### FOR UNIT EQUIPPED WITH OPTIONAL HEAVY DUTY BODY:

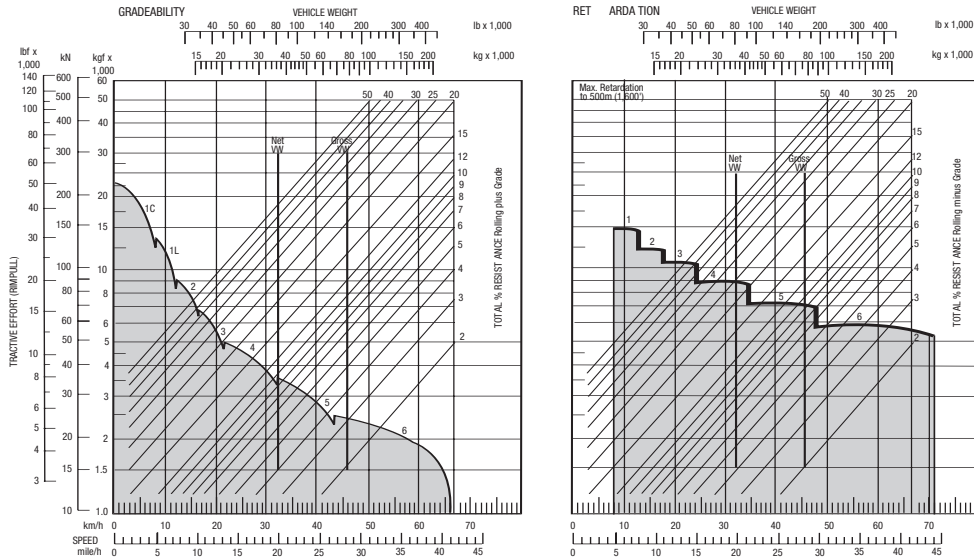
Chassis, with hoists	61,365 lbs	(27,835 kg)
Body, heavy duty	23,810 lbs	(10,800 kg)
Net Weight	85,175 lbs	(38,635 kg)
<b>Payload, maximum</b>	<b>86,695 lbs</b>	<b>(39,325 kg)</b>
<b>Maximum Gross Weight*</b>	<b>171,870 lbs</b>	<b>(77,960 kg)</b>

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

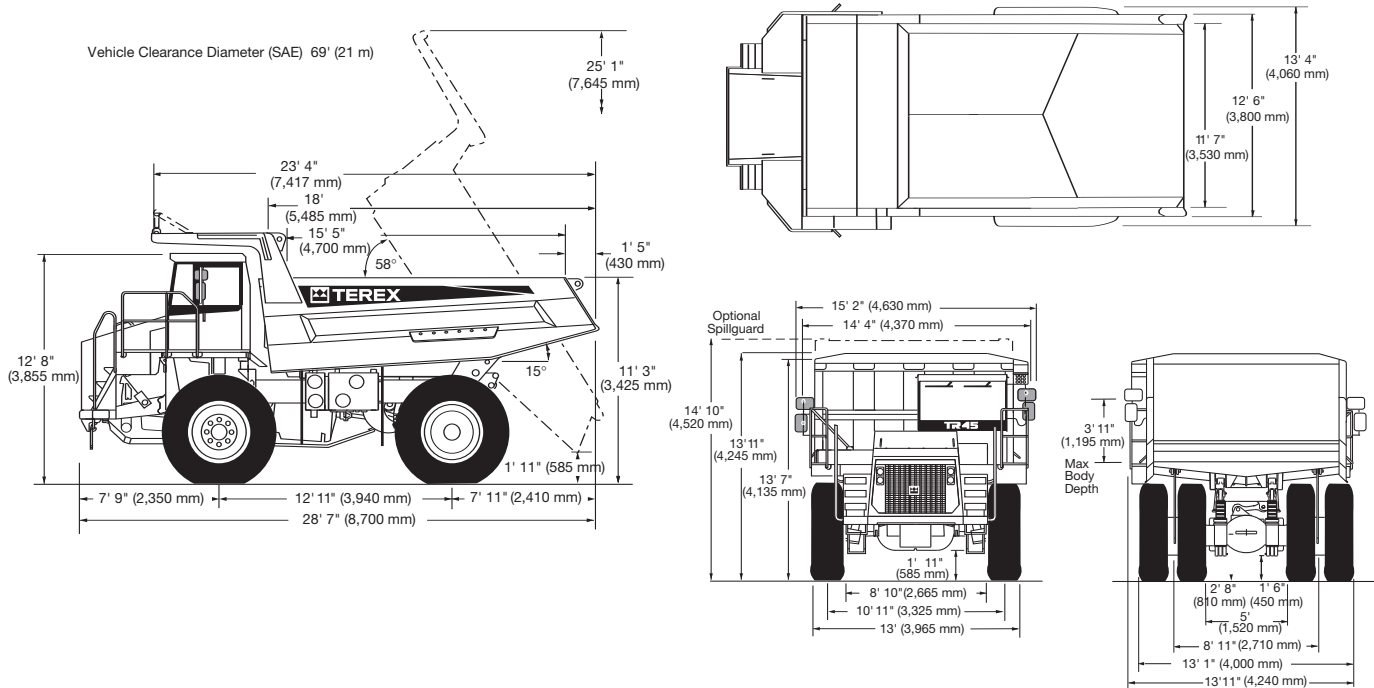
WEIGHT DISTRIBUTION	Front Axle	Rear Axle
Empty	48%	52%
Loaded	34%	66%

# Rigid Haul Truck TR45

## TR45 Performance Data (Graphs Based On 0% Rolling Resistance)



## Dimensions



### Terex Construction Americas

8800 Rostin Road  
Southaven, MS 38671  
USA

TEL 662-393-1800  
SALES 866-837-3923  
PARTS & TECH SUPPORT 888-201-6008  
FAX 662-393-1700  
EMAIL sales@terexca.com  
WEB terexca.com

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

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