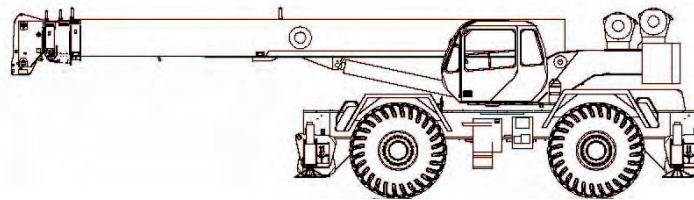




## Rough Terrain Crane Specifications | RT600 Series



### STANDARD BOOM EQUIPMENT

#### BOOM

36-111' (10.67-33.53 m), four section full power boom. Telescoping is mechanically synchronized with single lever control. The synchronization system consists of a single telescope cylinder and high strength leaf chains to extend and retract the third section and the tip section. The boom is a high-strength four plate design, welded inside and out with anti-friction slide pads. Boom side plates are made with stamped impressions to reduce weight and increase strength. A single boom hoist cylinder provides for boom elevation of -4 to 76 degrees. Maximum tip height 115' (35.05 m).

#### BOOM HEAD

Welded to fourth section of boom. Five or six nylon load sheaves and two idler sheaves mounted on heavy duty, anti friction bearings. Quick reeving boom head. Provisions made for side-stow jib mounting.

### OPTIONAL BOOM EQUIPMENT

#### JIBS

32' (9.68 m) side stow swing-on one-piece lattice type jib. Single nylon sheave mounted on anti-friction bearing. Jib is offsettable at 0°, 15° or 30°. Maximum tip height is 146' (44.50 m).

33-57' (10.15-17.30 m) side stow swing-on lattice type jib. Single nylon sheave mounted on anti-friction bearing. Jib is extendible to 57' (17.30 m) by means of a 25' (7.62 m) manual pull-out tip section, roller supported for ease of extension. Jib is offsettable at 0°, 15°, 30°. Maximum tip height is 170' (51.82 m).

#### HOOK BLOCK

Five metallic sheaves on anti-friction bearings with hook and hook latch. Quick reeving design does not require removal of wedge and socket form rope.

#### HOOK AND BALL

12 ton (10.9 mt) top swivel ball with hook and hook latch.

#### AUXILIARY BOOM HEAD

Removable auxiliary boom head has single nylon sheave mounted on anti-friction bearing. Removable pin-type rope guard for quick reeving. Installs on main boom peak only. Removal is not required for jib use.



## ROUGH TERRAIN CRANE RT600 SERIES

### STANDARD UPPERSTRUCTURE EQUIPMENT

#### UPPERSTRUCTURE FRAME

All welded one-piece structure fabricated with high tensile strength alloy steel. Counterweight is bolted to frame.

#### TURNTABLE CONNECTION

Swing bearing is a single row, ball type with internal teeth. The swing bearing is bolted to the revolving upperstructure and to the carrier frame.

#### SWING

A hydraulic motor drives a double planetary reduction gear for precise and smooth swing function. Swing speed (no load) is 1.9 rpm.

#### SWING BRAKE

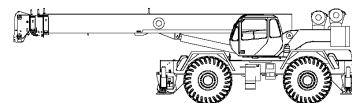
Heavy duty multiple disc swing brake is mechanically actuated from operator's cab by foot pedal. Brake may be locked on or used as a momentary brake. A 360° house mechanical house lock is standard.

#### RATED CAPACITY INDICATOR

Rated Capacity Indicator with visual and audible warning system and automatic function disconnects. Second generation pictographic display includes: boom radius, boom angle, boom length, allowable load, actual load, and percentage of allowable load registered by bar graph. Operator settable alarms provided for swing angle, boom length, boom angle, tip height, and work area exclusion zone. Anti-two block system includes audio/visual warning and automatic function disconnects.

#### OPERATORS CAB

Environmental cab with all steel construction, optimum visibility, tinted safety glass throughout, and rubber floor matting is mounted on vibration absorbing pads. The cab has a sliding door on the left side. Framed sliding window on the right side, hinged tinted all glass skylight and removable front windshield to provide optimum visibility of the load open or closed. Acoustical foam padding insulates against sound and weather. The deluxe six-way adjustable seat is equipped with a mechanical suspension and includes head and arm rests.



#### CONTROLS

Armrest mounted dual axis controls for winch(s), swing, and boom elevation. Winch rotation indication incorporated into control handles. Armrest swings up to improve access and egress. Vernier adjustable hand throttle included. Steering column mounted turn signal, wiper, and shift controls. Switches include ignition, engine stop, lights, horn, roof window wiper, defroster, steering mode, parking brake, outriggers, 360° house lock, etc. Horn and winch speed shift switches are mounted in the levers. Foot control pedals include swing brake, boom telescope, service brake, and accelerator.

#### INSTRUMENTATION AND ACCESSORIES

In-cab gauges include air pressure, bubble level, engine oil pressure, fuel, engine temperature, voltmeter, transmission temperature, and transmission oil pressure. Indicators include low air, high water temperature, low oil pressure, high transmission temperature, and low coolant level audio/visual warning, hoist drum rotation indicator(s), and Rated Capacity Indicator. Accessories include fire extinguisher; light package including headlights, tail light, brake lights, directional signals, four-way hazard flashers, dome light, and back-up lights with audible back-up alarm; windshield washer/wiper; skylight wiper; R.H. and L.H. rear view mirrors; dash lights; and seat belt. Circuit breakers protect electrical circuits.

#### HYDRAULIC CONTROL VALVES

Valves are mounted on the rear of the upperstructure and are easily accessible. Valves have electric/hydraulic operators and include one pressure compensated two spool valve for main and auxiliary winch, and one single spool valve for swing. Quick disconnects are provided for ease of installation of pressure check gauges.

#### OPTIONAL EQUIPMENT

Auxiliary Winch, Single axis armrest mounted controllers CLP Heater/Defroster, Hydraulically powered Air conditioner with or without hydraulic header, Diesel Heater/ Defroster, Work Lights, Rotating Beacon.

### STANDARD CARRIER EQUIPMENT

#### CARRIER CHASSIS

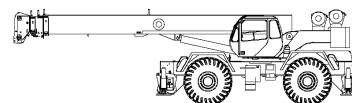
Chassis is Terex designed with four-wheel drive and four-wheel steer (4x4x4). Has box-type construction with reinforcing cross members, a precision machined turn table mounting plate and integrally welded outrigger boxes. Decking has anti-skid surfaces, including between the frame rails lockable front tool storage compartment, and access steps and handles on the left and right sides and on all four corners.

#### AXLES AND SUSPENSION

Rear axle is a planetary drive/steer type with 10.5' (.26 m) of total oscillation. Automatic oscillation lockouts that engage when the superstructure is swung 10° in either direction. Front axle is a planetary drive/steer type, rigid mounted to the frame for increased stability.

#### STEERING

Hydraulic four-wheel power steering for two-wheel, four-wheel coordinated, or four-wheel crab steer is easily controlled by steering wheel. A rear axle centering light is provided.



#### TRANSMISSION

Range shift type power-shift transmission with integral torque converter provides six speeds forward and six speed reverse with neutral safety start. Four wheel drive engages automatically with low range and two wheel drive with high range. Automatic pulsating back-up alarm.

	Turning Radius: (to CL of outside tire)	Curb Clearance Radius
Two-wheel:	41' 7" (12.7 m)	43' 2" (13.2 m)
Four-wheel:	22' 10" (7.0 m)	24' 7" (7.5 m)





**TEREX**

**ROUGH TERRAIN CRANE  
RT600 SERIES**

**STANDARD CARRIER EQUIPMENT (CONTINUED)**

**MULTI-POSITION OUT AND DOWN  
OUTRIGGERS**

Fully independent hydraulic outriggers may be utilized fully extended to 24' (7.32 m) centerline to centerline, in their 1/2 extended position, or fully retracted for maximum flexibility. Easily removable Almag floats, each with an area of 254 in<sup>2</sup> (1639 cm<sup>2</sup>), stow on the outrigger boxes at their point of use. Complete controls and a sight leveling bubble are located in the operator's cab.

**WHEELS AND TIRES**

Disc type wheels with full tapered bead seat rim. 157.56" (4 m) wheelbase.

**TIRES**

Wide earthmover (E3) style tread tires provide life and flotation. 29.50 x 25, 28 P.R. -std.

**SERVICE BRAKES**

Split system air over hydraulic 18.5" (470 mm) diameter disc dual caliper brakes on all wheels.

**PARKING BRAKE**

Front axle equipped with spring-set, air released parking brake.

**OPTIONAL EQUIPMENT**

Immersion Heater, Pintle Hook, Clearance Lights, Independent Rear Wheel Steer, Four Mode Rear Wheel Steer, 20,000 lb line pull front mounted winch.

**HYDRAULIC SYSTEM**

**HYDRAULIC PUMPS**

Three gear type pumps, one single and two in tandem, driven off the transmission. Combined system capability is 113 gpm (428 lpm). Includes pump disconnect on winch pump.

**Main and Auxiliary Winch Pump**

▶ 52.7 gpm (199.5 lpm) @ 4,500 psi (316.4 kg/cm<sup>2</sup>)

**Boom Hoist and Telescope Pump**

▶ 37.3 gpm (141.2 lpm) @ 3,500 psi (246.1 kg/cm<sup>2</sup>)

**Power Steering, Outrigger and Swing Pump**

▶ 18.7 gpm (70.8 lpm) @ 3,500 psi (246.1 kg/cm<sup>2</sup>)

**FILTRATION**

Full flow oil filtration system with bypass protection includes a removable 60 mesh (250 micron) suction screen-type filter and five micron replaceable return line filter.

**HYDRAULIC RESERVOIR**

All steel, welded construction with internal baffles and diffuser. Provides easy access to filters and is equipped with an external sight level gauge. The hydraulic tank is pressurized to aid in keeping out contaminants and in reducing potential pump cavitation. Capacity is 116 gal (439 L). Hydraulic oil cooler is standard.

**MAIN WINCH SPECIFICATIONS**

Hydraulic winch with bent axis piston motor and planetary reduction gearing provides two-speed operation with equal speeds for power up and down. Winch is equipped with an integral automatic brake, grooved drum, tapered flanges, standard cable roller on drum, and electronic rotation indicator.

Performance	L0-Range	HI-Range
▶ Max line speed (no load)		
▶ First layer	187 fpm (57 m/min)	300 fpm (91.4 m/min)
▶ Fifth layer	269 fpm (82 m/min)	431 fpm (131.4 m/min)
▶ Max. line pull-first layer	18,450 lb (8 369 kg)	10,002 lb (4 537 kg)
▶ Max. line pull-fifth layer	12,845 lb (5 826 kg)	6,963 lb (3 158 kg)
▶ Permissible line pull	13,800 lb (6 260 kg)	

**Drum Dimensions**

- ▶ 13" (330 mm) drum diameter
- ▶ 20.16" (512 mm) length
- ▶ 12.5" (546 mm) flange dia.
- ▶ Cable: 3/4" x 600' (19 mm x 182.9 m)
- ▶ Cable type: 3/4" (19 mm) 6 x 19 IWRC XIPS, right regular lay, performed.
- ▶ Min. breaking strength 29.4 tons (26.6 mt)

**Drum Capacity**

- Max. Storage: 561' (171 m)
- Max. Useable: 561' (171 m)\*

\*Based on minimum flange height above top layer to comply with ANSI B30.5

**OPTIONAL AUXILIARY WINCH**

Hydraulic two-speed winch with bent axis piston motor, equal speed power up and down, planetary reduction with integral automatic brake, grooved drum with tapered flanges, drum roller, and rotation indicator.

**Performance**

- ▶ Max. line speed (no load) Fifth layer 431 fpm (131.4 m/min)
- ▶ Max. line pull First layer 18,450 lb (8 369 kg)

**Drum Dimensions and Capacity**

(Same as main winch)

**OPTIONAL HOIST LINE**

**Main winch and optional auxiliary winch** 3/4" (19 mm) rotation resistant compacted strand 34 x 7 grade 1960. Min. breaking strength 34.5 tons (31.7 mt).

**ENGINE SPECIFICATIONS**

- ▶ Make and Model, Cummins QSB-215 (300 hp)
- ▶ Type 6 cylinder
- ▶ Bore and Stroke 4.02 x 4.72" (102 x 120 mm)
- ▶ Displacement 359 in<sup>3</sup> (5.9 L)
- ▶ Rated HP 215 hp (160 kw) @ 2500 rpm
- ▶ Max. Gross HP 255 hp (168 kw) @ 2300 rpm
- ▶ Max. Gross Torque 655 lb • ft (888 N•m) @ 1500 rpm
- ▶ Aspiration Turbocharged & charge air cooled dry type
- ▶ Air filter 12 volt
- ▶ Electrical System 102 amp
- ▶ Alternator 14,260 lb (6 468 kg)
- ▶ Battery (2) 12V-1900 C.C.A.
- ▶ Fuel Capacity 50 gal (189 L)

**PERFORMANCE (STANDARD ENGINE)**

Transmission Gear	Forward Drive	Max. Speed	Max. Tractive Effort	Gradeability @ Stall
▶ 1	4-wheel	1.9 mph (3.1 kph)	86,330 lb (39 159 kg)	127.6%
▶ 2	4-wheel	3.8 mph (6.1 kph)	41,547 lb (18 845 kg)	48.5%
▶ 3	4-wheel	9.6 mph (15.4 kph)	15,220 lb (6 904 kg)	34.7%
▶ 4	2-wheel	5.2 mph (8.4 kph)	29,686 lb (13 465 kg)	18%
▶ 5	2-wheel	10.3 mph (16.6 kph)	14,260 lb (6 468 kg)	12%
▶ 6	2-wheel	23.4 mph (37.7 kph)	5,211 lb (2 364 kg)	5.9%

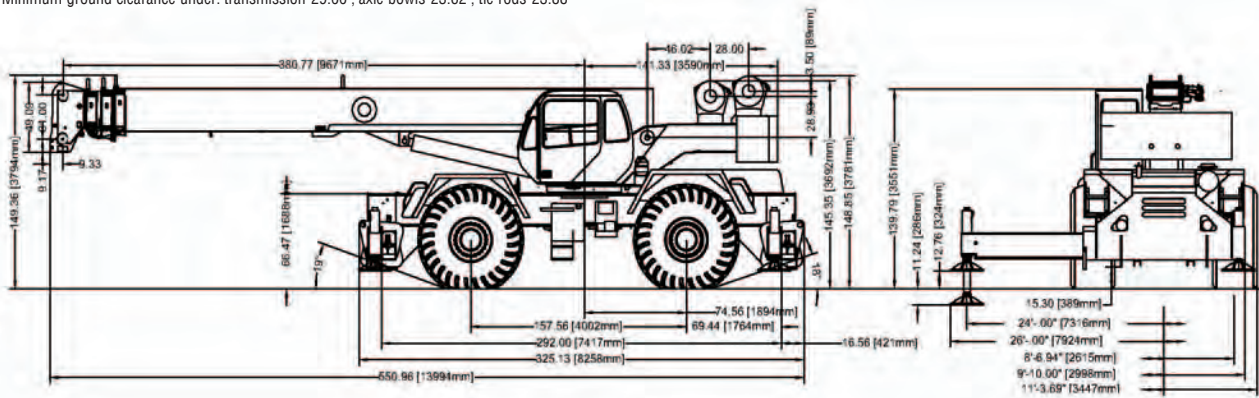
All performance data is based on a gross vehicle weight of 86,000 lb (39 009 kg) 29.5x25 tires, 4x4 drive. Performance may vary due to engine performance. Gradeability data is theoretical and is limited by tire slip, machine stability, or oil pan design.





**GENERAL DIMENSIONS**

1. Dimensions given assume the boom is fully retracted in travel position and 29.50 x 25 tires.
2. Minimum ground clearance under: transmission-29.00", axle bowls-23.62", tie rods-23.88"



WEIGHTS & AXLE LOADS	GROSS WEIGHT LB	UPPER FACING FRONT		GROSS WEIGHT KG	UPPER FACING REAR	
		FRONT	REAR		FRONT	REAR
Basic crane with 14,200 lb (6 440 kg) counterweight	85,694	45,238	40,456	38 870	20 520	18 350
Add Options:						
32' (9.68 m) Swing-on Jib (Stowed)	+ 1,270	+ 2,205	- 935	+ 576	+ 1 000	- 424
33'-57' (10.15-17.30 m) Swing-on Jib (Stowed)	+ 2,170	+ 3,580	- 1,410	+ 984	+ 1 624	- 640
Axillary Boom Head	+ 125	+ 365	- 240	+ 57	+ 166	- 109
Auxiliary Winch with Wire Rope, Controls, Etc.	+ 584	- 30	+ 614	+ 265	- 14	+ 279
75 T (68.0 mt) 5-Sheave Hook Block	+ 1,040	+ 1,971	- 931	+ 472	+ 894	- 422
60 T (54.4 mt) 5-Sheave Hook Block	+ 1,204	+ 2,233	- 1,029	+ 546	+ 1 013	- 467
20 T (18.1 mt) I-Sheave Hook Block	+ 570	+ 936	- 366	+ 259	+ 425	- 166
12 T (19.9 mt) Hook and Ball (In tool box)	+ 419	+ 443	- 24	+ 190	+ 201	- 11
Pintle Hook:						
Front	+ 45	+ 60	- 15	+ 20	+ 27	- 7
Rear	+ 45	- 25	+ 70	+ 20	- 11	+ 31
Substitute:	+ 98	- 17	+ 115	+ 44	- 8	+ 52
600' of 34x7 class spin resistant wire rope						

Note: Weights are for Terex supplied equipment and are subject to 2% variation due to manufacturing tolerances.

**Bigge Crane and Rigging Co.**

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