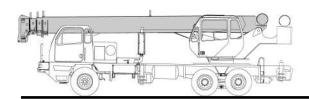


T 300/T 300XL SERIES

truck cranes specifications



STANDARD BOOM EQUIPMENT

BOOM

30-94 ft. (9.23-28.49 m), four section full power, mechanically synchronized boom. High-strength four plate construction with embossed side plate holes to reduce weight and increase strength. Anti-friction slide pads. A single boom hoist cylinder provides for boom elevation of -4 to 77 degrees. Maximum tip height is 99 ft. (30.17 m).

BOOM HEAD

Welded to outer section of boom. Four or five nonmetallic 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

MAIN BOOM

33-81 ft. (10.15 - 24.83 m), three section full power, mechanically synchronized boom. High-strength four plate construction with embossed side plate holes to reduce weight and increase strength. Anti-friction slide pads. A single boom hoist cylinder provides for boom elevation of -4 to 77 degrees. Maximum tip height is 87 ft. (26.52 m).

33.75-105' (10.29-32.0 m), four section full power, mechanically synchronized boom. Extra high-strength four plate construction with embossed side plate holes. Anti-friction slide pads. A single boom hoist cylinder provides boom elevation of -4 to 77 degrees. Maximum tip height is 110 ft. (33.5 m).

JIBS

32 ft. (9.68 m) side stow swing-on one-piece lattice type jib. Single sheave mounted on anti-friction bearing. Jib is offsettable at 0°, 15°, or 30°. Maximum tip height is 129 ft. (39.32 m) with 94 ft. (28.49 m) boom, 140 ft. with 105 ft. (32.0 m) boom.

32-49 ft. (9.68 -14.86 m) side-stow swing-on lattice type jib. Single sheave mounted on anti-friction bearing. Jib is extendible to 49 ft. (14.86 m) by means of a 17 ft. (5.18 m) manual pull-out tip section, roller supported for ease of extension. Jib is offsettable at 0°, 15°, or 30°. Maximum tip height is 147 ft. (44.81 m) with 94 ft. (28.49 m) boom, 158 ft. with 105 ft. (32.0 m) boom.

AUXILIARY BOOM HEAD

Removable auxiliary boom head has single 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.

HOOK BLOCK

Three, or four metallic sheaves on anti-friction bearings with hook and heavy duty hook latch. Quick reeving design does not require removal of wedge and socket from rope.

HOOK & BALL

7 ton (6.3 mt) top swivel ball with hook and hook latch.

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 external 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 2.8 rpm.

SWING BRAKE

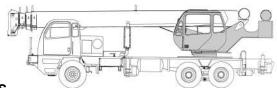
Heavy duty multiple disc swing brake is mechanically actuated from operator's cab by foot pedal. Brake may be locked on or used as a momentary brake.

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.

OPERATOR'S 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 operator's seat is equipped with a mechanical suspension and includes head and arm rests.



CONTROLS

All control levers and pedals are positioned for efficient operation. Hand operated control levers include swing, boom telescope, boom hoist, winch(s), vernier adjustable hand throttle, and 360° house lock. Switches include ignition, engine stop, two-speed winch(s), lights, horn, windshield wipers, defroster, outriggers, etc. Horn and additional winch momentary shift switches are mounted in the levers. Foot control pedals include swing brake, boom raise, boom lower, and throttle.

INSTRUMENTATION AND ACCESSORIES

In-cab gauges include bubble level, engine oil pressure, fuel, engine temperature, and voltmeter. Indicators include high coolant temperature/low engine oil pressure audio/visual warning, low coolant level audio/visual warning, and Rated Capacity Indicator. Accessories include fire extinguisher, windshield washer/wiper, skylight wiper, L.H. rear view mirror, dash and dome 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 are mechanically operated and include one three spool valve for boom elevation, telescope, main winch, and one single spool valve for swing. High pressure regeneration feature provides 2-speed boom extension. Quick disconnects are provided for ease of installation of pressure check gauges.

OPTIONAL EQUIPMENT

Auxiliary Winch • LP Heater/Defroster • Hydraulically Powered Air Conditioner • Diesel Heater/Defroster • Tachometer • Work Lights • Outrigger Controls on Sides of Carrier • Heavy Counterweight Package(s)

STANDARD CARRIER EQUIPMENT

CARRIER CHASSIS

Chassis is Terex designed and built with a 6 x 4 drive. Triple box construction frame is fabricated from high strength alloy steel and provides superior frame rigidity. Full aluminum decking improves access and reduces weight. Aluminum engine housing with sliding cover optimizes engine access while reducing weight and improving corrosion resistance.

AXLES AND SUSPENSION

Rear Axle – 45,000 lb. (20 412 kg) capacity tandem axles with heat treated housings have interaxle differential with lockout. Axles are mounted on equalizer beams to distribute weight

Front Axle – 22,000 lb. (9979 kg) I beam type axle with air suspension and shock absorbers for exceptional ride.

TIRES

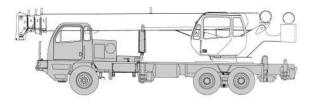
Front: Two 425/65R22.5-20 P.R. All-Position type tubeless. Rear: Eight 11R22.5-16 P.R. transport type.

BRAKES

Full air brakes on all wheels with ABS split circuit system.

Front brakes: 16.5 x 6 in. (419 x 152 mm) Rear brakes: 16.5 x 7 in. (419 x 178 mm).

All brakes are air operated "S" cam type with automatic slack adjusters. Lining areas are 384 in² (2477 cm²) front and 920 in² (5935 cm²) rear. Air compressor has standard air dryer. Rear tandem axles have spring-set, air-released parking or emergency brake chambers. Parking brake is applied with



valve mounted on dash panel. Emergency brakes apply automatically when air pressure drops below 60 psi (4.2 kg/cm²).

STEERING

Mechanism includes rack and pinion with integral hydraulic

power.

To C of tires

To corner of carrier

Turning radius: 34' 0" (10.35 m) 37'-7" (11.46 m)

TRANSMISSION

Standard: Fuller RT 8908LL transmission has 10 speeds forward and 3 reverse, with neutral safety start. Gear selection is accomplished by single level shift control and two position air shift range selector. Optional: Allison MD3560 provides 6 speeds forward with lock-up in top 5 gears. Adaptive feed back controls continually optimize shifts for weight, terrain, etc.

MULTI-POSITION OUT & DOWN OUTRIGGERS

Fully independent hydraulic outriggers may be utilized fully extended to 20 ft. (6.10 m), in their 1/2 extended position, or fully retracted. Removable aluminum outrigger pads are 452 in² (2919 cm²) and stow on the carrier frame. Complete controls and sight leveling bubble are located in the operator's cab. Includes 5th, front, outrigger.

STANDARD CARRIER EQUIPMENT (continued)

CARRIER CAB

One-man aluminum cab is mounted on vibration absorbing pads and has optimum visibility, safety glass, acoustical foam padding inside cab for insulating against sound and weather, hot air defroster, six-way adjustable air suspension seat with seat belt and arm rests, and a lockable door with roll down window.

CONTROLS

Included are transmission shift, inter-axle differential lock, cruise control, parking brake, two-speed windshield wiper/washer, heater and defroster, lights, headlight dimmer, dome light, and ignition switch.

INSTRUMENTS

Included are speedometer, hourmeter, tachometer, voltmeter, fuel gauge, engine oil pressure gauge, water temperature gauge, dual air pressure gauges. Warning lights include low coolant level, parking brakes on, low air, pumps engaged, and high beam lights.

HYDRAULIC SYSTEM

HYDRAULIC PUMPS

Triple pump driven from engine flywheel housing PTO with air shifted mechanical pump disconnect at 1.15 times engine speed. A separate steering pump is driven directly from the engine. Combined system capacity is 115 gpm (435 lpm). Hydraulic oil cooler is standard.

Main Winch Pump

54 gpm (204.4 lpm) @ 3,500 psi (246.1 kg/cm²)

Boom Hoist and Telescope Pump

39 gpm (147.6 lpm) @ 3,500 psi (246.1 kg/ cm²)

Outrigger and Swing Pump

22 gpm (83.3 lpm) @ 2,500 psi (175 kg/ cm²)

ACCESSORIES

Included are fire extinguisher, right hand and left hand rear view mirrors, electric horn, access steps and grab handles (located at four separate points around the crane), back-up alarm, two position boom rack, front and rear towing loops.

LIGHTS

Light package includes headlights with foot operated dimmer switch, clearance lights, tail lights, directional signal lights, fourway hazard flasher lights, back-up lights with audible alarm.

OPTIONAL EQUIPMENT

Spare Tire with Wheel • Immersion Heater(s) • Pintle Hook • Cold Weather Kit • Allison MD560 6-speed Automatic Transmission • Rear Air Suspension • Engine Exhaust Brake • Air Conditioner • Aluminum R/L Hand Tool Boxes • Ground Level Outrigger Controls

Power Steering Pump

8 gpm (30.3 lpm) @ 1500 psi (105.5 kg/cm²)

FILTRATION

Full flow oil filtration system with bypass protection includes a removable 60 mesh (250 micron) suction screen-type filter and 5 micron replaceable return line filter.

HYDRAULIC RESERVOIR

All 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 91 gal (344 liters).

MAIN WINCH SPECIFICATIONS

Hydraulic winch with bent axis piston motor and planetary reduction gearing provides 2-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	LO-RANGE	HI-RANGE
Max. line speed (no load)		
First layer	167 fpm (50.9 m/min)	335 fpm (102.1 m/min)
Fifth layer	242 fpm (73.8 m/min)	484 fpm (147.5 m/min)
Max. line pull-first layer	15,639 lbs (7093 kg)	7,298 lbs (3310 kg)
Max. line pull-fifth layer	10,827 lbs (4911 kg)	5,052 lbs (2291 kg)
Permissible line pull	9,000 lbs (4082 kg)	

DRUM DIMENSIONS

10.62 in (270 mm) drum diameter 17.55 in (446 mm) length 18.0 in (457 mm) flange dia. Cable: 58" x 450 ft. (16 mm x 137.2 m) Cable type: 58" (16 mm) 6x19 IWRC IPS right regular lay, preformed. Min. breaking strength 17.9 tons (16.2 mt).

DRUM CAPACITY

Max. Storage: 570 ft (173.7 m) 6th layer not a working layer Max. Usable: 455 ft. (138.7 m)* *Based on minimum flange height above top layer to comply with ANSI B30.5

OPTIONAL AUX. WINCH

Hydraulic 2-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 484 fpm (147.5 m/min)

Max. line pull

First layer 15,639 lbs (7093 kg)

DRUM DIMENSIONS AND CAPACITY

(Same as main winch)

OPTIONAL HOIST LINE

MAIN WINCH AND OPTIONAL AUXILIARY WINCH – 5/8" (16 mm) rotation resistant compacted strand 18 x 19 or 19 x 19. Min breaking strength 22.6 tons (20.6 mt).

ENGINE SPECIFICATIONS

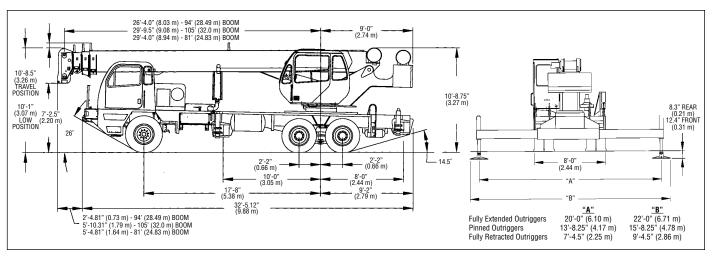
Make and Model	Cummins ISC 300 (300 hp)
Type	6 cylinder
Bore and Stroke	4.49 x 5.32 in. (114 x 135 mm)
Displacement	504.5 cu. in. (8.27 l)
Max. Gross Horsepower	300 hp (224 kw) @ 2000 rpm
Max. Gross Torque	860 lbs•ft. (1166 N•m)/1300 rpm
Net Horsepower	242 hp (180 kw) @ 2000 rpm
Aspiration	turbocharged
Electrical System	12 volt
Alternator	100 amp
Battery	(2) 12V-1600 C.C.A. @ 0°F (-18°C)
Fuel Capacity	60 gal (227 l)

SPEED AND GRADEABILITY

Engine Transmission	Speed Range	Gradeability
Cummins Manual	60 mph (96 km/h)	56%
Cummins Automatic	60 mph (96 km/h)	64%

Performance data is based on a gross vehicle weight of 58,000 lb. (26 308 kg). Performance may vary due to engine performance, weight, tire size, etc. Gradeability data is theoretical and is limited by tire slip, vehicle stability, oil pan angle, and other factors.

GENERAL DIMENSIONS



WEIGHTS & AXLE LOADS	GROSS WEIGHT LBS.	UPPER IN TRAVEL POSITION		GROSS WEIGHT	UPPER IN TRAVEL POSITION	
		FRONT	REAR	KG.	FRONT	REAR
T 300 Crane with ISC 300 Engine, 94' (28.49 m) Boom, 2,000 + 500 lb. (1633 + 227 kg) Cwt., 1/4 Tank of Fuel, 425/65R22.5-20 PR Front and 11R22.5-14 PR Rear Tires, Aluminum Disc Wheels, and 200 lb. (90.7 kg) Operator in Cab.	47,101	16,576	30,525	21 365	7519	13 846
T 340XL Crane with ISC 300 Engine, 105' (32.0 m) Boom, 11,000 + 1,850 lb. (4990 + 227 kg) Cwt., 1/4 Tank of Fuel, 425/65R22.5-20 PR Front and 11R22.5-14 PR Rear Tires, Aluminum Disc Wheels, and 200 lb. (90.7 kg) Operator in Cab.	60,053	16,515	43,528	27 240	7491	19 749
Add Options:						
32' (9.68 m) Swing-on Jib on 94' (28.49 m) Boom	+ 1,368	+ 797	+ 571	+ 620	+ 362	+ 258
32' (9.68 m) Swing-on Jib on 81' (24.83 m) Boom	+ 1,368	+ 1,030	+ 338	+ 620	+ 467	+ 153
32' (9.68 m) Swing-on Jib on 105' (32.00 m) Boom	+ 1,368	+ 1,117	+ 251	+ 620	+ 507	+ 113
32'-49' (9.68-14.86 m) Swing on Jib on 94' (28.49 m) Boom	+ 1,789	+ 1,004	+ 785	+ 811	+ 455	+ 356
32'-49' (9.68-14.86 m) Swing on Jib on 81' (28.49 m) Boom	+ 1,789	+ 1,307	+ 482	+ 811	+ 593	+ 218
32'-49' (9.68-14.86 m) Swing on Jib on 105' (32.00 m) Boom	+ 1,789	+ 1,343	+ 446	+ 811	+ 609	+ 202
Auxiliary Boom Head on 94' (28.49 m) Boom	+ 100	+ 154	- 54	+ 45	+ 70	- 25
Auxiliary Boom Head on 81' (24.83 m) Boom	+ 100	+ 167	- 67	+ 45	+ 89	- 44
Auxiliary Boom Head on 105' (32.00 m) Boom	+ 100	+ 170	- 70	+ 45	+ 77	- 32
Full Tank of Fuel	+ 315	+ 120	+ 195	+ 142	+ 54	+ 88
Auxiliary Winch W/Drum Roller and Wire Rope	+ 175	- 73	+ 248	+ 79	- 112	+ 191
Heater/Defroster (Upper)	+ 60	- 5	+ 65	+ 27	- 2	+ 25
Work Lights	+ 35	+ 5	+ 30	+ 16	+ 2	+ 18
Sling Box Installed on Left Side of Carrier	+ 87	+ 62	+ 25	+ 40	+ 28	+ 12
Sling Box Installed on Right Side of Carrier	+ 87	+ 31	+ 56	+ 40	+ 14	+ 26
Pintle Hook (Rear)	+ 50	- 26	+ 76	+ 23	+ 12	+ 34
Electric Remote Control	+ 200	+ 100	+ 100	+ 91	+ 45	+ 45
40 ton (36.3 mt) Quick Reeving Hook Block (On Bumper – 4 Sheave)	+ 690	+ 973	- 283	+ 313	+ 441	- 128
7 ton (6.3 mt) Hook and Ball (At boom rack)	+ 240	+ 145	+ 95	+ 109	+ 66	+ 43
Substitute:						
33-81' (10.15-24.83m) Boom w/3,100 lb (1,406 kg) Upper Cwt. & 500 lb (227 kg) F. Bumper	- 640	- 630	- 10	- 290	- 286	- 4
7,200 lb Upper Cwt w/1,850 F. Bumper (94' Boom)	+ 6,636	- 619	+7,255	+ 3010	- 281	+ 3291
7,200 lb Upper Cwt w/1,850 F. Bumper (81' Boom)	+ 5,450	- 121	+5,571	+ 2472	- 55	+ 2527
Aux. Winch W/Drum Roller for Heavy Cwt. (above)	+ 5	+ 5	+ 0	+ 2	+ 2	0
Metallic Boom Head Sheaves	+ 120	+ 196	- 32	+ 54	+ 89	- 35
Front Air Suspension	+ 100	+ 94	+ 6	+ 46	+ 43	+ 3
Rear Air Suspension	+ 344	0	+ 344	+ 156	0	+ 156
Spin Resistant Wire Rope (per winch)	+ 32	- 12	+ 44	+ 14	- 6	+ 20
1 1 7		0			0	
		-			-	
Automatic Transmission w/2-speed axles Automatic Transmission w/2-speed aux. trans. & 2-speed axles	+ 15 + 510	+ 300	+ 15 + 210	+ 7 + 231	0 + 136	+

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

WE RESERVE THE RIGHT TO AMEND THESE SPECIFICATIONS AT ANY TIME WITHOUT NOTICE. THE ONLY WARRANTY APPLICABLE IS OUR STANDARD WRITTEN WARRANTY APPLICABLE TO THE PARTICULAR PRODUCT AND SALE. WE MAKE NO OTHER WARRANTY, EXPRESSED OR IMPLIED.

TEREX CRANES

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