

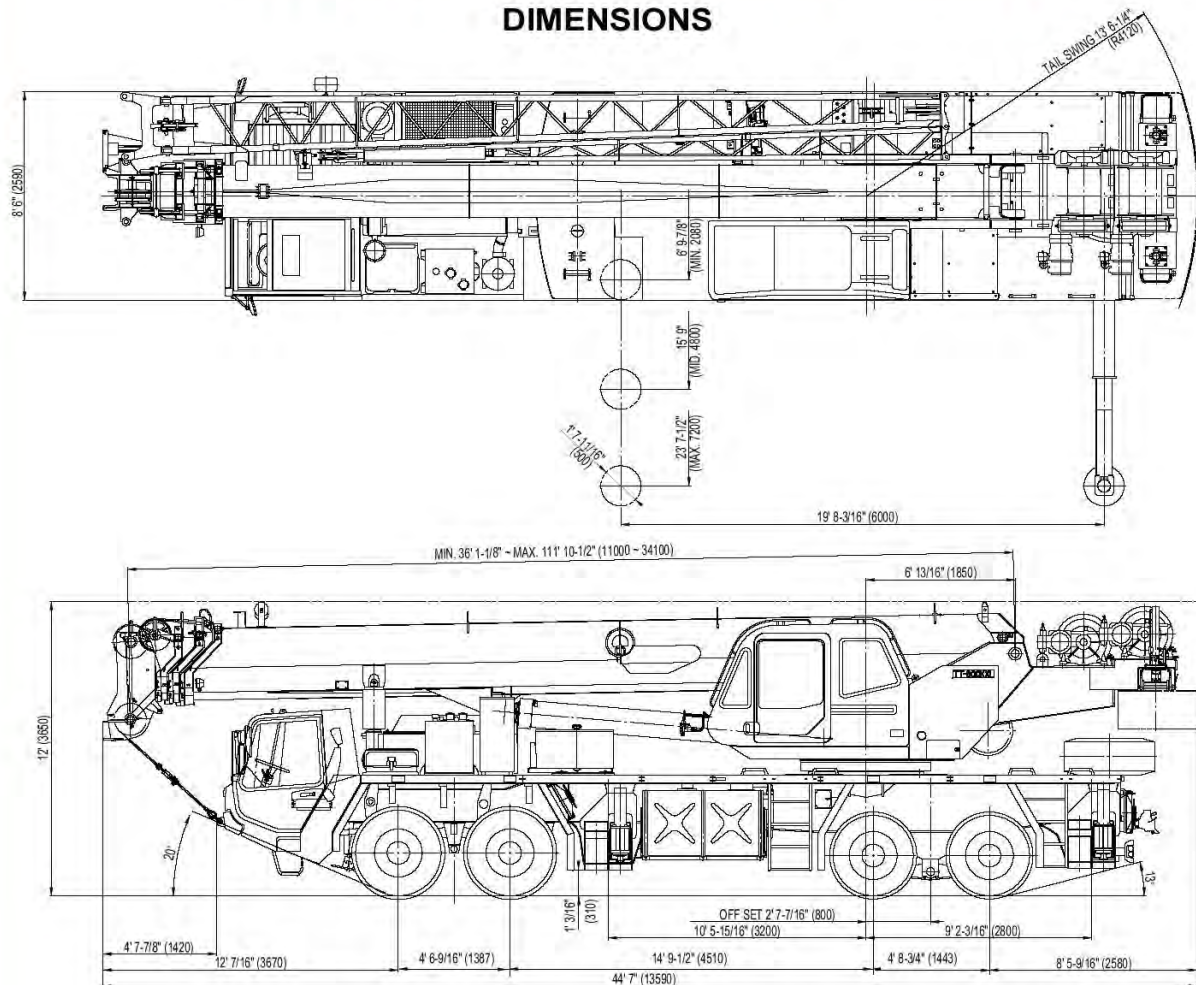


TT-600XL

60 Ton Capacity (54.4 Metric Tons)

HYDRAULIC TRUCK CRANE

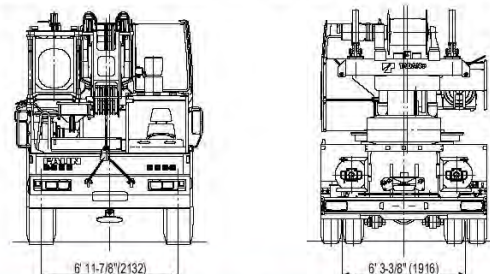
DIMENSIONS



GENERAL DIMENSIONS

Tire: 445/65R22.5(Front)
315/80R22.5(Rear)

Turning radius	Feet	Meters
Front tire (curb to curb)	42' 8"	13.0
Over jib	49' 7"	15.1



Specifications are subject to change without notice

CRANE SPECIFICATIONS

BOOM

Four section full power synchronized telescoping boom, 36.1'~111.9' (11.0m~34.1m), of round hexagonal box construction with five sheaves, 15" (0.38m) root diameter, at boom head. The synchronization system consists of two-telescope cylinders, an extension cable and retraction cable. Hydraulic cylinder fitted with holding valve. Two easily removable wire rope guards, rope dead end provided on both sides of boom head. Boom telescope sections are supported by wear pads both vertically and horizontally. Extension speed 75' 9-3/8" in 95 seconds.

BOOM ELEVATION - By a double acting hydraulic cylinder with holding valve. Elevation -0.4° ~ 80.5°, combination controls for hand or foot operation. Boom angle indicator. Automatic speed reduction and soft stop function. Elevation speed -0.4° ~ 80.5° in 75 seconds.

JIB - Two stage bi-fold lattice type with 3.5°, 25° or 45° offset (tilt type). Single sheave, 15-5/8" (0.396m) root diameter, at the head of both jib sections. Stored alongside base boom section. Jib length is 32.5' (9.9m) or 58.1' (17.7m). Assist cylinders for mounting and stowing are controlled at right side of superstructure. Self stowing jib mounting pins.

AUXILIARY LIFTING SHEAVE (SINGLE TOP)

Single sheave, 15-5/8" (0.396m) root diameter. Mounted to main boom head for single line work (stowable).

ANTI-TWO BLOCK - Pendant type over-winding cut out device with audio-visual (FAILURE lamp/BUZZER) warning system.

SWING

Hydraulic axial piston motor driven through planetary swing speed reducer. Continuous 360° full circle swing on ball bearing turntable at 1.8rpm. Equipped with manually locked/released swing brake. 360° positive swing lock. Twin swing System: Free swing or lock swing controlled by selector switch on front console. Automatic speed reduction and soft stop function. (swing range restricted only)

HOIST

MAIN HOIST - Variable speed type with grooved drum driven by hydraulic axial piston motor through winch speed reducer. Power load lowering and raising. Equipped with automatic brake (neutral brake) and counterbalance valve. Controlled independently of auxiliary hoist. Equipped with cable follower and drum rotation indicator.

DRUM - Grooved 15-3/4" (0.40m) root diameter x 22-3/4" (0.578m) wide. Wire rope: 623' of 3/4" diameter rope (190m of 19mm). Drum capacity: 1,095.5' (333.9m) 7 layers. Maximum line pull (permissible): 15,200lbs. (6,880kg)*. Maximum line speed: 585FPM (178m/min).

AUXILIARY HOIST - Variable speed type with grooved drum driven by hydraulic axial piston motor through winch speed reducer. Power load lowering and raising. Equipped with automatic brake (neutral brake) and counterbalance valve. Controlled independently of main hoist. Equipped with cable follower and drum rotation indicator.

DRUM - Grooved 15-3/4" (0.40m) root diameter x 22-3/4" (0.578m) wide. Wire rope: 367' of 3/4" diameter rope (112m of 19mm). Drum capacity: 1,095.5' (333.9m) 7 layers. Maximum line pull (permissible): 15,200lbs. (6,880kg)*. Maximum line speed: 585FPM (178m/min).

* Maximum permissible line pull may be affected by wire rope strength.

WIRE ROPE - Warrington seal wire, extra improved plow steel, preformed, independent wire rope core, right regular lay. 3/4" (19 mm) 6X37 class

HOOK BLOCKS

6.2 ton (5.6 metric ton) - Weighted hook with swivel and safety latch, for 3/4" (19mm) wire rope.

HYDRAULIC SYSTEM

PUMPS - Two variable piston pumps for crane functions. Tandem gear pump for swing and optional equipment. Powered by carrier engine. Pump disconnect for crane is engaged/disengaged by rocker switch from carrier cab.

CONTROL VALVES - Multiple valves actuated by pilot pressure with integral pressure relief valves.

RESERVOIR - 185 gallon (700 lit.) capacity. External sight level gauge.

FILTRATION - 26 micron return filter, full flow with bypass protection, located inside of hydraulic reservoir. Accessible for easy replacement.

OIL COOLER - Air cooled fan type.

COUNTERWEIGHT

Hydraulically assembled/disassembled counterweight pinned to superstructure frame. 8,000lbs. (3,630kg).

CAB AND CONTROLS

Left side, 1 man type, steel construction with sliding door access and safety glass windows opening at side. Door window is powered control. Windshield glass window and roof glass window are shatter-resistant. Adjustable control lever stands for swing, boom hoist, boom telescoping, auxiliary hoist and main hoist. Control lever stands can change neutral positions and tilt for easy access to cab. Engine throttle knob. Foot operated controls - boom hoist, boom telescoping and engine throttle.

Hot water cab heater and air conditioning (OPTIONAL).

Dash-mounted engine start/stop, monitor lamps, cigarette lighter, ashtray, low noise mode switch, windshield washer and wiper switch, power window switch, swing brake switch, boom telescoping / auxiliary hoist control selector switch, main winch / auxiliary winch selector switch, swing stop cancel switch, slow elevation stop cancel switch and free swing / lock swing selector switch. Outrigger controls.

Instruments - Hydraulic oil pressure is monitored and displayed on the AML-L display panel.

Tadano electronic LOAD MOMENT INDICATOR system (AML-L) including:

- Control lever lockout function
- Lift status indicator
- Outrigger status indicator
- Warning buzzer
- Boom angle / boom length / jib offset angle / load radius / rated lifting capacities / actual loads read out
- Ratio of actual load moment to rated load moment indication
- Automatic Speed Reduction and Soft Stop function on boom elevation and swing (swing range restricted only)
- Working condition register switch
- Load radius / boom angle / tip height / swing range preset function
- External warning lamp

CARRIER SPECIFICATIONS

MANUFACTURER/MODEL - FAUN GmbH / KF70-4

TYPE - Left hand steering, 8 x 4

FRAME - High tensile steel, all welded mono-box construction.

TRANSMISSION - ZF AS Tronic 12AS2301

Automatically shifting transmission system with the possibility of semi-automatic operation. 12 forward and 2 reverse speeds.

Gear step/Gear	Traveling speeds in mph / (km/h)
1st	0-3.91 (0-6.3)
2nd	4.97 (8.0)
3rd	6.46 (10.4)
4th	8.32 (13.4)
5th	10.50 (16.9)
6th	13.48 (21.7)
7th	17.77 (28.6)
8th	22.87 (36.8)
9th	29.45 (47.4)
10th	37.78 (60.8)
11th	47.97 (77.2)
12th	61.51 (99.0)
1st Revers	4.23 (6.8)
2nd Revers	5.41 (8.7)

AXLES - Front: Full floating type, steering axle.

Rear: Full floating type, driving axles with inter-wheel differential lock

STEERING - Dual-circuit hydraulic and mechanical steering of both front axles with hydraulic power booster. Emergency steering pump mounted on 3rd axle reduction gear. Tilt telescoping steering wheel.

SUSPENSION - Front: Load sharing type with leaf springs.

Rear: Solid mounted tandem with equalizer beam and torque rods.

ENGINE (EPA Tier 2)

Model	Cummins QSM11
No. of cylinders	6
Combustion	4 cycle, turbo charged and inter cooled
BoreXStroke, in.(mm)	4.9' X 5.8' (125X147)
Displacement, cu. in (liters)	660 (10.8)
Air inlet heater	24 volt preheat
Air cleaner	Dry type, replaceable element
Oil filter	Full flow and bypass with replaceable element
Fuel filter	Spin-on type
Fuel tank, gal.(liters)	105.6 (400), right side of carrier
Cooling	Liquid pressurized, recirculating by-pass

TADANO AML-L monitors outrigger extended length and automatically programs the corresponding "RATED LIFTING CAPACITIES" table.

2nd boom emergency / 3rd, top boom emergency telescoping switch. Correct jib status select switch. Upper console includes working light switch, roof washer and wiper switch, oil cooler switch, emergency outrigger set up key switch and air conditioning control switch (OPTIONAL). Swing lock lever.

NOTE: Each crane motion speed is based on unladen conditions.

BRAKE SYSTEMS - Service: Full air brakes with multi-protection valve and auto slack adjuster on all wheels. Dual air line system, internal expanding leading and trailing shoe type with Anti-lock Braking System (ABS). Parking / Emergency: Spring loaded brake on rear 4-wheels controlled by knob of spring brake valve. Auxiliary: Exhaust brake (JAKE BRAKE by Cummins).

TIRES - Front: 445/65R22.5 Single Rear: 315/80R22.5 Dual Spare: 445/65R22.5 Single x 1

OUTRIGGERS - Four hydraulic, beam and jack outriggers. Vertical jack cylinders equipped with integral holding valve. Each outrigger beam and jack is controlled independently from either side of carrier. Beams extend to 23' 7-1/2" (7.2 m) center-line and retract to within 8' 6" (2.59 m) overall width. Equipped with four stowable plastic floats. Controls and sight bubble located on both side of carrier. Three outrigger extension lengths are provided with corresponding "RATED LIFTING CAPACITIES" for crane duty in confined areas.

Min. extension 6' 9-7/8" (2.08m) center to center
Mid. extension 15' 9" (4.8m) center to center
Max. extension 23' 7-1/2" (7.2m) center to center
Float size (Diameter) 1' 7-11/16" (0.5m)

FRONT JACK - A fifth hydraulically operated outrigger jack is mounted to the front carrier frame providing 360° lifting capacities. Hydraulic cylinder equipped with integral holding valve and steel float.
Float size (Diameter) 1' 3-11/16" (0.4m)

CARRIER CAB - One man full with cab of composite structure (steel sheet metal and fiberglass), windshield of laminated safety glass with windshield wiper and washer, sliding side windows of hardened glass. Driver seat adjustable and air-suspended with headrests and 3 point safety belts. 2 rear-view mirrors (electrically adjustable), 1 wide angle mirror and additional curb mirror, all mirrors heated. Engine dependent warm-water heater with defroster nozzles for windshield and cab floor. Instrumentation includes speedometer, tachograph, rpm counter with hour meter, fuel level gauge, air pressure gauge and engine warning lamp, oil pressure control lamp.

Radiator	Fin and tube core, thermostat controlled
Fan, in.(mm)	Hydraulic driven fan, 29.5 (750) dia.
Starting	24 volt, 7.5 kW
Charging	24 volt system, negative ground
Battery	24 Volt DC system with 2 batteries
Compressor, air, CFM(l/min)	13.4 CFM (380) at 2,100 rpm
Horsepower, hp (kW)	385 (287) at 1,800 rpm
Torque, Max. ft-lb (N-m)	1,310 (1,776) at 1,400 rpm
Capacity, gal.(liters)	
Cooling water	3.4 (13)
Lubrication	9.5 (36)
Engine brake	Jake brake



STANDARD EQUIPMENT

FOR CRANE

- Four-section full power synchronized boom 36.1'~111.9' (11.0 m~34.1 m)
- 32.5'~58.1' (9.9 m~17.7 m) two stage bi-fold lattice jib (tilt type) with 3.5°, 25° or 45° pinned offsets and self storing pins.
- Auxiliary lifting sheave (single top) stowable
- Variable speed main hoist with grooved drum, cable follower and 623' of 3/4" cable.
- Variable speed auxiliary hoist with grooved drum, cable follower and 367' of 3/4" cable.
- Drum rotation indicator (thumper type) main and auxiliary hoist
- Anti-Two block device (overwind cutout)
- Boom angle indicator
- Tadano electronic load moment indicator system (AML-L)
- Outrigger extension length detector
- Tadano twin swing system
- 360° positive swing lock
- Self centering finger control levers with pilot control
- Control pedals for boom hoist and boom telescoping
- 3 way adjustable cloth seat with armrests, high back and seat belt
- Tinted safety glass
- Front windshield wiper and washer
- Roof window wiper and washer
- Power window (Door of the cab)
- Cab floor mat
- Mirror for main and auxiliary hoists
- Cigarette lighter
- Electric fan in cab
- 6.2 ton (5.6 metric ton) hook with swivel
- Weighted hook storage compartment
- Hydraulic oil cooler
- 8,000lbs removable counterweight
- Hydraulic circuit for dolly (Elevation, swing and swing brake)
- Low noise mode
- 3 working lights
- Counterweight position indicator
- Outrigger controls and sight bubble located in superstructure cab

FOR CARRIER

- Cummins QSM11 turbo charged and inter cooled engine with Jake brake.
- Exhaust pipe extension
- ZF Astronic semi-automatic, 12 forward and 2 reverse speeds.
- Front and spare tires 445/65R22.5, Rear tires 315/80R22.5
- Inter wheel differential lock
- Anti-block system (ABS)
- Towing hooks (Front and rear, Eye type)
- Carrier mounted storage box
- Trailer coupling device
- Air dryer and air cleaner dust indicator
- Either injection
- ZF - Servocom dual-circuit hydraulic steering system with emergency steering pump
- Front jack (Fifth jack)
- Aluminum fenders
- Windshield wiper and washer
- Roof hatch and sun visor
- Emergency hammer
- Speedometer, Odometer, Tachometer, Hourmeter and Tachograph
- Tilt telescoping steering wheel
- 3 way adjustable air suspension seat with 3 point type seat belt
- Windshield of laminated safety glass
- Side windows of hardened glass
- Air pressure gauge
- Engine temperature indicator
- Fuel level indicator and lockable fuel tank cap
- Gearbox display (ZF T/M indicator) and malfunction buzzer
- Front and rear fog lights
- Reversing signal (Back-up alarm)
- Electrically adjustable and heating rearview mirror
- Hazard warning system
- Electric horn
- Hot water cab heater with defroster
- FM/AM radio
- Engine over-run buzzer
- Swing brake pressure drop buzzer for dolly
- Hook block tie down front bumper
- Rotary beacon on carrier cab

OPTIONAL EQUIPMENT

- 60 ton (54.4 metric ton) 5 sheaves hook block
- 45 ton (40.8 metric ton) 4 sheaves hook block
- Hot water cab heater and air conditioner (Crane cab)

HOISTING PERFORMANCE

LINE SPEEDS AND PULLS

Layer	Speed	Main or auxiliary hoist - 15'-3/4" (0.4m) drum					
		Line speeds ²		Line pulls			
				Available ¹		Permissible ⁴	
		F.P.M	m/min	Lbs.	kgf	Lbs.	kgf
1st	High	378	115	18,200	8,260	15,200	6,880
2nd	High	413	126	16,700	7,570	13,900	6,310
3rd	High	448	136	15,400	6,990	12,800	5,820
4th	High	482	147	14,300	6,490	11,900	5,410
5th	High	502	157	13,400	6,060	11,100	5,050
6th ³	High	551	168	12,500	5,680	10,400	4,730
7th ³	High	585	178	11,800	5,350	9,800	4,460

¹ Developed by machinery with each layer of wire rope, but not based on rope strength or other limitation in machinery or equipment.

² Line speeds based only on hook block, not loaded.

³ Sixth layer and seventh layer of wire rope are not recommended for hoisting operations.

⁴ Permissible line pull may be affected by wire rope strength.

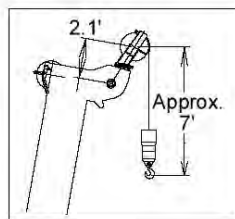
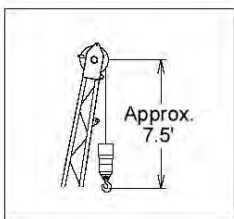
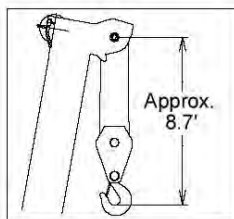
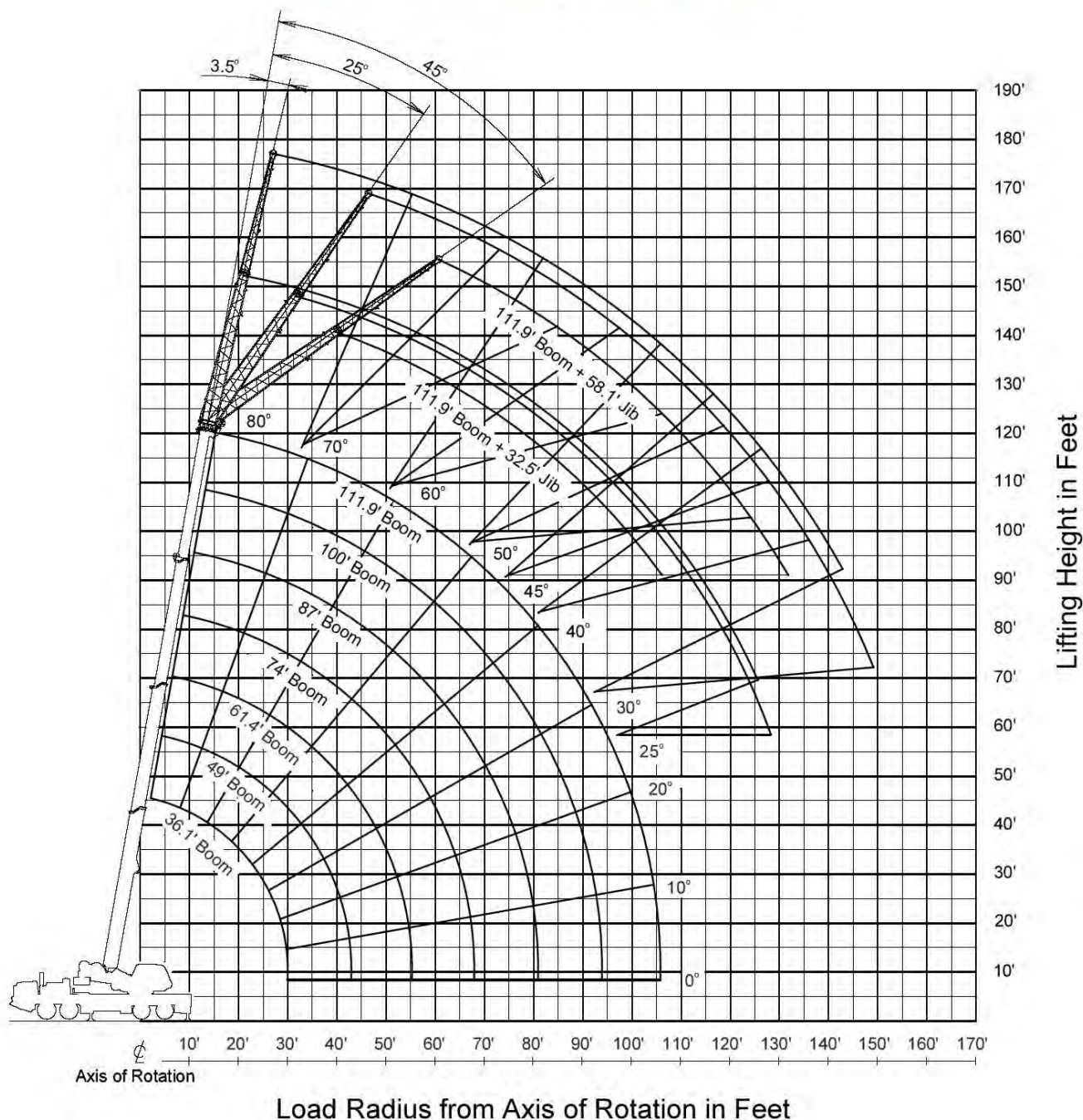
DRUM WIRE ROPE CAPACITIES

Wire rope layer	Main and auxiliary drum grooved lagging			
	3/4" (19mm) wire rope			
	Rope per layer		Total wire rope	
	Feet	Meters	Feet	Meters
1	123.0	37.5	123.0	37.5
2	134.2	40.9	257.2	78.4
3	145.3	44.3	402.6	122.7
4	156.5	47.7	559.1	170.4
5	167.7	51.1	726.7	221.5
6	178.8	54.5	905.5	276.0
7	190.0	57.9	1,095.5	333.9

DRUM DIMENSIONS

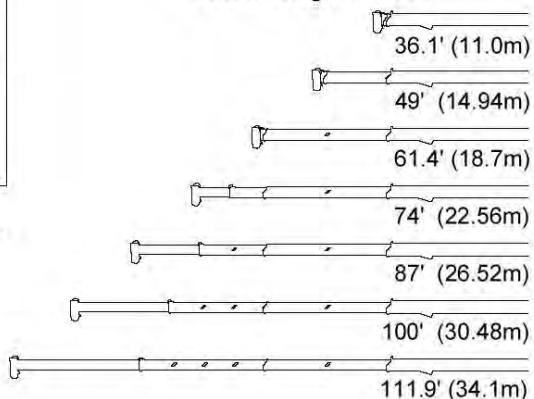
	Inch	mm
Root diameter	15-3/4"	400
Length	22-3/4"	578
Flange diameter	27-3/8"	695

TT-600XL WORKING RANGE CHART



NOTE: Boom and jib geometry shown are for unloaded condition and machine standing level on firm supporting surface. Boom deflection and subsequent radius and boom angle change must be accounted for when applying load to hook.

Boom Length in Feet



TT-600XL RATED LIFTING CAPACITIES (IN POUNDS)

ON OUTRIGGERS FULLY EXTENDED 23' 7-1/2" (7.2m) SPREAD, FRONT JACK EXTENDED 8,000lbs COUNTERWEIGHT, 360° ROTATION																					
A	36.1'			49'			61.4'			74'			87'			100'			111.9'		
B	C	(11.0m)	C	(14.94m)	C	(18.7m)	C	(22.56m)	C	(26.52m)	C	(30.48m)	C	(34.1m)							
10'	67°	120,000	73°	90,600	77°	68,300	79°	40,700													
12'	63°	107,000	71°	90,600	75°	68,300	78°	40,700	80°	40,700											
15'	57°	88,200	67°	90,600	72°	66,200	76°	40,700	78°	40,700	80°	37,200									
20'	47°	69,700	60°	65,300	67°	55,700	72°	40,700	75°	40,700	77°	37,200	79°	27,800							
25'	34°	53,100	53°	52,400	62°	47,200	67°	40,100	71°	35,300	74°	32,300	77°	27,800							
30'	7°	38,100	45°	37,800	56°	37,300	63°	34,600	68°	30,300	71°	27,600	74°	24,400							
35'			35°	28,700	50°	28,300	59°	29,600	64°	26,400	68°	24,000	71°	21,600							
40'			23°	22,500	44°	22,300	54°	23,500	60°	23,300	65°	21,100	68°	19,400							
45'					36°	17,900	49°	19,100	57°	19,800	62°	18,600	66°	17,300							
50'					26°	14,400	43°	15,600	52°	16,300	58°	16,500	63°	16,000							
55'					9°	11,700	37°	12,900	48°	13,600	55°	14,100	60°	14,400							
60'							29°	10,700	43°	11,400	51°	11,900	57°	12,200							
65'							18°	8,900	37°	9,700	47°	10,100	53°	10,600							
70'									31°	8,200	43°	8,700	50°	9,100							
75'									23°	6,900	38°	7,400	46°	7,900							
80'									10°	5,900	33°	6,400	42°	6,800							
85'											27°	5,500	38°	5,900							
90'											18°	4,700	33°	5,100							
95'													28°	4,300							
100'													20°	3,700							
105'													10°	3,200							
D	0°																				

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON OUTRIGGERS FULLY EXTENDED 23' 7-1/2" (7.2m) SPREAD 8,000lbs COUNTERWEIGHT, 360° ROTATION, FRONT JACK EXTENDED															
C	A	36.1'		49'		61.4'		74'		87'		100'		111.9'	
	B	(11.0m)	B	(14.94m)	B	(18.7m)	B	(22.56m)	B	(26.52m)	B	(30.48m)	B	(34.1m)	
0°		30.0'	38,100	42.9'	19,200	55.3'	11,500	67.9'	8,200	80.9'	5,700	93.9'	3,800	105.8'	2,600

A : Boom length in feet

C : Loaded boom angle (deg.)

B : Load radius in feet

D : Minimum boom angle (deg.) for indicated length (no load)

NOTE: • The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-L) is based on the standard number of parts of line listed in the chart.

• Standard number of parts of line for each boom length should be according to the following table.

Boom Length in Feet (meters)	36.1' (11.0m)	36.1' to 49' (11.0m to 14.94m)	49' to 61.4' (14.94m to 18.7m)	61.4' to 111.9' (18.7m to 34.1m)	Single top Jib
Number of parts of line	10	8	6	4	1

ON OUTRIGGERS FULLY EXTENDED 23' 7-1/2" (7.2m) SPREAD, FRONT JACK EXTENDED 8,000lbs COUNTERWEIGHT, 360° ROTATION												
C	111.9' (34.1m) Boom + 32.5' (9.9m) Jib						111.9' (34.1m) Boom + 58.1' (17.7m) Jib					
	3.5° offset		25° offset		45° offset		3.5° offset		25° offset		45° offset	
	R	W	R	W	R	W	R	W	R	W	R	W
80°	25.0'	12,300	37.3'	11,000	44.8'	8,400	32.6'	7,900	53.4'	6,000	66.3'	4,400
75°	38.9'	12,300	50.1'	10,200	56.7'	8,200	49.4'	7,900	67.9'	5,300	79.0'	4,100
70°	51.9'	11,800	62.1'	8,700	67.2'	7,300	64.6'	7,200	81.9'	4,800	90.8'	3,900
65°	63.5'	9,600	73.2'	7,700	76.6'	6,700	78.1'	6,300	94.8'	4,400	101.0'	3,700
60°	74.5'	8,000	84.1'	6,800	86.4'	6,100	90.9'	5,300	107.0'	3,900	111.0'	3,400
55°	84.7'	6,900	93.7'	6,000	95.1'	5,600	103.0'	4,600	118.0'	3,600	120.0'	3,200
50°	93.9'	5,400	102.0'	4,900	103.0'	4,700	113.0'	3,700	127.0'	3,200	128.0'	3,000
45°	102.0'	4,200	110.0'	3,900	110.0'	3,800	123.0'	2,800	136.0'	2,500	136.0'	2,400
40°	110.0'	3,300	117.0'	3,100			132.0'	2,100	143.0'	1,900		
35°	117.0'	2,700	123.0'	2,500			140.0'	1,600	149.0'	1,400		
30°	123.0'	2,100	128.0'	2,100			147.0'	1,200	154.0'	1,100		
25°	129.0'	1,700	132.0'	1,700								

C : Loaded boom angle (deg.)

R : Load radius in feet

W : Rated lifting capacity in pounds

TT-600XL RATED LIFTING CAPACITIES (IN POUNDS)

ON OUTRIGGERS MID. EXTENDED 15' 9" (4.8m) SPREAD, FRONT JACK EXTENDED 8,000lbs COUNTERWEIGHT, 360° ROTATION															
A B	36.1'			49'		61.4'		74'		87'		100'		111.9'	
	C	(11.0m)		C	(14.94m)	C	(18.7m)	C	(22.56m)	C	(26.52m)	C	(30.48m)	C	(34.1m)
10'	67°	109,400		73°	90,600	77°	68,300	79°	40,700						
12'	63°	93,000		71°	90,600	75°	68,300	78°	40,700	80°	40,700				
15'	57°	74,900		67°	74,800	72°	66,200	76°	40,700	78°	40,700	80°	37,200		
20'	47°	41,300		60°	40,400	67°	39,800	72°	40,700	75°	40,700	77°	37,200	79°	27,800
25'	34°	26,500		53°	26,100	62°	25,600	67°	27,000	71°	27,900	74°	28,500	77°	27,800
30'	8°	18,300		45°	18,100	56°	17,700	63°	19,100	68°	19,800	71°	20,400	74°	20,800
35'				35°	12,600	50°	12,200	58°	13,600	64°	14,400	68°	15,000	71°	15,400
40'				22°	8,800	43°	8,600	53°	9,900	60°	10,700	65°	11,200	68°	11,600
45'						35°	6,000	48°	7,300	56°	8,000	61°	8,500	65°	8,900
50'						25°	4,000	43°	5,300	52°	6,000	58°	6,500	62°	6,900
55'						8°	2,500	36°	3,700	47°	4,500	54°	5,000	59°	5,300
60'								29°	2,400	43°	3,200	51°	3,800	56°	4,100
65'								18°	1,400	37°	2,200	47°	2,700	53°	3,100
70'										31°	1,300	42°	1,900	49°	2,200
75'														45°	1,500
D	0°								31°		42°		45°		

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON OUTRIGGERS MID. EXTENDED 15' 9" (4.8m) SPREAD 8,000lbs COUNTERWEIGHT, 360° ROTATION, FRONT JACK EXTENDED											
C	A	36.1'		49'		61.4'		74'			
	B	(11.0m)	B	(14.94m)	B	(18.7m)	B	(22.56m)			
0°	30.0'	18,300	42.9'	6,800	55.3'	2,400	67.9'	900			

A : Boom length in feet

C : Loaded boom angle (deg.)

B : Load radius in feet

D : Minimum boom angle (deg.) for indicated length (no load)

NOTE: • The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-L) is based on the standard number of parts of line listed in the chart.

• Standard number of parts of line for each boom length should be according to the following table.

Boom Length in Feet (meters)	36.1' (11.0m)	36.1' to 49' (11.0m to 14.94m)	49' to 61.4' (14.94m to 18.7m)	61.4' to 111.9' (18.7m to 34.1m)	Single top Jib
Number of parts of line	10	8	6	4	1

ON OUTRIGGERS MID. EXTENDED 15' 9" (4.8m) SPREAD, FRONT JACK EXTENDED 8,000lbs COUNTERWEIGHT, 360° ROTATION												
C	111.9' (34.1m) Boom + 32.5' (9.9m) Jib						111.9' (34.1m) Boom + 58.1' (17.7m) Jib					
	3.5° offset		25° offset		45° offset		3.5° offset		25° offset		45° offset	
	R	W	R	W	R	W	R	W	R	W	R	W
80°	25.3'	12,300	37.5'	11,000	44.8'	8,400	32.8'	7,900	53.1'	6,000	66.3'	4,400
75°	39.2'	12,300	50.2'	10,200	56.2'	8,200	49.4'	7,900	67.9'	5,300	79.0'	4,100
70°	50.5'	8,200	61.0'	6,400	65.8'	5,600	62.7'	5,400	81.2'	3,900	90.3'	3,200
65°	61.3'	4,800	71.5'	4,000	75.5'	3,600	75.2'	3,000	93.1'	2,300	100.0'	1,900
60°	72.0'	2,800	81.6'	2,300	84.4'	2,100	87.3'	1,500	104.0'	1,100		
55°	81.9'	1,400	91.1'	1,200	93.2'	1,100						

C : Loaded boom angle (deg.)

R : Load radius in feet

W : Rated lifting capacity in pounds

TT-600XL RATED LIFTING CAPACITIES (IN POUNDS)

ON OUTRIGGERS FULLY EXTENDED 23' 7-1/2" (7.2m) SPREAD, FRONT JACK EXTENDED 0 lbs COUNTERWEIGHT, 360° ROTATION														
A B	36.1'		49'		61.4'		74'		87'		100'		111.9'	
	C	(11.0m)	C	(14.94m)	C	(18.7m)	C	(22.56m)	C	(26.52m)	C	(30.48m)	C	(34.1m)
10'	67°	120,000	73°	90,600	77°	68,300	79°	40,700						
12'	63°	106,600	71°	90,600	75°	68,300	78°	40,700	80°	40,700				
15'	57°	87,100	67°	86,900	72°	66,200	76°	40,700	78°	40,700	80°	37,200		
20'	47°	65,000	60°	64,900	67°	55,700	72°	40,700	75°	40,700	77°	37,200	79°	27,800
25'	34°	43,900	53°	43,200	62°	42,600	67°	40,100	71°	35,300	74°	32,300	77°	27,800
30'	7°	31,100	45°	30,800	56°	30,300	63°	31,600	68°	30,300	71°	27,600	74°	24,400
35'			35°	22,900	50°	22,300	59°	23,700	64°	24,600	68°	24,000	71°	21,600
40'			23°	17,200	44°	16,800	54°	18,100	60°	19,000	65°	19,500	68°	19,400
45'					36°	13,000	49°	14,200	57°	15,000	62°	15,500	66°	15,900
50'					26°	10,100	43°	11,300	52°	12,000	58°	12,500	63°	12,900
55'					9°	7,900	37°	9,100	48°	9,800	55°	10,300	60°	10,600
60'							29°	7,300	43°	8,000	51°	8,500	57°	8,800
65'							18°	5,800	37°	6,600	47°	7,000	53°	7,300
70'									31°	5,400	43°	5,800	50°	6,100
75'									23°	4,300	38°	4,800	46°	5,100
80'									10°	3,500	33°	4,000	42°	4,300
85'											27°	3,200	38°	3,500
90'											18°	2,600	33°	2,900
95'													28°	2,300
100'													20°	1,800
105'													10°	1,400
D	0°													

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON OUTRIGGERS FULLY EXTENDED 23' 7-1/2" (7.2m) SPREAD 0 lbs COUNTERWEIGHT, 360° ROTATION, FRONT JACK EXTENDED															
C	A	36.1'		49'		61.4'		74'		87'		100'		111.9'	
	B	(11.0m)	B	(14.94m)	B	(18.7m)	B	(22.56m)	B	(26.52m)	B	(30.48m)	B	(34.1m)	
0°	30.0'	31,100	42.9'	14,100	55.3'	7,700	67.9'	5,000	80.9'	3,300	93.9'	1,900	105.8'	1,200	

A : Boom length in feet

C : Loaded boom angle (deg.)

B : Load radius in feet

D : Minimum boom angle (deg.) for indicated length (no load)

NOTE: • The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-L) is based on the standard number of parts of line listed in the chart.

• Standard number of parts of line for each boom length should be according to the following table.

Boom Length in Feet (meters)	36.1' (11.0m)	36.1' to 49' (11.0m to 14.94m)	49' to 61.4' (14.94m to 18.7m)	61.4' to 111.9' (18.7m to 34.1m)	Single top Jib
Number of parts of line	10	8	6	4	1

ON OUTRIGGERS FULLY EXTENDED 23' 7-1/2" (7.2m) SPREAD, FRONT JACK EXTENDED 0 lbs COUNTERWEIGHT, 360° ROTATION												
C	111.9' (34.1m) Boom + 32.5' (9.9m) Jib						111.9' (34.1m) Boom + 58.1' (17.7m) Jib					
	3.5° offset		25° offset		45° offset		3.5° offset		25° offset		45° offset	
	R	W	R	W	R	W	R	W	R	W	R	W
80°	25.0'	12,300	37.3'	11,000	44.8'	8,400	32.8'	7,900	53.4'	6,000	66.3'	4,400
75°	38.9'	12,300	50.1'	10,200	56.5'	8,200	49.4'	7,900	67.9'	5,300	78.8'	4,100
70°	51.9'	11,800	62.1'	8,700	66.8'	7,300	64.3'	7,200	82.0'	4,800	90.8'	3,900
65°	63.5'	9,600	73.5'	7,700	76.8'	6,700	78.4'	6,300	94.8'	4,400	101.0'	3,700
60°	73.7'	6,600	83.3'	5,700	85.8'	5,300	90.0'	4,500	106.0'	3,700	111.0'	3,300
55°	83.5'	4,700	92.6'	4,200	94.4'	3,900	101.0'	3,100	117.0'	2,600	120.0'	2,400
50°	92.7'	3,400	101.0'	3,000	102.0'	2,900	112.0'	2,100	126.0'	1,800	128.0'	1,600
45°	101.0'	2,400	109.0'	2,200	109.0'	2,100	122.0'	1,300	135.0'	1,100	135.0'	1,000
40°	109.0'	1,700	116.0'	1,500								
35°	116.0'	1,100										

C : Loaded boom angle (deg.)

R : Load radius in feet

W : Rated lifting capacity in pounds



TT-600XL RATED LIFTING CAPACITIES (IN POUNDS)

ON OUTRIGGERS MID. EXTENDED 15' 9" (4.8m) SPREAD, FRONT JACK EXTENDED														
0 lbs COUNTERWEIGHT, 360° ROTATION														
A B	36.1'		49'		61.4'		74'		87'		100'		111.9'	
	C	(11.0m)	C	(14.94m)	C	(18.7m)	C	(22.56m)	C	(26.52m)	C	(30.48m)	C	(34.1m)
10'	67°	104,700	73°	90,600	77°	68,300	79°	40,700						
12'	63°	88,600	71°	88,400	75°	68,300	78°	40,700	80°	40,700				
15'	57°	59,200	67°	57,800	72°	57,000	76°	40,700	78°	40,700	80°	37,200		
20'	47°	31,100	60°	30,200	67°	29,700	72°	31,300	75°	32,300	77°	33,100	79°	27,800
25'	34°	18,600	53°	17,800	62°	17,300	67°	19,000	71°	20,000	74°	20,800	77°	21,300
30'	8°	11,300	45°	11,000	56°	10,500	63°	12,000	68°	12,900	71°	13,600	74°	14,000
35'			35°	6,900	50°	6,500	58°	7,900	64°	8,700	68°	9,300	71°	9,700
40'			22°	4,100	43°	3,900	53°	5,100	60°	5,900	65°	6,500	68°	6,900
45'							48°	3,200	56°	3,900	61°	4,500	65°	4,800
50'							43°	1,700	52°	2,500	58°	3,000	62°	3,300
55'									47°	1,300	54°	1,800	59°	2,200
D	0°				43°				47°		54°		59°	

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON OUTRIGGERS MID. EXTENDED 15' 9"(4.8m) SPREAD												
0 lbs COUNTERWEIGHT, 360° ROTATION, FRONT JACK EXTENDED												
C A	36.1'		49'									
	B	(11.0m)	B	(14.94m)								
0°	30.0'	11,300	42.9'	2,400								

A : Boom length in feet

C : Loaded boom angle (deg.)

B : Load radius in feet

D : Minimum boom angle (deg.) for indicated length (no load)

NOTE: • The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-L) is based on the standard number of parts of line listed in the chart.

• Standard number of parts of line for each boom length should be according to the following table.

Boom Length in Feet (meters)	36.1' (11.0m)	36.1' to 49' (11.0m to 14.94m)	49' to 61.4' (14.94m to 18.7m)	61.4' to 111.9' (18.7m to 34.1m)	Single top Jib
Number of parts of line	10	8	6	4	1

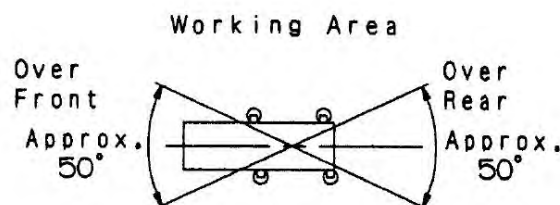
TT-600XL RATED LIFTING CAPACITIES (IN POUNDS)

ON OUTRIGGERS MIN. EXTENDED 6' 9-7/8" (2.08m) SPREAD, FRONT JACK EXTENDED 360° ROTATION				
Load Radius in Feet	36.1' (11.0m) Boom			
	Counterweight in pounds			
	8,000		0	
	C		C	
10'	67°	41,400	67°	27,000
12'	63°	29,700	63°	18,700
15'	57°	19,600	57°	11,400
20'	47°	10,800	47°	5,000
25'	34°	6,000		
30'	7°	3,100		
D	0°		47° / 0° *	

C: Loaded boom angle (deg.)

D: Minimum boom angle (deg.) for indicated length (no load)

*: When Working Area is only Over Front and Over Rear.



LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON OUTRIGGERS MIN. EXTENDED 6' 9-7/8" (2.08m) SPREAD, FRONT JACK EXTENDED				
Boom Angle	360° Rotation		Over Front and Over Rear	
	36.1' (11.0m) Boom			
	Counterweight in pounds			
	8,000		0	
	B		B	
0°	30.0'	3,100	20.0'	5,000

B : Load radius in feet

- NOTE:
- The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-L) is based on the standard number of parts of line listed in the chart.
 - Standard number of parts of line for each boom length should be according to the following table.

Boom Length in Feet (meters)	36.1' (11.0m)
Number of parts of line	10

WARNING AND OPERATING INSTRUCTIONS FOR LIFTING CAPACITIES

GENERAL

1. RATED LIFTING CAPACITIES apply only to the machine as originally manufactured and normally equipped by TADANO LTD. Modifications to the machine or use of optional equipment other than that specified can result in a reduction of capacity.
2. Hydraulic cranes can be hazardous if improperly operated or maintained. Operation and maintenance of this machine must be in compliance with information in the **Operation and Maintenance Manual** supplied with the crane. If this manual is missing, order a replacement through the distributor.
3. The operator and other personnel associated with this machine shall fully acquaint themselves with the latest American National Standards Institute (ANSI) safety standards for cranes.

SET UP

1. Rated lifting capacities on the load chart are the maximum allowable crane capacities. They are based on the machine standing level on a firm supporting surface under ideal job conditions. Depending on the nature of the supporting surface, it may be necessary to have structural supports under the outrigger floats to spread the loads to a larger surface.
2. For outrigger operation, outriggers shall be properly extended with tires free of supporting surface before operating crane. The front jack must be properly extended.

OPERATION

1. Rated lifting capacities have been tested to and meet minimum requirements of SAE J1063-Cantilevered Boom Crane Structures Method of Test.
2. Rated lifting capacities do not exceed 85% of the tipping load on outriggers fully extended as determined by SAE J765-Crane Stability Test Code. Rated lifting capacities for partially extended outriggers are determined by this formula: Rated Lifting Capacities = (Tipping Load - 0.1 x Tip Reaction) / 1.25.
3. Rated lifting capacities above bold lines in the chart are based on crane strength and those below, on its stability. They are based on actual load radius increased by boom deflection.
4. The weight of handling device such as hook blocks, slings, etc., must be considered as part of the load and must be deducted from the lifting capacities.
5. Rated lifting capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stopping of loads, supporting surface conditions, operating speeds, side loads, etc. Side pull on the boom or jib is extremely dangerous.
6. Rated lifting capacities do not account for the effects of wind on a lifted load or boom. Rated lifting capacities and boom length shall be appropriately reduced, when wind velocity exceeds 20 mph (9 m/sec.).
7. Rated lifting capacities at load radius shall not be exceeded. Do not tip the crane to determine allowable loads.
8. Do not operate at boom lengths, radii, or boom angle, where no capacities are shown. Crane may overturn without any load on the hook.
9. When boom length is between values listed, refer to the rated lifting capacities of the next longer and next shorter booms for the same radius. The lesser of the two rated lifting capacities shall be used.

10. When making lifts at a load radius not shown, use the next longer radius to determine allowable capacity.
11. Load per line should not exceed 12,300 lbs. (5,600kg) for main winch and auxiliary winch.
12. Check the actual number of parts of line with LOAD MOMENT INDICATOR (AML-L) before operation. Maximum lifting capacity is restricted by the number of parts of line of LOAD MOMENT INDICATOR (AML-L). Limited capacity is as determined from the formula, Single line pull for main winch (12,300 lbs.) x number of parts of line.
13. The boom angle before loading should be greater to account for deflection. For rated lifting capacities, the loaded boom angle and the load radius is for reference only.
14. The 36.1' (11.0m) boom length capacities are based on boom fully retracted. If not fully retracted [less than 49' (14.94m) boom length], use the rated lifting capacities for the 49' (14.94m) boom length.
15. Extension or retraction of the boom with loads may be attempted within the limits of the RATED LIFTING CAPACITIES. The ability to telescope loads is limited by hydraulic pressure, boom angle, boom length, crane maintenance, etc.
16. For lifting capacity of single top, reduce the rated lifting capacities of relevant boom according to a weight reductions for auxiliary load handling equipment. Capacities of single top shall not exceed 12,300 lbs. (5,600kg) including main hook.
17. When base jib or top jib or both jib removing, jib state switch select removed.
18. When erecting and stowing jib, be sure to retain it by hand or by other means to prevent its free movement.
19. Use "ANTI-TWO BLOCK" disable switch when erecting and stowing jib and when stowing hook block. While the switch is pushed, the hoist does not stop, even when overwind condition occurs.
20. For boom length with 32.5' (9.9m) jib, rated lifting capacities are determined by loaded boom angle only in the column headed "111.9' (34.1m) boom + 32.5' (9.9m) jib". For boom length with 58.1' (17.7 m) jib, rated lifting capacities are determined by loaded boom angle only in the column headed "111.9' (34.1m) boom + 58.1' (17.7m) jib". For angles not shown, use the next lower loaded boom angle to determine allowable capacity.
21. When lifting a load by using jib (aux. winch) and boom (main winch) simultaneously, do the following:
 - Enter the operation status as jib operation, not as boom operation.
 - Before starting operation, make sure that mass of load is within rated lifting capacity for jib.

DEFINITIONS

1. Load Radius: Horizontal distance from a projection of the axis of rotation to supporting surface before loading to the center of the vertical hoist line or tackle with load applied.
2. Loaded Boom Angle: The angle between the boom base section and the horizontal, after lifting the rated lifting capacity at the load radius.
3. Working Area: Area measured in a circular arc about the centerline of rotation.
4. Freely Suspended Load: Load hanging free with no direct external force applied except by the hoist line.
5. Side Load: Horizontal side force applied to the lifted load either on the ground or in the air.



WARNING AND OPERATING INSTRUCTIONS FOR USING THE LOAD MOMENT INDICATOR (AML-L)

- When operating crane on outriggers:
 - Set Starter switch to "ON" position
 - Press the outrigger mode select key to register for the outrigger operation. Press the register key, then the outrigger mode indicative symbol changes from flashing to a solid light.
 - Press the lift mode select key to select the lift status that corresponds to the actual boom configuration. Each time the lift mode select key is pressed, the status changes. Press the register key to register the lift status, then the lift indicative symbol changes from flashing to a solid light.
 - When mounting and stowing jib, select the jib set status. (The jib lift indicative symbol will be flashing).
- A swing does not automatically stop even if the crane becomes overloaded.
- During crane operation, make sure that the displays on front panel of the LOAD MOMENT INDICATOR (AML-L) are in accordance with actual operating conditions.
- The displayed values of LOAD MOMENT INDICATOR (AML-L) are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stopping of loads, supporting surface conditions, operating speed, side loads, etc.
For safe operation, it is recommended when extending and lowering boom or swinging, lifting loads shall be appropriately reduced.
- LOAD MOMENT INDICATOR (AML-L) is intended as an aid to the operator. Under no condition should it be relied upon to replace use of capacity charts and operating instruction. Sole reliance upon LOAD MOMENT INDICATOR (AML-L) aids in place of good operating practice can cause an accident. The operator must exercise caution to assure safety.

TT-600XL Axle weight distribution chart

	Pounds			Kilograms		
	GVW	Front	Rear	GVW	Front	Rear
Base machine with 105.7gal.(400L) fuel and spare tire, no counterweight.	81,790	36,005	45,785	37,100	16,334	20,766
Remove:						
1. Auxiliary hoist with 367' (112m) of 3/4" (19mm)	-1,910	610	-2,520	-865	278	-1,143
2. 6.2 ton (5.6 metric ton) hook ball	-290	-340	50	-132	-154	22
3. Top jib (25.6')	-670	-400	-270	-306	-184	-122
4. Base jib (32.5')	-1,920	-2,020	100	-872	-919	47
5. Spare tire	-360	140	-500	-165	62	-227
6. Auxiliary lifting sheave	-110	-185	75	-50	-84	34
Add:						
1. Counterweight 8,000lbs on upper	8,000	-3,780	11,780	3,630	-1,715	5,345
2. Counterweight 8,000lbs to carrier deck	8,000	5,950	2,050	3,630	2,697	933
Options:						
1. 60 ton(54.5 metric ton) hook block tied on front bumper	1,049	1,556	-507	476	706	-230
2. 60 ton(54.5 metric ton) hook block on carrier deck	1,049	609	440	476	276	200
3. 45 ton(40.8 metric ton) hook block tied on front bumper	760	1,124	-364	345	510	-165
4. 45 ton(40.8 metric ton) hook block on carrier deck	760	440	320	345	200	145
5. Hot water cab heater and air conditioning in upper cab	210	20	190	97	9	88

Permissible Axle Load

	Pounds			Kilograms		
	GVW	Front	Rear	GVW	Front	Rear
Permissible axle load	105,800	48,500	57,300	48,000	22,000	26,000

Bigge Crane and Rigging Co.

10700 Bigge Avenue
San Leandro, CA 94577
Phone: (888) 337-BIGGE or (510) 638-8100
Fax: (510) 639-4053
Email: info@bigge.com
Web site: www.bigge.com

TADANO AMERICA CORPORATION

333 NORTH PARK CENTRAL DRIVE, SUITE Z,
HOUSTON, TEXAS 77073, U.S.A.
PHONE: (281) 869-0030 EXT.315
FAX: (281) 869-0040
Web site : www.tadanoamerica.com
E-mail: sales@tadano-cranes.com
Form No. TAC- TT-600XL-01-040520