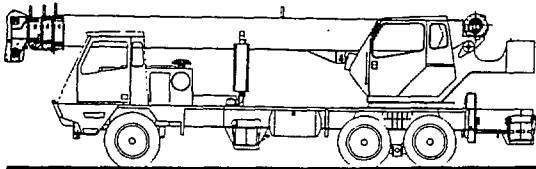


# TEREX T 300 SERIES

truck cranes  
specifications



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## STANDARD BOOM EQUIPMENT

### BOOM

30-94 ft. (9.23-28.49 m), four section full power mechanically synchronized boom. Boom is 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 77 degrees. Maximum tip height is 99 ft. (30.17 m).

### BOOM HEAD

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

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## OPTIONAL BOOM EQUIPMENT

### MAIN BOOM

33-81 ft. (10.15 - 24.83 m), three section full power, mechanically synchronized boom. Boom is 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 77 degrees. Maximum tip height is 87 ft. (26.52 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.

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.

### 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. Maximum 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

Built in Rated Capacity Indicator with visual and audible warning system and automatic function disconnects. 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 torsion bar suspension and includes head and arm rests.

## STANDARD CARRIER EQUIPMENT

### CARRIER CHASSIS

Chassis is Lorain 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 reduces weight. Aluminum engine housing with sliding cover optimizes engine access while reducing weight and improving corrosion resistance.

### AXLES AND SUSPENSION

Rear axle - 40,000 lb. (18,144 kg) capacity tandem axles with heat treated housings have interaxle differential with lockout. Axles are mounted on equalizer beams to distribute weight evenly.

Front axle - I beam type axle is heavy duty multi-leaf spring-mounted with shock absorbers.

### TIRES

Front: Two 425/65R22.5-18 P.R. All-Position type tubeless.  
Rear: Eight 11R22.5-14 P.R. transport type.

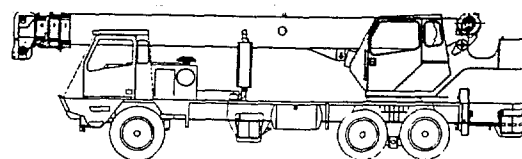
### BRAKES

Full air brakes on all wheels with 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 in<sup>2</sup> (2477 cm<sup>2</sup>) front and 920 in<sup>2</sup> (5935 cm<sup>2</sup>) rear. Air compressor has standard air dryer. Rear tandem axles have spring-set, air-released parking or emer-



### 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 a two position house lock. Switches include ignition, engine stop, two-speed winch(s), lights, 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, service brakes and throttle.

### INSTRUMENTATION AND ACCESSORIES

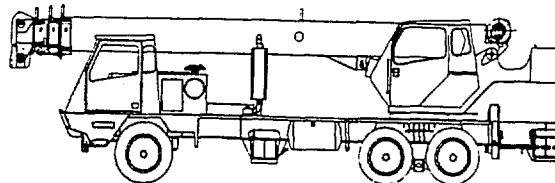
In-cab gauges include bubble level, engine oil pressure, fuel, engine temperature, and voltmeter. Indicators include high coolant temperature/low engine oil pressure audio/visual warning, low coolant level audio/visual warning, and Rated Capacity Indicator. Accessories include fire extinguisher, windshield 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; one single spool valve for swing; and one single spool valve for future installation of an auxiliary winch. 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 • 360° House Lock • LP Heater/Defroster • Hydraulically Powered Air Conditioner • Diesel Heater/Defroster • Tachometer • Work Lights • Outrigger Controls on Sides of Carrier • Heavy Counterweight Package



gency 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/cm<sup>2</sup>).

### STEERING

Mechanism includes rack and pinion with integral hydraulic power.

|                |                     |                      |
|----------------|---------------------|----------------------|
|                | To $\odot$ of tires | To corner of carrier |
| Turning radius | 34' 0" (10.35 m)    | 37' 7" (11.46 m)     |

### TRANSMISSION

Standard: Fuller 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 in<sup>2</sup> (2919 cm<sup>2</sup>) 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, six-way adjustable torsion bar suspension seat with seat belt and lockable door with roll down window.

## CONTROLS

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

## INSTRUMENTS

Included are speedometer, hour meter, 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/cm<sup>2</sup>)

#### Boom Hoist and Telescope Pump

39 gpm (147.6 lpm) @ 3,500 psi (246.1 kg/cm<sup>2</sup>)

#### Outrigger and Swing Pump

22 gpm (83.3 lpm) @ 2,500 psi (175 kg/cm<sup>2</sup>)

## 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

Max. line speed (no load)

First layer 167 fpm (50.9 m/min)

Fifth layer 242 fpm (73.8 m/min)

Max. line pull-first layer 15,639 lbs (7 093 kg)

Max. line pull-fifth layer 10,827 lbs (4 911 kg)

Permissible line pull 9,000 lbs (4082 kg)

### LO-RANGE

### HI-RANGE

335 fpm (102.1 m/min)

484 fpm (147.5 m/min)

7,298 lbs (3 310 kg)

5,052 lbs (2 291 kg)

### DRUM DIMENSIONS

10.62 in (270 mm) drum diameter

17.55 in (446 mm) length

18.0 in (457 mm) flange dia.

Cable: 5/8" x 450 ft. (16 mm x 137.2 m)

height above

Cable type: 5/8" (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

top layer to comply with

ANSI B30.5

## ENGINE SPECIFICATIONS

| Make and Model        | Cummins ISC-285                  |
|-----------------------|----------------------------------|
| 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 (111 kg•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)                   |

## 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, four-way hazard flasher lights, back-up lights with audible alarm.

## OPTIONAL EQUIPMENT

Spare Tire with Wheel • Immersion Heater(s) • Pintle Hook • Cold Weather Kit • Allison MD 356AA8.3 6 speed Automatic Transmission with 300 HP Cummins ISC-285 Diesel Engine • Air Suspension for Drivers Seat • Front and/or Rear Air Suspension • Aluminum R/L Hand Tool Boxes

### Power Steering Pump

8 gpm (30.3 lpm) @ 1500 psi (105.5 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 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).

## 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 (7 093 kg)

### DRUM DIMENSIONS

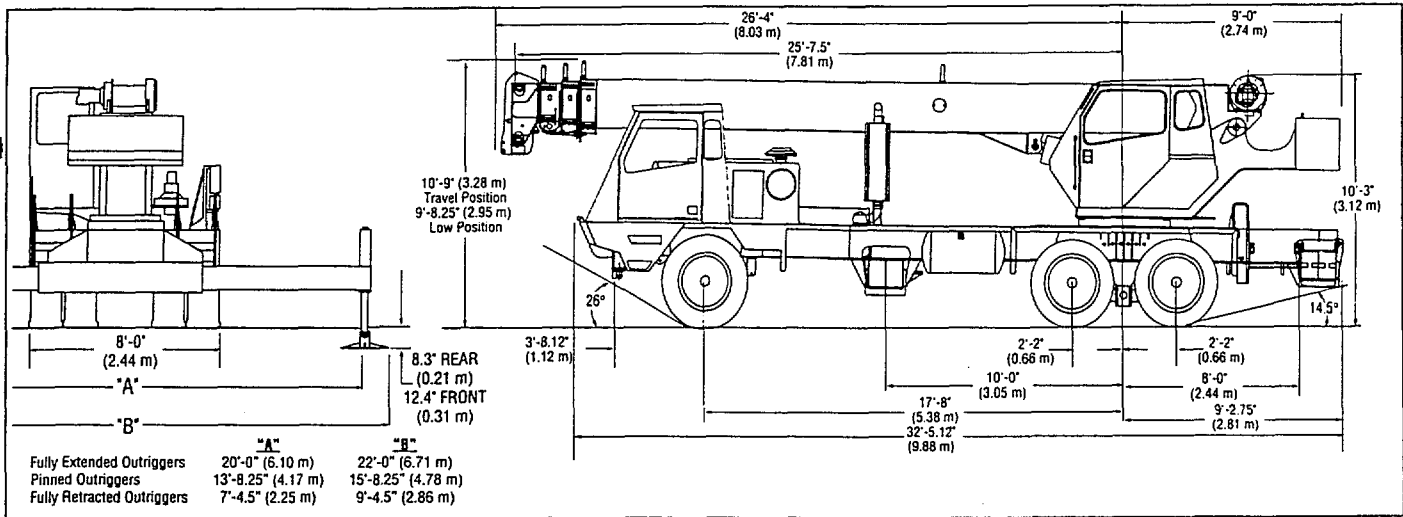
AND CAPACITY (Same as main winch)

## 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).

## SPEED AND GRADEABILITY

| ENGINE TRANSMISSION | SPEED RANGE      | GRADEABILITY |
|---------------------|------------------|--------------|
| Cummins Manual      | 60 mph (96 km/h) | 56%          |
| Cummins Automatic   | 60 mph (96 km/h) | 64%          |



| WEIGHTS & AXLE LOADS  | GROSS WEIGHT<br>LBS. | UPPER IN TRAVEL POSITION |         | GROSS WEIGHT<br>KG. | UPPER IN TRAVEL POSITION |        |
|---|----------------------|--------------------------|---------|---------------------|--------------------------|--------|
|   |                      | FRONT                    | REAR    |                     | FRONT                    | REAR   |
| <b>Basic Crane with ISC-285; Engine, 94' (28.49 m) Boom, 2,000 + 500 lb. (1633 + 227 kg) Cwt., 1/4 Tank of Fuel, 425/65Rx22.5 18 PR Front and 11R22.5 14 PR Rear Tires with Disc Wheels, and 200 lb. (90.7 kg) Operator in Cab.</b> | 47,213               | 16,454                   | 30,759  | 21,415              | 7,463                    | 13,952 |
| <b>Add Options:</b>   |                      |                          |         |                     |                          |        |
| 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'-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' (24.83 m) Boom   | + 1,789              | + 1,307                  | + 482   | + 811               | + 593                    | + 218  |
| Auxiliary Boom Head on 94' (28.49 m) Boom   | + 100                | + 180                    | - 80    | + 45                | + 82                     | - 37   |
| Auxiliary Boom Head on 81' (24.83 m) Boom   | + 100                | + 197                    | - 97    | + 45                | + 89                     | - 44   |
| 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   |
| 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  |
| 30 ton (27.2 mt) Quick Reeving Hook Block (On Bumper - 3 Sheave)  | + 670                | + 945                    | - 275   | + 304               | + 429                    | - 125  |
| 25 ton (22.7 mt) Quick Reeving Hook Block (On Bumper - 2 Sheave)  | + 682                | + 962                    | - 280   | + 309               | + 436                    | - 127  |
| 7 ton (6.3 mt) Hook and Ball (At boom rack)   | + 240                | + 145                    | + 95    | + 109               | + 66                     | + 43   |
| <b>Substitutes:</b>   |                      |                          |         |                     |                          |        |
| 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    |
| Add for Spin Resistant Wire Rope (per winch)  | + 32                 | - 12                     | + 44    | + 14                | - 6                      | + 20   |
| 360° Mechanical house Lock  | + 85                 | 0                        | + 85    | + 39                | 0                        | + 39   |
| Aluminum Disc Wheels (Std Tires)  | - 366                | - 134                    | - 232   | - 166               | - 61                     | - 105  |
| Automatic Transmission  | 0                    | 0                        | 0       | 0                   | 0                        | 0      |
| Automatic Transmission w/2-spd Aux & 2 -spd Axles   | + 510                | + 300                    | + 210   | + 231               | + 136                    | + 95   |

NOTE: Weights are for Lorain 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.

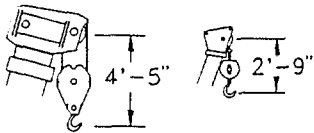


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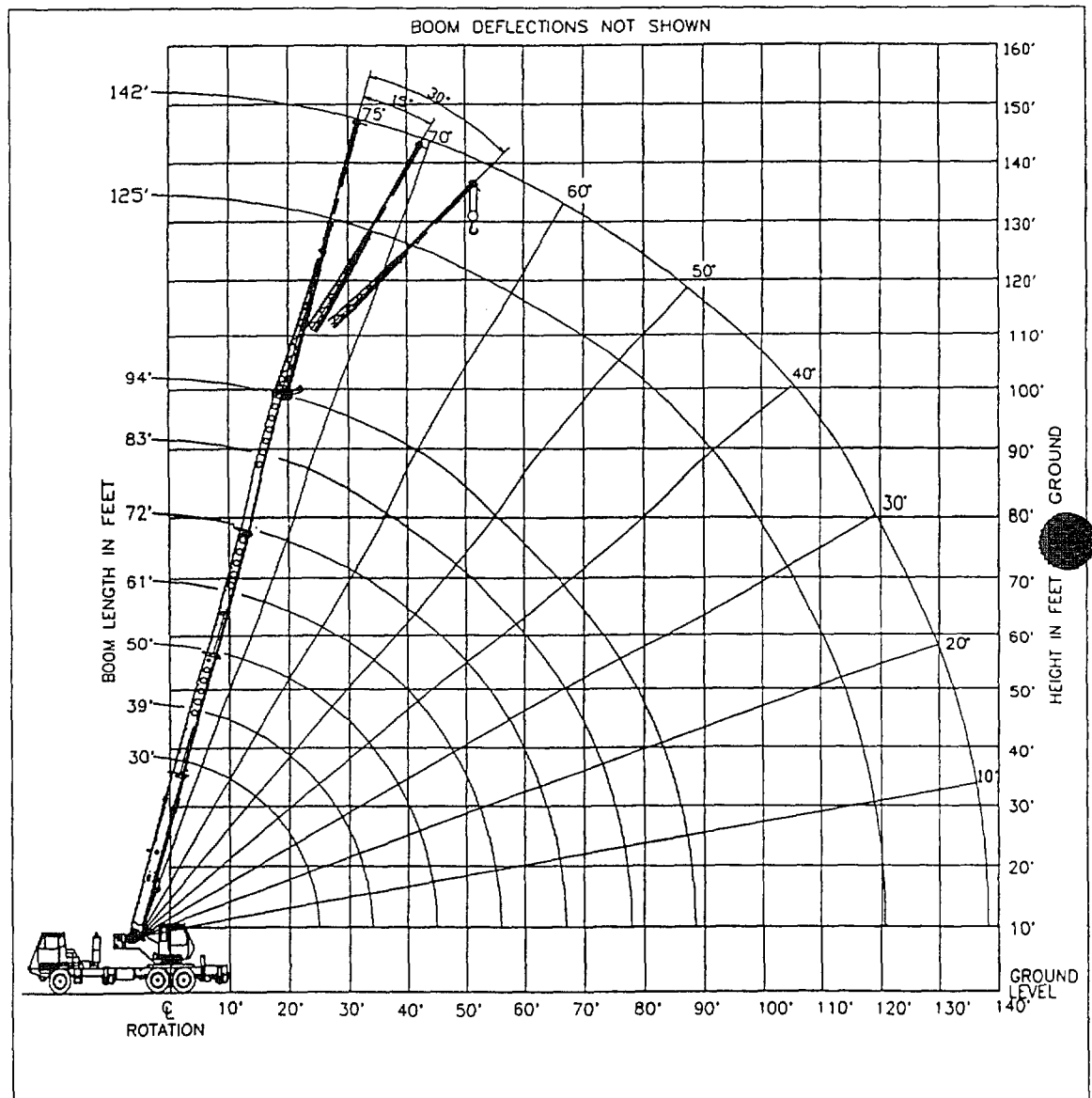
# TEREX T 34Q

truck crane  
40 ton capacity

range diagram & lifting capacities

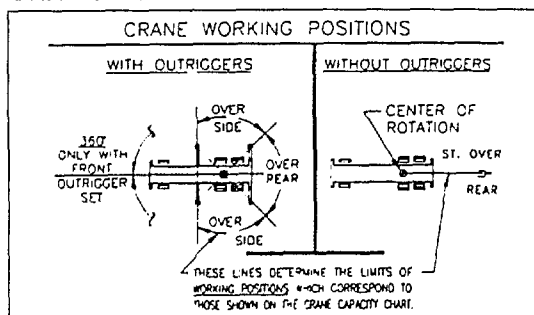


DIMENSIONS ARE FOR LARGEST FACTORY FURNISHED HOOK BLOCK AND HOOK & BALL, WITH ANTI-TWO BLOCK ACTIVATED



Range Diagram  
(30' - 94' boom)

## CRANE WORKING CONDITIONS



## REDUCTION IN MAIN BOOM CAPACITY

All Jibs in Stowed Position \_\_\_\_\_ 0 Lbs.  
Aux. Boom in Head Sheave \_\_\_\_\_ 100 Lbs.

## HOOK BLOCK WEIGHTS

Hook & Ball \_\_\_\_\_ 239 Lbs.  
25T Hook Block (2 Sheave) \_\_\_\_\_ 682 Lbs.  
30T Hook Block (3 Sheave) \_\_\_\_\_ 670 Lbs.  
40T Hook Block (4 Sheave) \_\_\_\_\_ 690 Lbs.

# Lifting Capacities – Pounds (30'– 94' boom and heavy-lift package)

## MODEL T 340

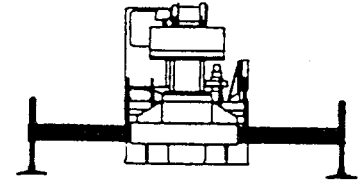
COUNTERWEIGHT:  
F. BUMPER 1850 LBS.  
UPPERSTRUCTURE:  
W/AUX. WINCH 6100 LBS.  
W/O AUX. WINCH 7200 LBS.

BOOM LENGTH 30-94 FT.  
STABILITY PERCENTAGE  
ON OUTRIGGERS 85%  
ON TIRES 75%  
PCSA CLASS 9-118

**CAUTION:** Do not use this specification sheet as a load rating chart. The format of data is not consistent with the machine chart and may be subject to change.

### ON OUTRIGGERS - FULLY EXTENDED

| LOAD RADIUS (FT) | BOOM LENGTH 30 FT       |                |           | BOOM LENGTH 39 FT       |                |           | BOOM LENGTH 50 FT       |                |           | LOAD RADIUS (FT) |
|------------------|-------------------------|----------------|-----------|-------------------------|----------------|-----------|-------------------------|----------------|-----------|------------------|
|                  | LOADED BOOM ANGLE (DEG) | OVER REAR (LB) | 360° (LB) | LOADED BOOM ANGLE (DEG) | OVER REAR (LB) | 360° (LB) | LOADED BOOM ANGLE (DEG) | OVER REAR (LB) | 360° (LB) |                  |
| 9                | 65.1                    | 80,000*        | 80,000*   |                         |                |           |                         |                |           | 9                |
| 10               | 63.0                    | 70,100*        | 70,100*   | 69.4                    | 46,600*        | 46,600*   |                         |                |           | 10               |
| 12               | 58.5                    | 61,000*        | 61,000*   | 66.2                    | 46,600*        | 46,600*   | 71.7                    | 46,600*        | 46,600*   | 12               |
| 15               | 51.4                    | 49,400*        | 49,400*   | 61.2                    | 46,600*        | 46,600*   | 68.0                    | 44,300*        | 44,300*   | 15               |
| 20               | 37.4                    | 35,300*        | 35,300*   | 52.3                    | 36,100*        | 36,100*   | 61.6                    | 36,600*        | 36,600*   | 20               |
| 25               | 13.7                    | 26,700*        | 26,700*   | 42.0                    | 27,600*        | 27,600*   | 54.8                    | 28,100*        | 28,100*   | 25               |
| 30               | **                      |                |           | 28.8                    | 21,900*        | 19,900    | 47.3                    | 22,400*        | 20,400    | 30               |
| 35               |                         |                |           | **                      |                |           | 38.7                    | 17,900         | 15,300    | 35               |
| 40               |                         |                |           |                         |                |           | 27.9                    | 14,300         | 11,800    | 40               |
| 45               |                         |                |           |                         |                |           | 7.9                     | 11,500         | 9,300     | 45               |
| 50               |                         |                |           |                         |                |           | **                      |                |           | 50               |
| 55               |                         |                |           |                         |                |           |                         |                |           | 55               |
| 60               |                         |                |           |                         |                |           |                         |                |           | 60               |
| 65               |                         |                |           |                         |                |           |                         |                |           | 65               |
| 70               |                         |                |           |                         |                |           |                         |                |           | 70               |
| 75               |                         |                |           |                         |                |           |                         |                |           | 75               |
| 80               |                         |                |           |                         |                |           |                         |                |           | 80               |
| 85               |                         |                |           |                         |                |           |                         |                |           | 85               |
| 90               |                         |                |           |                         |                |           |                         |                |           | 90               |



**USE THESE CHARTS ONLY  
WHEN ALL OUTRIGGERS  
ARE FULLY EXTENDED**

### ON OUTRIGGERS - FULLY EXTENDED

| LOAD RADIUS (FT) | BOOM LENGTH 61 FT       |                |           | BOOM LENGTH 72 FT       |                |           | BOOM LENGTH 83 FT       |                |           | BOOM LENGTH 94 FT       |                |           | LOAD RADIUS (FT) |
|------------------|-------------------------|----------------|-----------|-------------------------|----------------|-----------|-------------------------|----------------|-----------|-------------------------|----------------|-----------|------------------|
|                  | LOADED BOOM ANGLE (DEG) | OVER REAR (LB) | 360° (LB) | LOADED BOOM ANGLE (DEG) | OVER REAR (LB) | 360° (LB) | LOADED BOOM ANGLE (DEG) | OVER REAR (LB) | 360° (LB) | LOADED BOOM ANGLE (DEG) | OVER REAR (LB) | 360° (LB) |                  |
| 9                |                         |                |           |                         |                |           |                         |                |           |                         |                |           | 9                |
| 10               |                         |                |           |                         |                |           |                         |                |           |                         |                |           | 10               |
| 12               |                         |                |           |                         |                |           |                         |                |           |                         |                |           | 12               |
| 15               | 72.1                    | 38,100*        | 38,100*   |                         |                |           |                         |                |           |                         |                |           | 15               |
| 20               | 67.1                    | 33,000*        | 33,000*   | 70.8                    | 27,400*        | 27,400*   |                         |                |           |                         |                |           | 20               |
| 25               | 61.9                    | 27,900*        | 27,900*   | 66.5                    | 23,100*        | 23,100*   | 69.8                    | 21,800*        | 21,800*   | 72.2                    | 17,500*        | 17,500*   | 25               |
| 30               | 56.3                    | 22,800*        | 20,700    | 62.0                    | 19,900*        | 19,900*   | 66.0                    | 18,300*        | 18,300*   | 69.0                    | 15,000*        | 15,000*   | 30               |
| 35               | 50.4                    | 18,200         | 15,600    | 57.4                    | 17,400*        | 15,800    | 62.2                    | 15,900*        | 15,900*   | 65.7                    | 13,100*        | 13,100*   | 35               |
| 40               | 43.9                    | 14,600         | 12,200    | 52.5                    | 14,700         | 12,300    | 58.1                    | 13,800*        | 12,500    | 62.2                    | 11,500*        | 11,500*   | 40               |
| 45               | 36.5                    | 11,900         | 9,700     | 47.2                    | 12,100         | 9,900     | 53.9                    | 12,100*        | 10,000    | 58.7                    | 10,100*        | 10,100    | 45               |
| 50               | 27.3                    | 9,900          | 7,800     | 41.4                    | 10,100         | 8,000     | 49.5                    | 10,200         | 8,200     | 55.1                    | 9,000*         | 8,300     | 50               |
| 55               | 13.0                    | 8,200          | 6,400     | 34.8                    | 8,500          | 6,600     | 44.7                    | 8,600          | 6,700     | 51.2                    | 8,200*         | 6,800     | 55               |
| 60               | **                      |                |           | 26.9                    | 7,200          | 5,400     | 39.5                    | 7,300          | 5,600     | 47.2                    | 7,300*         | 5,700     | 60               |
| 65               |                         |                |           | 15.5                    | 6,100          | 4,500     | 33.6                    | 6,300          | 4,600     | 42.8                    | 6,300          | 4,700     | 65               |
| 70               |                         |                |           | **                      |                |           | 26.6                    | 5,400          | 3,800     | 38.0                    | 5,500          | 4,000     | 70               |
| 75               |                         |                |           |                         |                |           | 17.0                    | 4,600          | 3,200     | 32.7                    | 4,700          | 3,300     | 75               |
| 80               |                         |                |           |                         |                |           | **                      |                |           | 26.4                    | 4,000          | 2,700     | 80               |
| 85               |                         |                |           |                         |                |           |                         |                |           | 18.1                    | 3,400          | 2,200     | 85               |
| 90               |                         |                |           |                         |                |           |                         |                |           | **                      |                |           | 90               |

### MAXIMUM CAPACITY AT 0 DEGREE BOOM ANGLE

| BOOM LENGTH 30 FT |                |           | BOOM LENGTH 39 FT |                |           | BOOM LENGTH 50 FT |                |           | BOOM LENGTH 61 FT |                |           | BOOM LENGTH 72 FT |                |           | BOOM LENGTH 83 FT |                |           | BOOM LENGTH 94 FT |                |           |
|-------------------|----------------|-----------|-------------------|----------------|-----------|-------------------|----------------|-----------|-------------------|----------------|-----------|-------------------|----------------|-----------|-------------------|----------------|-----------|-------------------|----------------|-----------|
| LOAD RADIUS (FT)  | OVER REAR (LB) | 360° (LB) | LOAD RADIUS (FT)  | OVER REAR (LB) | 360° (LB) | LOAD RADIUS (FT)  | OVER REAR (LB) | 360° (LB) | LOAD RADIUS (FT)  | OVER REAR (LB) | 360° (LB) | LOAD RADIUS (FT)  | OVER REAR (LB) | 360° (LB) | LOAD RADIUS (FT)  | OVER REAR (LB) | 360° (LB) | LOAD RADIUS (FT)  | OVER REAR (LB) | 360° (LB) |
| 25.6              | 25,700         | 25,700    | 34.3              | 17,700         | 15,100    | 45.3              | 11,300         | 9,100     | 56.3              | 7,800          | 6,000     | 67.3              | 5,600          | 4,000     | 78.3              | 4,000          | 2,700     | 89.3              | 2,900          | 1,800     |

# Lifting Capacities – Pounds (30' – 94' boom and heavy-lift package)

**MODEL T 340**

COUNTERWEIGHT:  
F. BUMPER 1850 LBS.  
UPPERSTRUCTURE:  
W/AUX. WINCH 6100 LBS.  
W/O AUX. WINCH 7200 LBS.

BOOM LENGTH 30-94 FT.  
STABILITY PERCENTAGE  
ON OUTRIGGERS 85%  
ON TIRES 75%  
PCSA CLASS 9-118

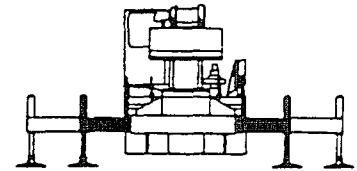
**CAUTION:** Do not use this specification sheet as a load rating chart. The format of data is not consistent with the machine chart and may be subject to change.

## ON OUTRIGGERS - MID POSITION

| LOAD RADIUS (FT) | BOOM LENGTH 30 FT       |           | BOOM LENGTH 39 FT       |           | BOOM LENGTH 50 FT       |           | BOOM LENGTH 61 FT       |           | BOOM LENGTH 72 FT       |           | BOOM LENGTH 83 FT       |           | BOOM LENGTH 94 FT       |           | LOAD RADIUS (FT) |
|------------------|-------------------------|-----------|-------------------------|-----------|-------------------------|-----------|-------------------------|-----------|-------------------------|-----------|-------------------------|-----------|-------------------------|-----------|------------------|
|                  | LOADED BOOM ANGLE (DEG) | 360° (LB) | LOADED BOOM ANGLE (DEG) | 360° (LB) | LOADED BOOM ANGLE (DEG) | 360° (LB) | LOADED BOOM ANGLE (DEG) | 360° (LB) | LOADED BOOM ANGLE (DEG) | 360° (LB) | LOADED BOOM ANGLE (DEG) | 360° (LB) | LOADED BOOM ANGLE (DEG) | 360° (LB) |                  |
| 9                | 65.1                    | 77,900*   |                         |           |                         |           |                         |           |                         |           |                         |           |                         |           | 9                |
| 10               | 63.0                    | 70,000*   | 69.4                    | 46,600*   |                         |           |                         |           |                         |           |                         |           |                         |           | 10               |
| 12               | 58.5                    | 57,800*   | 66.2                    | 46,600*   | 71.7                    | 46,600*   |                         |           |                         |           |                         |           |                         |           | 12               |
| 15               | 51.4                    | 37,100    | 61.2                    | 37,900    | 68.0                    | 38,500    | 72.1                    | 38,100*   |                         |           |                         |           |                         |           | 15               |
| 20               | 37.4                    | 20,700    | 52.3                    | 21,400    | 61.6                    | 21,900    | 67.1                    | 22,200    | 70.8                    | 22,400    |                         |           |                         |           | 20               |
| 25               | 13.7                    | 13,000    | 42.0                    | 14,000    | 54.8                    | 14,400    | 61.9                    | 14,700    | 66.5                    | 14,900    | 69.8                    | 15,000    | 72.2                    | 15,100    | 25               |
| 30               | **                      |           | 28.8                    | 9,700     | 47.3                    | 10,200    | 56.3                    | 10,500    | 62.0                    | 10,600    | 66.0                    | 10,800    | 69.0                    | 10,800    | 30               |
| 35               |                         |           | **                      |           | 38.7                    | 7,400     | 50.4                    | 7,700     | 57.4                    | 7,900     | 62.2                    | 8,000     | 65.7                    | 8,100     | 35               |
| 40               |                         |           |                         |           | 27.9                    | 5,500     | 43.9                    | 5,800     | 52.5                    | 6,000     | 58.1                    | 6,100     | 62.2                    | 6,200     | 40               |
| 45               |                         |           |                         |           | 7.9                     | 3,900     | 36.5                    | 4,400     | 47.2                    | 4,500     | 53.9                    | 4,700     | 58.7                    | 4,700     | 45               |
| 50               |                         |           |                         |           | **                      |           | 27.3                    | 3,200     | 41.4                    | 3,400     | 49.5                    | 3,600     | 55.1                    | 3,600     | 50               |
| 55               |                         |           |                         |           |                         |           | 13.0                    | 2,300     | 34.8                    | 2,600     | 44.7                    | 2,700     | 51.2                    | 2,800     | 55               |
| 60               |                         |           |                         |           |                         |           |                         |           | 26.9                    | 1,800     | 39.5                    | 2,000     | 47.2                    | 2,100     | 60               |

## \*\* MAXIMUM CAPACITY AT 0 DEGREE BOOM ANGLE

| BOOM LENGTH 30 FT |           | BOOM LENGTH 39 FT |           | BOOM LENGTH 50 FT |           | BOOM LENGTH 61 FT |           | BOOM LENGTH 72 FT |           | BOOM LENGTH 83 FT |           | BOOM LENGTH 94 FT |           |
|-------------------|-----------|-------------------|-----------|-------------------|-----------|-------------------|-----------|-------------------|-----------|-------------------|-----------|-------------------|-----------|
| LOAD RADIUS (FT)  | 360° (LB) | LOAD RADIUS (FT)  | 360° (LB) | LOAD RADIUS (FT)  | 360° (LB) | LOAD RADIUS (FT)  | 360° (LB) | LOAD RADIUS (FT)  | 360° (LB) | LOAD RADIUS (FT)  | 360° (LB) | LOAD RADIUS (FT)  | 360° (LB) |
| 25.6              | 12,200    | 34.3              | 7,000     | 45.3              | 3,800     | 56.3              | 2,000     |                   |           |                   |           |                   |           |



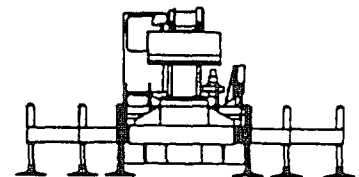
**USE THESE CHARTS ONLY WHEN ALL OUTRIGGERS ARE PINNED IN MID POSITION**

## ON OUTRIGGERS - RETRACTED

| LOAD RADIUS (FT) | BOOM LENGTH 30 FT       |           | BOOM LENGTH 39 FT       |           | BOOM LENGTH 50 FT       |           | BOOM LENGTH 61 FT       |           | BOOM LENGTH 72 FT       |           | BOOM LENGTH 83 FT       |           | BOOM LENGTH 94 FT       |           | LOAD RADIUS (FT) |
|------------------|-------------------------|-----------|-------------------------|-----------|-------------------------|-----------|-------------------------|-----------|-------------------------|-----------|-------------------------|-----------|-------------------------|-----------|------------------|
|                  | LOADED BOOM ANGLE (DEG) | 360° (LB) | LOADED BOOM ANGLE (DEG) | 360° (LB) | LOADED BOOM ANGLE (DEG) | 360° (LB) | LOADED BOOM ANGLE (DEG) | 360° (LB) | LOADED BOOM ANGLE (DEG) | 360° (LB) | LOADED BOOM ANGLE (DEG) | 360° (LB) | LOADED BOOM ANGLE (DEG) | 360° (LB) |                  |
| 9                | 65.1                    | 35,300    |                         |           |                         |           |                         |           |                         |           |                         |           |                         |           | 9                |
| 10               | 63.0                    | 28,700    | 69.4                    | 29,400    |                         |           |                         |           |                         |           |                         |           |                         |           | 10               |
| 12               | 58.5                    | 20,500    | 66.2                    | 21,100    | 71.7                    | 21,600    |                         |           |                         |           |                         |           |                         |           | 12               |
| 15               | 51.4                    | 13,600    | 61.2                    | 14,200    | 68.0                    | 14,600    | 72.1                    | 14,800    |                         |           |                         |           |                         |           | 15               |
| 20               | 37.4                    | 7,500     | 52.3                    | 8,200     | 61.6                    | 8,600     | 67.1                    | 8,900     | 70.8                    | 9,000     |                         |           |                         |           | 20               |
| 25               | 13.7                    | 4,100     | 42.0                    | 5,000     | 54.8                    | 5,500     | 61.9                    | 5,700     | 66.5                    | 5,900     | 69.8                    | 6,000     | 72.2                    | 6,100     | 25               |
| 30               | **                      |           | 28.8                    | 2,900     | 47.3                    | 3,500     | 56.3                    | 3,700     | 62.0                    | 3,900     | 66.0                    | 4,000     | 69.0                    | 4,100     | 30               |
| 35               |                         |           |                         |           | 38.7                    | 2,100     | 50.4                    | 2,400     | 57.4                    | 2,600     | 62.2                    | 2,700     | 65.7                    | 2,700     | 35               |

## \*\* MAXIMUM CAPACITY AT 0 DEGREE BOOM ANGLE

| BOOM LENGTH 30 FT |           | BOOM LENGTH 39 FT |           | BOOM LENGTH 50 FT |           | BOOM LENGTH 61 FT |           | BOOM LENGTH 72 FT |           | BOOM LENGTH 83 FT |           | BOOM LENGTH 94 FT |           |
|-------------------|-----------|-------------------|-----------|-------------------|-----------|-------------------|-----------|-------------------|-----------|-------------------|-----------|-------------------|-----------|
| LOAD RADIUS (FT)  | 360° (LB) | LOAD RADIUS (FT)  | 360° (LB) | LOAD RADIUS (FT)  | 360° (LB) | LOAD RADIUS (FT)  | 360° (LB) | LOAD RADIUS (FT)  | 360° (LB) | LOAD RADIUS (FT)  | 360° (LB) | LOAD RADIUS (FT)  | 360° (LB) |
| 25.6              | 3,600     |                   |           |                   |           |                   |           |                   |           |                   |           |                   |           |



**USE THESE CHARTS WHEN ALL OUTRIGGER BEAMS ARE NOT IN EITHER THE MID OR FULLY EXTENDED POSITION**

# Lifting Capacities – Pounds (30'– 94' boom and heavy-lift package)

## MODEL T 340

COUNTERWEIGHT: BOOM LENGTH 30-94 FT.  
 F. BUMPER 1850 LBS. STABILITY PERCENTAGE  
 UPPERSTRUCTURE: ON OUTRIGGERS 85%  
 W/AUX. WINCH 6100 LBS. ON TIRES 75%  
 W/O AUX. WINCH 7200 LBS. PCSA CLASS 9-118

**CAUTION:** Do not use this specification sheet as a load rating chart. The format of data is not consistent with the machine chart and may be subject to change.

### SIDE STOW JIB ON FULLY EXTENDED OUTRIGGERS

| LOADED BOOM ANGLE (DEG) | 32 FT OFFSETTABLE JIB  |                |           |                        |                |           |                        |                |           | 49 FT OFFSETTABLE JIB  |                |           |                        |                |           |                        |                |           | LOADED BOOM ANGLE (DEG) |
|-------------------------|------------------------|----------------|-----------|------------------------|----------------|-----------|------------------------|----------------|-----------|------------------------|----------------|-----------|------------------------|----------------|-----------|------------------------|----------------|-----------|-------------------------|
|                         | 0° OFFSET              |                |           | 15° OFFSET             |                |           | 30° OFFSET             |                |           | 0° OFFSET              |                |           | 15° OFFSET             |                |           | 30° OFFSET             |                |           |                         |
|                         | LOAD RADIUS (REF) (FT) | REAR ONLY (LB) | 360° (LB) | LOAD RADIUS (REF) (FT) | REAR ONLY (LB) | 360° (LB) | LOAD RADIUS (REF) (FT) | REAR ONLY (LB) | 360° (LB) | LOAD RADIUS (REF) (FT) | REAR ONLY (LB) | 360° (LB) | LOAD RADIUS (REF) (FT) | REAR ONLY (LB) | 360° (LB) | LOAD RADIUS (REF) (FT) | REAR ONLY (LB) | 360° (LB) |                         |
| 75                      | 38                     | 9,100*         | 9,100*    | 46                     | 7,700*         | 7,700*    | 52                     | 5,900*         | 5,900*    | 41                     | 5,100*         | 5,100*    | 55                     | 3,400*         | 3,400*    | 62                     | 2,700*         | 2,700*    | 75                      |
| 73                      | 42                     | 8,600*         | 8,600*    | 49                     | 7,300*         | 7,300*    | 55                     | 5,800*         | 5,800*    | 47                     | 4,800*         | 4,800*    | 59                     | 3,300*         | 3,300*    | 68                     | 2,700*         | 2,700*    | 73                      |
| 71                      | 45                     | 8,200*         | 8,200*    | 52                     | 7,000*         | 7,000*    | 58                     | 5,600*         | 5,600*    | 52                     | 4,500*         | 4,500*    | 64                     | 3,200*         | 3,200*    | 73                     | 2,600*         | 2,600*    | 71                      |
| 68                      | 50                     | 7,800*         | 7,400*    | 58                     | 6,200*         | 6,200*    | 63                     | 5,100*         | 5,100*    | 60                     | 4,100*         | 4,100*    | 70                     | 3,000*         | 3,000*    | 79                     | 2,500*         | 2,500*    | 68                      |
| 65                      | 56                     | 6,700*         | 6,300*    | 63                     | 5,500*         | 5,500*    | 68                     | 4,600*         | 4,600*    | 66                     | 3,800*         | 3,800*    | 76                     | 2,900*         | 2,900*    | 84                     | 2,500*         | 2,500*    | 65                      |
| 62                      | 61                     | 5,900*         | 5,000*    | 68                     | 4,900*         | 4,700*    | 73                     | 4,200*         | 4,200*    | 71                     | 3,600*         | 3,600*    | 81                     | 2,800*         | 2,800*    | 88                     | 2,400*         | 2,400*    | 62                      |
| 59                      | 66                     | 5,200*         | 4,100*    | 73                     | 4,400*         | 4,000*    | 77                     | 3,800*         | 3,800*    | 77                     | 3,400*         | 3,400*    | 86                     | 2,700*         | 2,700*    | 93                     | 2,400*         | 2,400*    | 59                      |
| 55                      | 73                     | 4,400*         | 3,500*    | 79                     | 3,900*         | 3,300*    | 83                     | 3,400*         | 3,100*    | 84                     | 3,100*         | 3,000*    | 93                     | 2,600*         | 2,400*    | 99                     | 2,300*         | 2,300*    | 55                      |
| 51                      | 79                     | 3,800*         | 2,900*    | 85                     | 3,400*         | 2,600*    | 88                     | 3,100*         | 2,500*    | 91                     | 2,900*         | 2,400*    | 99                     | 2,500*         | 2,000*    | 105                    | 2,300*         | 2,000*    | 51                      |
| 47                      | 86                     | 3,300*         | 2,300*    | 91                     | 2,900*         | 2,100*    | 94                     | 2,800*         | 2,100*    | 100                    | 2,800*         | 1,900*    | 106                    | 2,400*         | 1,600*    | 110                    | 2,200*         | 1,600*    | 47                      |
| 43                      | 92                     | 2,900*         | 1,900*    | 97                     | 2,700*         | 1,700*    | 99                     | 2,500*         | 1,700*    | 109                    | 2,400*         | 1,500*    | 112                    | 2,100*         | 1,300*    | 116                    | 2,000*         | 1,300*    | 43                      |
| 38                      | 100                    | 2,400*         | 1,400*    | 103                    | 2,300*         | 1,300*    | 105                    | 2,200*         | 1,300*    | 116                    | 2,000*         | 1,000*    | 119                    | 1,800*         | 1,000*    | 122                    | 1,800*         | 1,000*    | 38                      |
| 32                      | 106                    | 2,000*         | 900*      | 109                    | 1,900*         | 900*      | 110                    | 1,900*         | 900*      | 122                    | 1,600*         | 700*      | 126                    | 1,500*         | 600*      | 127                    | 1,500*         | 600*      | 32                      |
| 25                      | 113                    | 1,600*         |           | 114                    | 1,600*         |           |                        |                |           | 129                    | 1,300*         |           | 131                    | 1,200*         |           |                        |                |           | 25                      |
| 17                      | 118                    | 1,200*         |           | 118                    | 1,200*         |           |                        |                |           | 133                    | 1,000*         |           | 135                    | 1,000*         |           |                        |                |           | 17                      |

#### NOTES FOR JIB CAPACITIES

- A. For all boom lengths less than the maximum with a jib erected, the rated loads are determined by boom angle only in the appropriate column.
- B. For boom angle not shown, use the capacity of the next lower boom angle.
- C. Listed radii are for extended main boom only.

### ON TIRES

| RADIUS (FT) | MAX BOOM LENGTH (FT) | BOOM STRAIGHT OVER REAR 0 TO 2 1/2 MPH |
|-------------|----------------------|--|
| 10          | 30                   | 19,200                                 |
| 12          | 30                   | 15,800                                 |
| 15          | 39                   | 12,100                                 |
| 20          | 39                   | 7,600                                  |
| 25          | 50                   | 5,100                                  |
| 30          | 50                   | 3,600                                  |
| 35          | 50                   | 2,600                                  |
| 40          | 50                   | 1,700                                  |

#### NOTES FOR ON TIRE CAPACITIES

- A. For Pick and Carry operations, boom must be centered over the front of the crane with swing brake and lock engaged. Use minimum boom point height and keep load close to ground surface.
- B. The load should be restrained from swinging. NO ON TIRE OPERATION WITH JIB ERECTED.
- C. Without outriggers, never maneuver the boom beyond listed load radii for applicable tires to ensure stability.
- D. Creep speed is crane movement of less than 200 Ft. (61m) in a 30 minute period and not exceeding 1.0 mph (1.6 km/h).
- E. Refer to General Notes for additional information.

### MAXIMUM PERMISSIBLE HOIST LINE LOAD

| LINE PARTS  | 1     | 2      | 3      | 4      | 5      | 6       | 7       | 8         | 9         | 10          |
|---|-------|--------|--------|--------|--------|---------|---------|-----------|-----------|-------------|
| MAX. LOAD   | 9,080 | 18,160 | 27,240 | 36,320 | 45,400 | 54,480  | 63,560  | 72,640    | 81,720    | 90,800      |
| BOOM HEAD   | 2     | 3-D    | 2-3    | 1-4-D  | 2-3-4  | 2-3-4-D | 1-2-3-4 | 1-2-3-4-D | 1-2-3-4-5 | 1-2-3-4-5-D |
| HOOK BLOCK  | D     | 3      | 3-D    | 1-4    | 2-3-D  | 2-3-4   | 2-3-4-D | 1-2-3-4   | 1-2-3-4-D | 1-2-3-4-5   |
| WIRE ROPE: 5/8" ROTATION RESISTANT COMPACTED STRAND, 18X19<br>OR 19X19 MINIMUM BREAKING STRENGTH - 22.7 TONS<br>5/8" 6X19 OR 6X37 IWRC IPS PREFORMED RIGHT<br>REGULAR LAY MINIMUM BREAKING STRENGTH - 17.9 TONS |       |        |        |        |        |         |         |           |           |             |



# GENERAL NOTES

## GENERAL

1. Rated loads as shown on Lift Charts pertain to this machine as originally manufactured and equipped. Modifications to the machine or use of optional equipment other than that specified can result in a reduction of capacity.
2. Construction equipment can be hazardous if improperly operated or maintained. Operation and maintenance of this machine shall be in compliance with the information in the Operator's, Parts and Safety Manuals supplied with this machine. If these manuals are missing, order replacements from the manufacturer through your distributor.
3. These warnings do not constitute all of the operating conditions for the crane. The operator and job site supervision must read the OPERATORS MANUAL, CIMA SAFETY MANUAL, APPLICABLE OSHA REGULATIONS, AND SOCIETY OF MECHANICAL ENGINEERS (ASME) SAFETY STANDARDS FOR CRANES.
4. This crane and its load ratings are in accordance with POWER CRANE & SHOVEL ASSOCIATION, STANDARD NO. 4, SAE CRANE LOAD STABILITY TEST CODE J765A, SAE METHOD OF TEST FOR CRANE STRUCTURE J1063 AND APPLICABLE SAFETY CODE FOR CRANES, DERRICKS AND MASTS, ASME/ANSI B30.5.

## DEFINITIONS

1. **LOAD RADIUS** – The horizontal distance from the axis of rotation before loading to the center of the vertical hoist line or tackle with a load applied.
2. **LOADED BOOM ANGLE** – It is the angle between the boom base section and the horizontal, after lifting the rated load at the rated radius. The boom angle before loading should be greater to account for deflections. The loaded boom angle combined with boom length give only an approximation of the operating radius.
3. **WORKING AREA** – Areas measured in a circular arc about the centerline of rotation as shown in the diagram.
4. **FREELY SUSPENDED LOAD** – Load hanging free with no direct external force applied except by the hoist rope.
5. **SIDE LOAD** – Horizontal force applied to the lifted load either on the ground or in the air.
6. **NO LOAD STABILITY LIMIT** – The stability limit radius shown on the range diagrams is the radius beyond which it is not permitted to position the boom, when the boom angle is less than the minimum shown on the applicable load chart, because the machine can overturn without any load.

## SET-UP

1. Crane load ratings are based on the crane being leveled and standing on a firm, uniform supporting surface.
2. Crane load ratings on outriggers are based on all outrigger beams being fully extended or in the case of partial extension ratings mechanically pinned in the appropriate position, and the tires free of the supporting surface.
3. Crane load ratings on tires depend on appropriate inflation pressure and the tire conditions. Caution must be exercised when increasing air pressures in tires. Consult Operator's Manual for precautions.
4. Use of jibs, lattice-type boom extensions, or fourth section pullouts extended is not permitted for pick and carry operations.
5. Consult appropriate section of the Operator's and Service Manual for more exact description of hoist line reeving.
6. The use of more parts of line than required by the load may result in having insufficient rope to allow the hook block to reach the ground.
7. Properly maintained wire rope is essential for safe crane operation. Consult Operator's Manual for proper maintenance and inspection requirements.

8. When spin-resistant wire rope is used, the allowable rope loading shall be the breaking strength divided by five (5), unless otherwise specified by the wire rope manufacturer.

## OPERATION

1. **CRANE LOAD RATINGS MUST NOT BE EXCEEDED. DO NOT ATTEMPT TO TIP THE CRANE TO DETERMINE ALLOWABLE LOADS.**
2. When either radius or boom length, or both, are between listed values, the smaller of the two listed load ratings shall be used.
3. Do not operate at longer radii than those listed on the applicable load rating chart (cross hatched areas shown on range diagrams).
4. The boom angles shown on the Capacity Chart give an approximation of the operating radius for a specified boom length. The boom angle, before loading, should be greater to account for boom deflection. It may be necessary to retract the boom if maximum boom angle is insufficient to maintain rated radius.
5. Power telescoping boom sections must be extended equally.
6. Rated loads include the weight of hook block, slings, and auxiliary lifting devices. Their weights shall be subtracted from the listed rated load to obtain the net load that can be lifted.  
When lifting over the jib the weight of any hook block, slings, and auxiliary lifting devices at the boom head must be added to the load.  
When jibs are erected but unused add two (2) times the weight of any hook block, slings, and auxiliary lifting devices at the jib head to the load.
7. Rated loads do not exceed 85% on outriggers or 75% on tires, of the tipping load as determined by SAE Crane Stability Test Code J765a. Structural strength ratings in chart are indicated with an asterisk (\*).
8. Rated loads are based on freely suspended loads. No attempt shall be made to drag a load horizontally on the ground in any direction.
9. The user shall operate at reduced ratings to allow for adverse job conditions, such as: Soft or uneven ground, out of level conditions, high winds, side loads, pendulum action, jerking or sudden stopping of loads, hazardous conditions, experience of personnel, two machine lifts, traveling with loads, electric wires, etc. (side pull on boom or jib is hazardous). Derating of the cranes lifting capacity is required when wind speed exceeds 20 MPH, the center of the lifted load must be allowed to move more than 3" feet off the center line of the boom section due to the effects of wind, inertia, or any combination of the two.  
\*\*Use 2 feet off the center line of the base boom for a two section boom, 3 feet for a three section boom, or 4 feet for a four section boom.
10. The maximum load which can be telescoped is not definable, because of variations in loadings and crane maintenance, but it is permissible to attempt retraction and extension if load ratings are not exceeded.
11. Load ratings are dependent upon the crane being maintained according to manufacturer's specifications.
12. It is recommended that load handling devices, including hooks, and hook blocks, be kept away from boom head at all times.
13. **FOR TRUCK ONLY:** 360° capacities apply only to machines equipped with a front outrigger jack and all five (5) outrigger jacks properly set. If the front (5th) outrigger jack is not properly set, the work area is restricted to the over side and over rear areas as shown on the Crane Working Positions diagram. Use the 360° load ratings in the overside work areas.