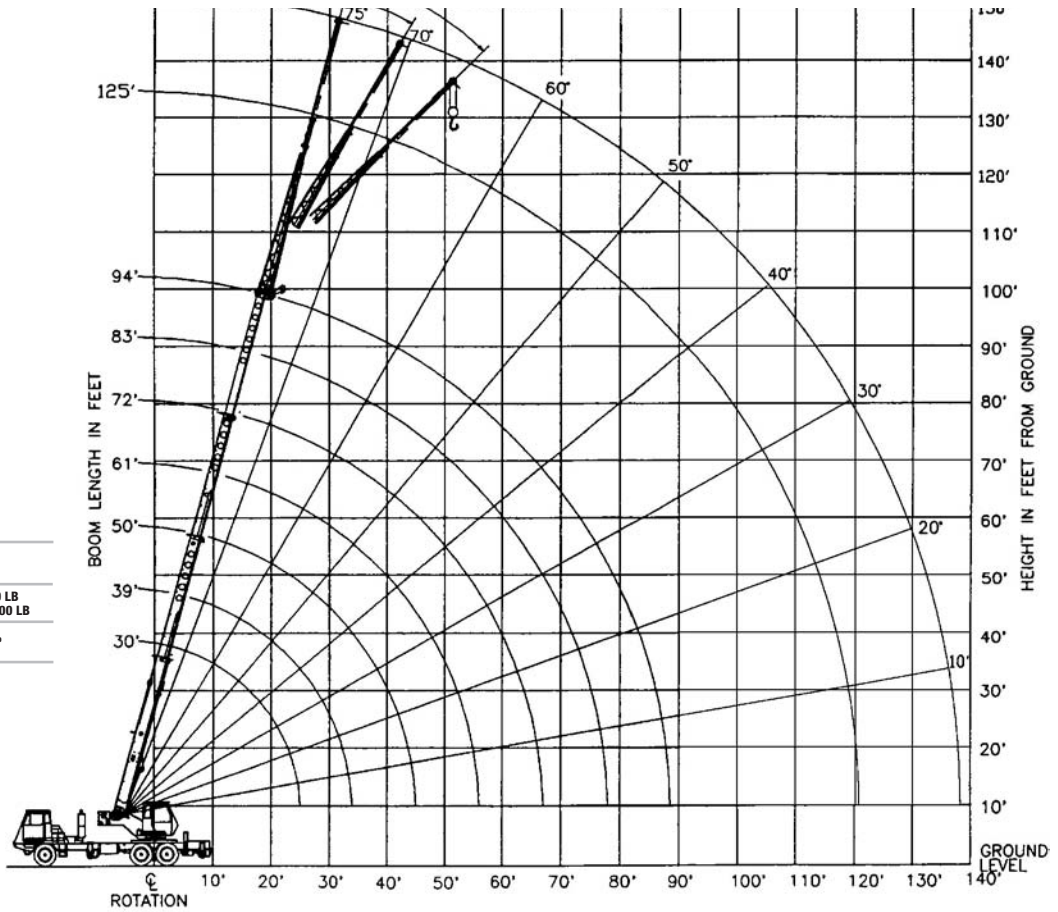


# Range Diagram and Lifting Capacity | T340-1

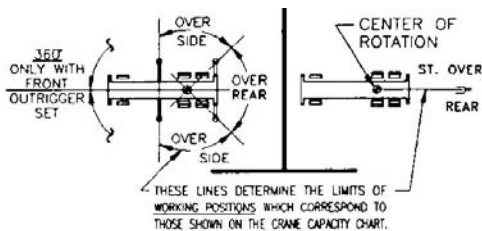
## RANGE DIAGRAM 30' - 94' BOOM

Dimensions are for largest factory furnished hook block and hook & ball, with anti-two block activated

COUNTER WEIGHT	F. BUMPER 1,850 LB
BOOM LENGTH	30'-94'
UPPERSTRUCTURE	W/AUX. WINCH 6,100 LB W/O AUX. WINCH 7,200 LB
STABILITY PERCENTAGE	ON OUTRIGGERS 85% ON TIRES 75%
PCSA CLASS	9-118



### CRANE WORKING CONDITIONS



### REDUCTION IN MAIN BOOM CAPACITY

All jib in stowed position	0 lb
Aux. boom in head sheave	100lb

### HOOK BLOCK WEIGHTS

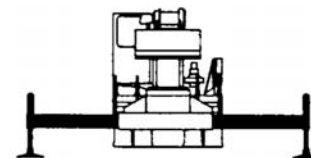
Hook and ball	239 lb
25T hook block (2 sheave)	682 lb
30T hook block (3 sheave)	670 lb
40T hook block (4 sheave)	690 lb

**LIFTING CAPACITIES** 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

**30' - 94' BOOM AND HEAVY LIFT PACKAGE ON OUTRIGGERS - FULLY EXTENDED**

LOAD RADIUS (FT)	BOOM LENGTH 30'			BOOM LENGTH 39'			BOOM LENGTH 50'			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	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	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	27,600*	27,600*	54.8	28,100*	28,100*	25
30	**			28.8	21,900*	19,900	47.3	22,400*	20,700	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'			BOOM LENGTH 72'			BOOM LENGTH 83'			BOOM LENGTH 94'			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	18,300*	18,300*	69	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	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	5,500	4,000	70
75							17	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'			BOOM LENGTH 39'			BOOM LENGTH 50'			BOOM LENGTH 61'			BOOM LENGTH 72'			BOOM LENGTH 83'			BOOM LENGTH 94'		
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	454.3	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** 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

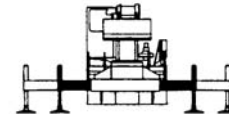
**30' - 94' BOOM AND HEAVY LIFT PACKAGE ON OUTRIGGERS - MID POSITION**

LOAD RADIUS (FT)	BOOM LENGTH 33.75'		BOOM LENGTH 45'		BOOM LENGTH 57'		BOOM LENGTH 69'		BOOM LENGTH 81'		BOOM LENGTH 93'		BOOM LENGTH 105'		LOAD RADIUS (FT)
	LOADED BOOM ANGLE (DEG)	360° (LB)	LOADED BOOM ANGLE (DEG)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	
9	65.1	77,900*													9
10	63	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	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	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	10,600	66	10,800	69	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	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 33.75'		BOOM LENGTH 45'		BOOM LENGTH 57'		BOOM LENGTH 69'		BOOM LENGTH 81'		BOOM LENGTH 93'		BOOM LENGTH 105'	
LOADED BOOM ANGLE (DEG)	360° (LB)	LOADED BOOM ANGLE (DEG)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)
25.6	12,200	34.3	7000	45.3	3800	56.3	2000						

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



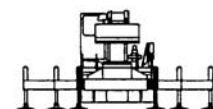
**ON OUTRIGGERS - RETRACTED**

LOAD RADIUS (FT)	BOOM LENGTH 30'		BOOM LENGTH 39'		BOOM LENGTH 50'		BOOM LENGTH 61'		BOOM LENGTH 72'		BOOM LENGTH 83'		BOOM LENGTH 94'		LOAD RADIUS (FT)
	LOADED BOOM ANGLE (DEG)	360° (LB)	LOADED BOOM ANGLE (DEG)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	
9	65.1	35,300													9
10	63	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	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	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	3,900	66	4,000	69	4,100	30
35					38.7	2,100	50.4	2,400	57.4	2,600	62.2	2,400	65.7	2,700	35

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

BOOM LENGTH 30'		BOOM LENGTH 39'		BOOM LENGTH 50'		BOOM LENGTH 61'		BOOM LENGTH 72'		BOOM LENGTH 83'		BOOM LENGTH 94'	
LOADED BOOM ANGLE (DEG)	360° (LB)	LOADED BOOM ANGLE (DEG)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)	LOADED BOOM ANGLE (LB)	360° (DEG)
25.6	3,600												

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





**LIFTING CAPACITIES** 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

**30' - 94' BOOM AND HEAVY LIFT PACKAGE  
SIDE STOW JIB ON FULLY EXTENDED OUTRIGGERS**

LOADED BOOM ANGLE (DEG)	32' OFFSETTABLE JIB									49' 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

- 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' (61 m) 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	2-3-4D	1-2-3-4	1-2-3-4-D	1-2-3-4-5
	WIRE ROPE: 5/8" ROTATION RESISTANT COMPACTED STRAND, 18X19 OR 19X19 MINIMUM BREAKING STRENGTH - 22.7 TONS 5.8" 6X19 OR 6X37 IWRC IPS PREFORMED RIGHT REGULAR LAY MINIMUM BREAKING STRENGTH - 17.9 TONS									



## General Notes | T340-1/T340-1XL Series

### 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 or 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 STANDINGS 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 HOISTS, 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.
7. **BOOM SIDE OF CRANE** - The side of the crane over which the boom is positioned when in OVER SIDE working position.

### 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.
9. Do not elevate the boom above 60° unless the boom is positioned in-line with the crane's chassis or the outrigger are extended. Failure to observe this warning may result in loss of stability.

### 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 never be allowed to move more than 3' off the center line of the base boom section due to the effects of wind, inertia, or any combination of the two.  
\*\*Use 2' off the center line of the base boom for a two section boom, 3' for a three section boom, or 4' 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 CRANES 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 area as shown on the Crane Working Positions diagram. Use the 360° load ratings in the overside work areas.
14. Do not lift with outrigger beams positioned between the fully extended and intermediate (pinned) positions.
15. Truck Cranes not equipped with equalizing (bogie) beams between the rear axles may not be used for lifting "on tires". Truck Cranes equipped with equalizing beams and rear air suspension should "dump" the air before lifting "on tires".

### CLAMSHELL, MAGNET, AND CONCRETE BUCKET SERVICE

1. Maximum boom length for clamshell and magnet service is 50'.
2. Weight of clamshell or magnet, plus contents are not to exceed 6,000 lb or 90% of rated lifting capacities, whichever is less. For concrete bucket operation, weight of bucket and load must not exceed 90% of rated lifting capacity.

### TEREX Cranes

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