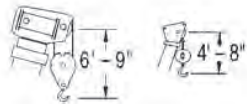




Range Diagram and Lifting Capacity | RT665

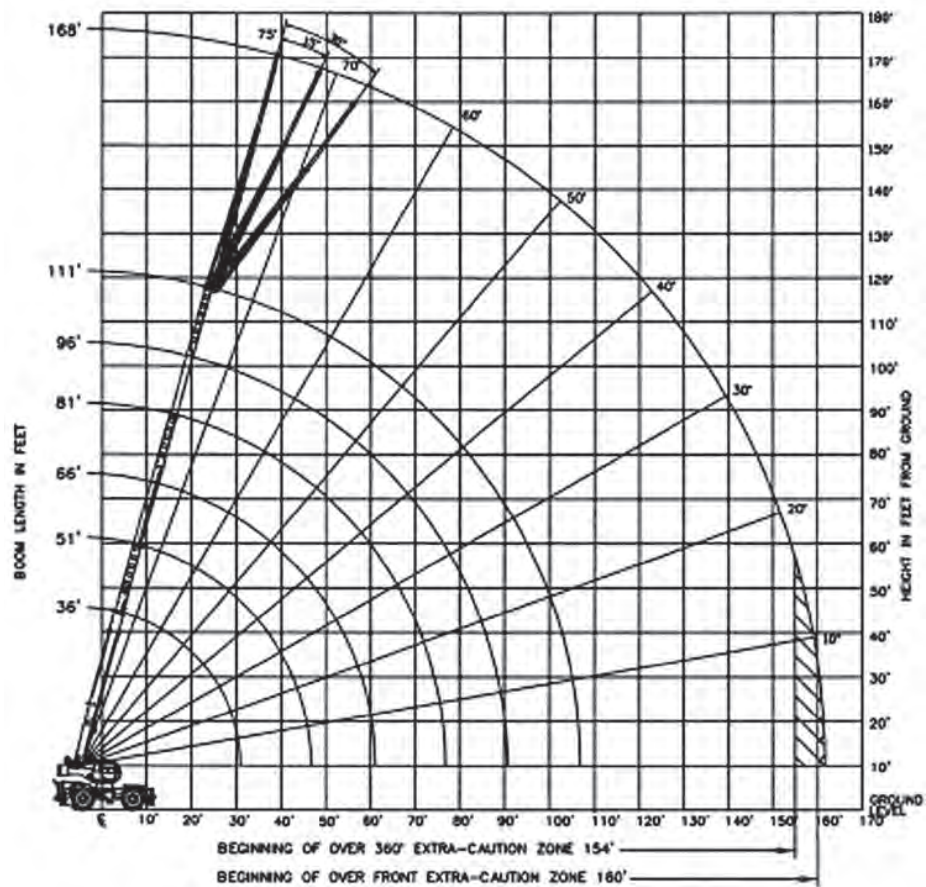
65 TON LIFTING CAPACITY

RANGE DIAGRAM 36' - 111' BOOM



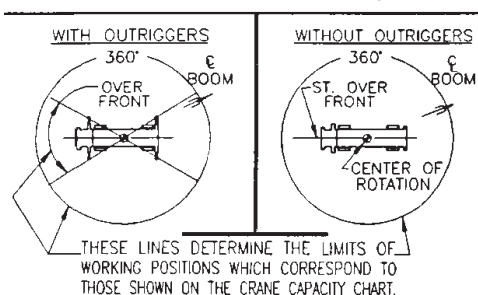
DIMENSIONS ARE FOR LARGEST FACTORY FURNISHED HOOK BLOCK AND HOOK & BALL, WITH ANTI-TWO BLOCK ACTIVATED

COUNTER WEIGHT	W/AUX. WINCH 13,100 LB W/O AUX. WINCH 14,200 LB
BOOM LENGTH	36'-111'
OUTRIGGER SPREAD	24'
STABILITY PERCENTAGE	ON OUTRIGGERS 85% ON TIRES 75%
PCSA CLASS	10-270



CRANE WORKING CONDITIONS

CRANE WORKING POSITIONS



REDUCTION IN MAIN BOOM CAPACITY

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

HOOK BLOCK WEIGHTS

Hook and ball	419 lb
Hook block (5 sheave)	1,204 lb





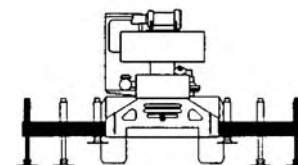
**ROUGH TERRAIN CRANE
RT665**

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

ON OUTRIGGERS - FULLY EXTENDED

LOAD RADIUS (FT)	BOOM LENGTH 36'			BOOM LENGTH 51'			BOOM LENGTH 66'			LOAD RADIUS (FT)
	BOOM ANGLE (DEG) REF.	OVER FRONT (LB)	360° (LB)	BOOM ANGLE (DEG) REF.	OVER FRONT (LB)	360° (LB)	BOOM ANGLE (DEG) REF.	OVER FRONT (LB)	360° (LB)	
10	67.1	130,000*	130,000*	74.1	80,100*	80,100*				10
12	63.6	106,800*	106,800*	71.8	80,100*	80,100*				12
15	57.5	86,100*	85,900*	68.1	78,500*	78,500*	73.3	62,000*	62,000*	15
20	48.0	62,100*	62,100*	61.9	63,400*	63,400*	68.7	54,900*	54,900*	20
25	35.9	47,700*	47,700*	55.3	48,900*	48,900*	63.9	49,200*	49,200*	25
30	18.0	37,800*	37,800*	48.0	39,200*	39,200*	58.9	39,900*	39,900*	30
35	**			39.9	32,300*	32,300*	53.7	33,000*	33,000*	35
40				29.9	27,100*	27,000	48.0	27,700	27,500	40
45				15.0	22,200	21,400	41.9	23,000	2,200	45
50				**			34.8	19,100	18,300	50
55							26.2	16,000	15,200	55
60							13.2	13,500	12,700	60
65							**			65
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105										105
110										110

USE THESE CHARTS ONLY WHEN ALL OUTRIGGERS ARE FULLY EXTENDED





**ROUGH TERRAIN CRANE
RT665**

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

ON OUTRIGGERS - FULLY EXTENDED

LOAD RADIUS (FT)	BOOM LENGTH 81'			BOOM LENGTH 96'			BOOM LENGTH 111'			LOAD RADIUS (FT)
	BOOM ANGLE (DEG) REF.	OVER FRONT (LB)	360° (LB)	BOOM ANGLE (DEG) REF.	OVER FRONT (LB)	360° (LB)	BOOM ANGLE (DEG) REF.	OVER FRONT (LB)	360° (LB)	
10										10
12										12
15										15
20	72.8	46,300*	46,300*							20
25	69.0	40,800*	40,800*	72.4	35,400*	35,400*				25
30	65.2	36,100*	36,100*	69.3	31,300*	31,300*	72.2	27,600*	27,600*	30
35	61.2	32,400*	32,400*	66.0	28,100*	28,100*	69.4	24,900*	24,900*	35
40	57.1	28,100*	27,900	62.7	25,400*	25,400*	66.7	22,600*	22,600*	40
45	52.7	23,300	22,500	59.3	23,200*	22,700	63.8	20,700*	20,700*	45
50	48.1	19,400	18,600	55.5	19,600	16,600	60.9	18,900*	18,900*	50
55	43.1	16,400	15,600	52.0	16,600	15,800	57.9	16,700	15,900	55
60	37.6	14,000	13,200	48.1	14,200	13,400	54.7	14,300	13,500	60
65	31.3	12,000	11,300	43.9	12,300	11,500	51.5	12,400	11,600	65
70	23.6	10,300	9,600	39.4	10,600	9,900	48.1	10,800	10,000	70
75	11.9	8,900	8,200	34.4	9,300	8,500	44.5	9,400	8,700	75
80	**			28.7	8,100	7,400	40.7	8,200	7,500	80
85				21.7	7,000	6,300	36.6	7,200	6,500	85
90				11.0	6,000	5,400	31.9	6,300	5,700	90
95				**			26.7	5,500	4,900	95
100							20.1	4,800	4,200	100
105							10.2	4,100	3,600	105
110							**			110

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

BOOM LENGTH 36'			BOOM LENGTH 51'			BOOM LENGTH 66'			BOOM LENGTH 81'			BOOM LENGTH 96'			BOOM LENGTH 111'		
LOAD RADIUS (FT)	OVER FRONT (LB)	360° (LB)	LOAD RADIUS (FT)	OVER FRONT (LB)	360° (LB)	LOAD RADIUS (FT)	OVER FRONT (LB)	360° (LB)	LOAD RADIUS (FT)	OVER FRONT (LB)	360° (LB)	LOAD RADIUS (FT)	OVER FRONT (LB)	360° (LB)	LOAD RADIUS (FT)	OVER FRONT (LB)	360° (LB)
31.7	20,400*	20,400*	46.7	12,400*	12,400*	61.7	8,000*	8,000*	76.7	5,300*	5,300*	91.7	3,400*	3,400*	106.7	2,100*	2,100*





ROUGH TERRAIN CRANE

RT665

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

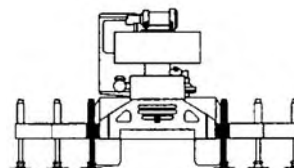
ON OUTRIGGERS - MID POSITION

LOAD RADIUS (FT)	BOOM LENGTH 36'		BOOM LENGTH 51'		BOOM LENGTH 66'		BOOM LENGTH 81'		BOOM LENGTH 96'		BOOM LENGTH 111'		LOAD RADIUS (FT)
	BOOM ANGLE (DEG) REF.	360° (LB)	BOOM ANGLE (DEG) REF.	360° (LB)	BOOM ANGLE (DEG) REF.	360° (LB)	BOOM ANGLE (DEG) REF.	360° (LB)	BOOM ANGLE (DEG) REF.	360° (LB)	BOOM ANGLE (DEG) REF.	360° (LB)	
10	67.1	121,200*	74.1	80,100*									10
12	63.6	106,800*	71.8	80,100*									12
15	57.5	86,000*	68.1	78,500*	73.3	62,000*							15
20	48.0	48,800	61.9	49,900	68.7	50,400	72.8	46,300*					20
25	35.9	31,300	55.3	32,700	63.9	33,200	69.0	33,500	72.4	33,700			25
30	18.0	21,800	48.0	23,400	58.9	23,900	65.2	24,200	69.3	24,400	72.2	24,500	30
35	**		39.9	17,500	53.7	18,100	61.2	18,300	66.0	18,500	69.4	18,600	35
40			29.9	13,300	48.0	14,100	57.1	14,300	62.7	14,500	66.7	14,600	40
45			15.0	10,300	41.9	11,100	52.7	11,400	59.3	11,600	63.8	11,700	45
50			**		34.8	8,800	48.1	9,200	55.5	9,400	60.9	9,500	50
55					26.2	7,000	43.1	7,400	52.0	7,600	57.9	7,800	55
60					13.2	5,400	37.6	5,900	48.1	6,200	54.7	6,300	60
65					**		31.3	4,700	43.9	5,000	51.5	5,200	65
70							23.6	3,700	39.4	4,000	48.1	4,200	70
75							11.9	2,800	34.4	3,100	44.5	3,300	75
80							**		28.7	2,400	40.7	2,600	80

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

LOAD RADIUS (FT)	BOOM LENGTH 36'		BOOM LENGTH 51'		BOOM LENGTH 66'		BOOM LENGTH 81'		BOOM LENGTH 96'		BOOM LENGTH 111'	
	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)
31.7	19,200	46.7	9,300	61.7	4,900	76.7	2,500					

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





**ROUGH TERRAIN CRANE
RT665**

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

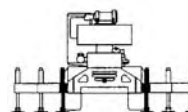
ON OUTRIGGERS - RETRACTED

LOAD RADIUS (FT)	BOOM LENGTH 36'		BOOM LENGTH 51'		BOOM LENGTH 66'		BOOM LENGTH 81'		BOOM LENGTH 96'		BOOM LENGTH 111'		LOAD RADIUS (FT)
	BOOM ANGLE (DEG) REF.	360° (LB)	BOOM ANGLE (DEG) REF.	360° (LB)	BOOM ANGLE (DEG) REF.	360° (LB)	BOOM ANGLE (DEG) REF.	360° (LB)	BOOM ANGLE (DEG) REF.	360° (LB)	BOOM ANGLE (DEG) REF.	360° (LB)	
10	67.1	73,700	74.1	74,900									10
12	63.6	51,700	71.8	51,700									12
15	57.5	34,300	68.1	35,300	73.3	35,800							15
20	48.0	20,100	61.9	21,400	68.7	21,800	72.8	22,100					20
25	35.9	12,800	55.3	14,100	63.9	14,600	69.0	14,900	72.4	15,000			25
30	18.0	8,200	48.0	9,600	58.9	10,200	65.2	10,500	69.3	10,700	72.2	10,800	30
35	**		39.9	6,600	53.7	7,200	61.2	7,600	66.0	7,700	69.4	7,800	35
40			29.9	4,400	48.0	5,000	57.1	5,400	62.7	5,600	68.7	5,700	40
45			15.0	2,600	41.9	3,400	52.7	3,800	59.3	4,000	63.8	4,100	45
50							48.1	2,500	55.5	2,700	60.9	2,900	50
55													55

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

BOOM LENGTH 36'		BOOM LENGTH 51'		BOOM LENGTH 66'		BOOM LENGTH 81'		BOOM LENGTH 96'		BOOM LENGTH 111'	
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)
31.7	6,800										

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





ROUGH TERRAIN CRANE

RT665

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.

SIDE STOW JIB ON FULLY EXTENDED OUTRIGGERS

LOADED BOOM ANGLE (DEG)	32' OFFSETTABLE JIB/NO PULL OUT INSTALLED									49' OFFSETTABLE JIB/PULL OUT RETRACTED									LOADED BOOM ANGLE (DEG)
	0° OFFSET			15° OFFSET			30° OFFSET			0° OFFSET			15° OFFSET			30° OFFSET			
	LOAD RADIUS (REF) (FT)	FRONT ONLY (LB)	360° (LB)	LOAD RADIUS (REF) (FT)	FRONT ONLY (LB)	360° (LB)	LOAD RADIUS (REF) (FT)	FRONT ONLY (LB)	360° (LB)	LOAD RADIUS (REF) (FT)	FRONT ONLY (LB)	360° (LB)	LOAD RADIUS (REF) (FT)	FRONT ONLY (LB)	360° (LB)	LOAD RADIUS (REF) (FT)	FRONT ONLY (LB)	360° (LB)	
75	40	12,600*	12,600*	48	8,500*	8,500*	54	6,600*	6,600*	41	12,600*	12,600*	49	8,500*	8,500*	55	6,600*	6,600*	75
73	46	11,900*	11,900*	53	8,200*	8,200*	59	6,400*	6,400*	47	11,900*	11,900*	54	8,200*	8,200*	60	6,400*	6,400*	73
71	51	11,300*	11,300*	58	7,800*	7,800*	63	6,300*	6,300*	52	11,300*	11,300*	59	7,800*	7,800*	64	6,300*	6,300*	71
68	58	10,400*	10,400*	65	7,400*	7,400*	70	6,000*	6,000*	59	10,400*	10,400*	66	7,400*	7,400*	71	6,000*	6,000*	68
65	65	9,600*	9,600*	71	7,100*	7,100*	76	5,900*	5,900*	66	9,600*	9,600*	72	7,100*	7,100*	77	5,900*	5,900*	65
62	71	8,900*	8,900*	78	6,800*	6,800*	83	5,700*	5,700*	72	8,900*	8,900*	79	6,800*	6,800*	84	5,700*	5,700*	62
59	78	8,300*	8,300*	84	6,500*	6,500*	88	5,500*	5,500*	79	8,300*	8,200*	85	6,500*	6,500*	89	5,500*	5,500*	59
55	86	7,700*	7,700*	91	6,200*	6,200*	95	5,300*	5,300*	87	7,600*	6,800*	92	6,200*	6,200*	96	5,300*	5,300*	55
51	93	7,100*	6,500*	98	5,900*	5,900*	102	5,200*	5,200*	94	6,300*	5,700*	99	5,600*	5,200*	103	5,200*	5,000*	51
47	100	6,000*	5,500*	105	5,500*	5,100*	108	5,000*	5,000*	101	5,300*	4,700*	106	4,800*	4,400*	109	4,700*	4,200*	47
43	106	5,200*	4,600*	111	4,800*	4,400*	113	4,700*	4,300*	107	4,400*	3,900*	112	4,100*	3,600*	114	4,000*	3,600*	43
38	113	4,300*	3,800*	119	4,100*	3,600*	119	4,000*	3,600*	114	3,600*	3,100*	120	3,400*	2,900*	120	3,300*	2,900*	38
32	121	3,500*	3,100*	124	3,400*	2,900*	125	3,300*	2,900*	122	2,800*	2,300*	125	2,700*	2,200*	126	2,600*	2,200*	32
25	127	2,900*	2,500*	130	2,800*	2,300*				129	2,200*	1,800*	132	2,100*	1,700*				25
17	133	2,400*	2,000*	135	2,300*	1,900*				135	1,700*	1,300*	137	1,700*	1,300*				17





ROUGH TERRAIN CRANE

RT665

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

SIDE STOW JIB ON FULLY EXTENDED OUTRIGGERS

Notes For Jib Capacities:

LOADED BOOM ANGLE (DEG)	57' OFFSETTABLE JIB									LOADED BOOM ANGLE (DEG)
	0° OFFSET			15° OFFSET			30° OFFSET			
	LOAD RADIUS (REF) (FT)	FRONT ONLY (LB)	360° (LB)	LOAD RADIUS (REF) (FT)	FRONT ONLY (LB)	360° (LB)	LOAD RADIUS (REF) (FT)	FRONT ONLY (LB)	360° (LB)	
75	52	6,600*	6,600*	64	4,600*	4,600*	74	3,400*	3,400*	75
73	58	6,200*	6,200*	70	4,400*	4,400*	80	3,300*	3,300*	73
71	64	5,900*	5,900*	76	4,200*	4,200*	85	3,200*	3,200*	71
68	73	5,600*	5,600*	83	3,900*	3,900*	92	3,100*	3,100*	68
65	81	5,200*	5,200*	91	3,700*	3,700*	99	3,000*	3,000*	65
62	89	4,800*	4,800*	98	3,500*	3,500*	106	2,900*	2,900*	62
59	96	4,500*	4,500*	105	3,400*	3,400*	112	2,800*	2,800*	59
55	105	4,100*	4,100*	113	3,200*	3,200*	119	2,700*	2,700*	55
51	114	3,800*	3,800*	121	3,000*	3,000*	126	2,700*	2,700*	51
47	122	3,500*	3,500*	128	2,900*	2,900*	132	2,600*	2,600*	47
43	129	3,300*	3,000	135	2,800*	2,800*	138	2,600*	2,600*	43
38	137	2,700	2,400	142	2,600	2,200	144	2,500	2,200	38
32	145	2,200	1,800	149	2,100	1,700	149	2,000	1,700	32
25	153	1,600	1,300	155	1,600	1,200				25
17	159	1,200	1,000	160	1,200	900				17

- 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)	29.5 X 25 28 PR			
		STATIONARY		PICK & CARRY	
		360°	STRAIGHT OVER FRONT	CREEP	2.5 MPH
10	36	55,700	87,600*	68,800	51,900
12	36	42,800	77,300*	60,500	45,400
15	36	29,500	61,400	50,800	37,700
20	36	17,600	37,300	37,300	28,800
25	51	11,800	22,600	22,600	22,600
30	51	8,000	15,700	15,700	15,700
35	51	5,700	12,700	12,700	12,700
40	51	4,100	10,200	10,200	10,200
45	66	2,900	8,100	8,100	8,100
50	66	1,900	6,500	6,500	6,500
55	66		5,200	5,200	5,200
60	81		4,200	4,200	4,200
65	81		3,400	3,400	3,400
75	81		2,700	2,700	2,700

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' (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.

RECOMMENDED TIRE PRESSURE

TIRE SIZE	STATIONARY	CREEP	2 1/2 MPH	TRAVEL
29.5 x 25-28 PR	81 PSI	81 PSI	65 PSI	55 PSI

MAXIMUM PERMISSIBLE HOIST LINE LOAD

LINE PARTS	1	2	3	4	5	6	7	8	9	10
MAIN & AUX. HOIST	13,800	27,600	41,400	55,200	69,000	82,800	96,600	100,400	124,200	130,000
WIRE ROPE:	3/4" ROTATION RESISTANT 34X7 COMPACTED STRAND, GRADE 2160, MINIMUM BREAKING STRENGTH - 34.5 TONS. 3/4" 6X19 OR 6X37, IPS, IWRC, PERFORMED RIGHT REGULAR LAY MINIMUM BREAKING STRENGTH - 25.6 TONS. WEIGHT 1.04 LB/FT.									





General Notes | RT600 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 areas 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.

