



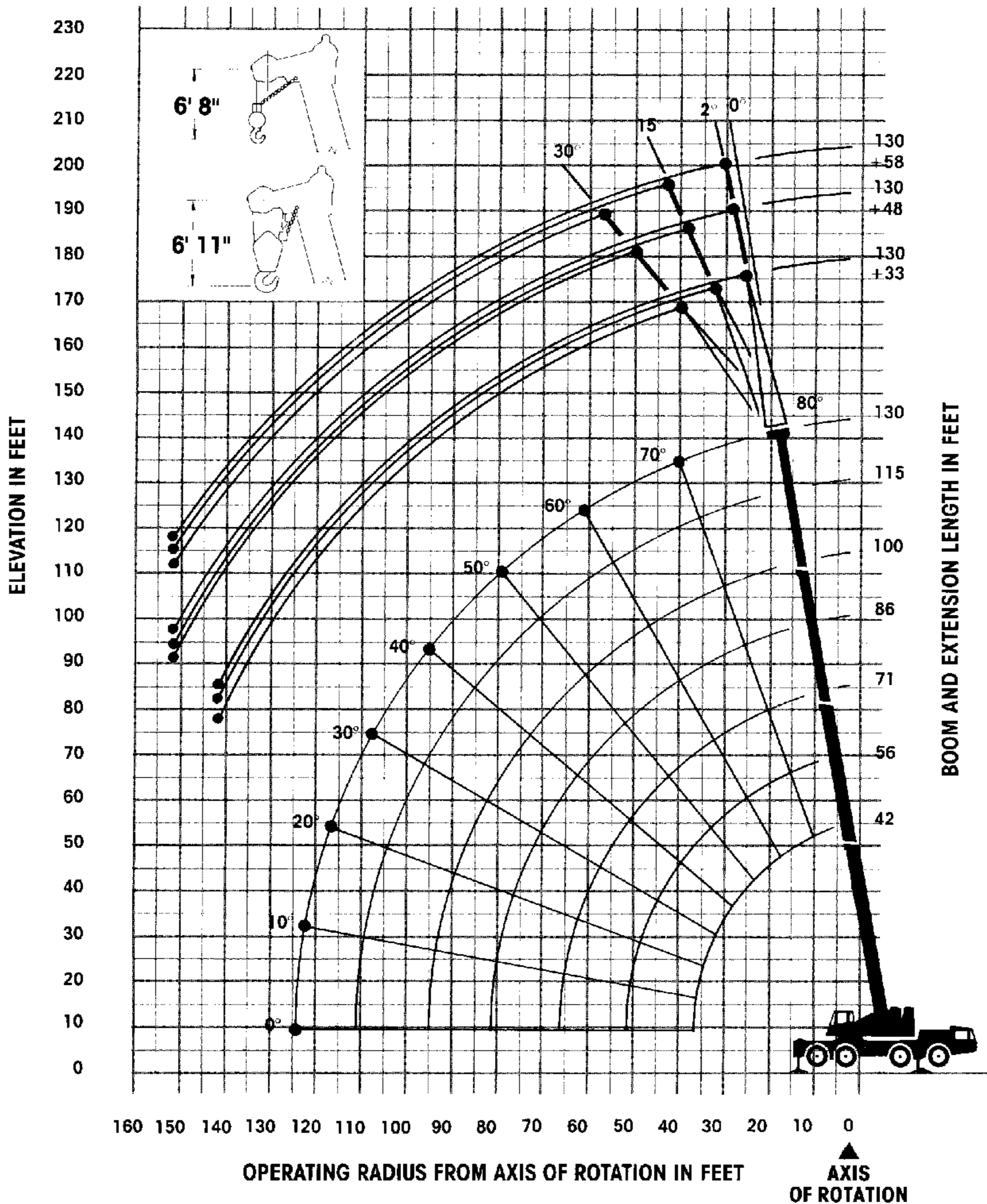
GROVE®

worldwide

AT1100

85% Domestic/42ft-130ft boom/Four-axle carrier

RANGE DIAGRAM (UNLADEN BOOM)



RATED LIFTING CAPACITIES (POUNDS) ZERO COUNTERWEIGHT

42 FT - 130 FT 4-SECTION BOOM ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in feet	Main boom length in feet Fourth section retracted					Fourth section extended	
	42	56	71	86	100	115	130
10	220000						
12	193000	123800					
15	151000	123800	123000	92400			
20	103600	103400	103200	78000	68200		
25	68700	67900	67000	63500	58600	54000	38600
30	46600	45800	45400	45000	44600	43000	38600
35		34900	34400	34300	34000	34400	34400
40		28500	28300	28100	28100	29400	29400
50			17000	17000	16900	19500	19500
60			10500	10500	10400	12700	12800
70				6300	6200	8500	8600
80					3300	5400	5500
90						3200	3300

42 FT - 71 FT 4-SECTION BOOM ON-RUBBER CAPACITIES OVER REAR ONLY 16.00 × 25 TIRES AT 115PSI 20.5 × 25 TIRES AT 85PSI

Radius in feet	Up to 1mph	Up to 3mph
10	55700	30500
12	50300	26800
15	43300	22600
20	29500	17000
25	19900	12800
30	13900	9600
35	9400	7100
40	6000	5000
45	3500	3400

130 FT MAIN BOOM WITH 33 FT FIXED-LENGTH BOOM EXTENSION ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in feet	33ft Extension		
	0° Offset	15° Offset	30° Offset
32	25800	16200@	
35	24600	37'6"	
40	22800	16000	12200
50	20000	14600	11800
60	14100	13500	11100
70	9700	10700	10500
80	6600	7400	8450
90	4400	5100	5700
100	2600	3200	3600

130 FT MAIN BOOM WITH 33 FT - 58 FT TELE BOOM EXTENSION ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in feet	33ft Length			48ft Length			58ft Length		
	0° Offset	15° Offset	30° Offset	0° Offset	15° Offset	30° Offset	0° Offset	15° Offset	30° Offset
32	24200	15800@		16500@					
35	22900	37'6"		35'6"	10500@				
40	21300	15600	11700	15400	46'0"	7700@	13100		
50	18700	14100	11300	13500	10100	54'6"	11400	8500	6100@
60	13400	13000	10600	12000	9300	7500	10200	7800	62'6"
70	9100	10500	10000	10100	8500	7000	9100	7200	5900
80	6000	6800	7900	7000	7600	6600	7700	6700	5500
90	3700	4400	5100	4800	5800	6200	5400	6100	5200
100			3000	2900	3800	4800	3500	4800	5000
110						3000		3000	4000

RATED LIFTING CAPACITIES (POUNDS) 12,500 LBS COUNTERWEIGHT

42 FT - 130 FT 4-SECTION BOOM ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in feet	Main boom length in feet Fourth section retracted					Fourth section extended	
	42	56	71	86	100	115	130
10	220000						
12	194800	123800					
15	161200	123800	123400	92400			
20	115600	113500	104000	78000	68200		
25	88400	87400	85200	66800	58600	54000	38600
30	63500	63300	63200	58200	51000	48000	38600
35		47700	47600	47500	45000	43000	38600
40		37100	37000	36900	36800	38500	35200
50			23800	23700	23600	26100	26300
60			16200	16100	16100	18400	18500
70				11000	10900	13300	13400
80					7300	9600	9700
90					4700	6900	7000
100						4900	5000
110							3300
120							2000

42 FT - 71 FT 4-SECTION BOOM ON-RUBBER CAPACITIES OVER REAR ONLY 16.00 × 25 TIRES AT 115PSI 20.5 × 25 TIRES AT 85PSI

Radius in feet	Up to 1 mph	Up to 3 mph
10	55700	30500
12	50300	26800
15	43300	22600
20	34700	17000
25	26700	12800
30	19500	9600
35	14600	7100
40	11000	5000
50	6200	
60	3000	

130 FT MAIN BOOM WITH 33 FT FIXED-LENGTH BOOM EXTENSION ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in feet	33ft Extension		
	0° Offset	15° Offset	30° Offset
32	25800	16200@	
35	24600	37'6"	
40	22800	16000	12200
50	20000	14600	11800
60	17800	13500	11100
70	14400	12500	10500
80	10800	11700	10000
90	8100	8800	9600
100	6000	6500	7100
110	4200	4800	5500
120	3000	3200	3600
130		2100	2300

130 FT MAIN BOOM WITH 33 FT - 58 FT TELE BOOM EXTENSION ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in feet	33ft Length			48ft Length			58ft Length		
	0° Offset	15° Offset	30° Offset	0° Offset	15° Offset	30° Offset	0° Offset	15° Offset	30° Offset
32	24200	15800@		16500@					
35	22900	37'6"		35'6"	10500@				
40	21300	15600	11700	15400	46'0"	7700@	13100		
50	18700	14100	11300	13500	10100	54'6"	11400	8500	6100@
60	16600	13000	10600	12000	9300	7500	10200	7800	62'6"
70	13700	12000	10000	10800	8500	7000	9100	7200	5900
80	10000	10900	9500	9800	7900	6600	8300	6700	5500
90	7300	8000	8600	8300	7400	6300	7500	6200	5200
100	5200	5700	6300	6100	6900	6000	6700	5800	5000
110	3500	4000	4400	4500	5200	5800	5000	5400	4700
120	2200	2500	2800	3100	3700	4200	3700	4400	4600
130				2000	2500	2900	2500	3100	3700
140								2100	2500

RATED LIFTING CAPACITIES (POUNDS) 28,350 LBS COUNTERWEIGHT

42 FT - 130 FT 4-SECTION BOOM ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in feet	Main boom length in feet Fourth section retracted					Fourth section extended	
	42	56	71	86	100	115	130
10	220000						
12	194800	123800					
15	164200	123800	123400	92400			
20	127000	113500	104000	78000	68200		
25	97500	95600	85600	66800	58600	54000	38600
30	77800	77600	72500	58200	51000	48000	38600
35		60200	57000	51400	45000	43000	38600
40		47900	47400	45600	40200	38500	35200
50			32500	32000	30900	31600	29000
60			23000	23000	22900	26200	24200
70				16800	16800	19900	20000
80					12400	14600	15500
90					9200	11300	11500
100						8800	8900
110							6900
120							5300

42 FT - 71 FT 4-SECTION BOOM ON-RUBBER CAPACITIES OVER REAR ONLY 16.00 × 25 TIRES AT 115PSI 20.5 × 25 TIRES AT 85PSI

Radius in feet	Up to 1 mph	Up to 3 mph
10	55700	30500
12	50300	26800
15	43300	22600
20	34700	17000
25	28200	12800
30	23200	9600
35	19400	7100
40	16100	5000
50	9700	
60	6600	

130 FT MAIN BOOM WITH 33 FT FIXED-LENGTH EXTENSION ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in feet	33ft Extension		
	0° Offset	15° Offset	30° Offset
32	25800	16200@	
35	24600	37'6"	
40	22800	16000	12200
50	20000	14600	11800
60	17800	13500	11100
70	16000	12500	10500
80	14600	11700	10000
90	12400	10900	9600
100	9900	10300	9200
110	7900	8300	8700
120	6200	6500	6800
130	5000	5100	5300
140	3700	3900	4000

130 FT MAIN BOOM WITH 33 FT - 58 FT TELE BOOM EXTENSION ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in feet	33ft Length			48ft Length			58ft Length		
	0° Offset	15° Offset	30° Offset	0° Offset	15° Offset	30° Offset	0° Offset	15° Offset	30° Offset
32	24200	15800@		16500@					
35	22900	37'6"		35'6"	10500@				
40	21300	15600	11700	15400	46'0"	7700@	13100		
50	18700	14100	11300	13500	10100	54'6"	11400	8500	6100@
60	16600	13000	10600	12000	9300	7500	10200	7800	62'6"
70	15000	12000	10000	10800	8500	7000	9100	7200	5900
80	13600	11200	9500	9800	7900	6600	8300	6700	5500
90	11600	10400	9100	8900	7400	6300	7500	6200	5200
100	8900	9600	8700	8200	6900	6000	7000	5800	5000
110	7000	7500	7900	7600	6500	5800	6400	5400	4700
120	5300	5750	6000	6300	6100	5500	5900	5100	4600
130	4000	4300	4500	5000	5400	5400	5500	4800	4400
140	2800	3100	3200	3800	4200	4400	4300	4600	4200
150				2800	3000	3200	3300	3700	4000

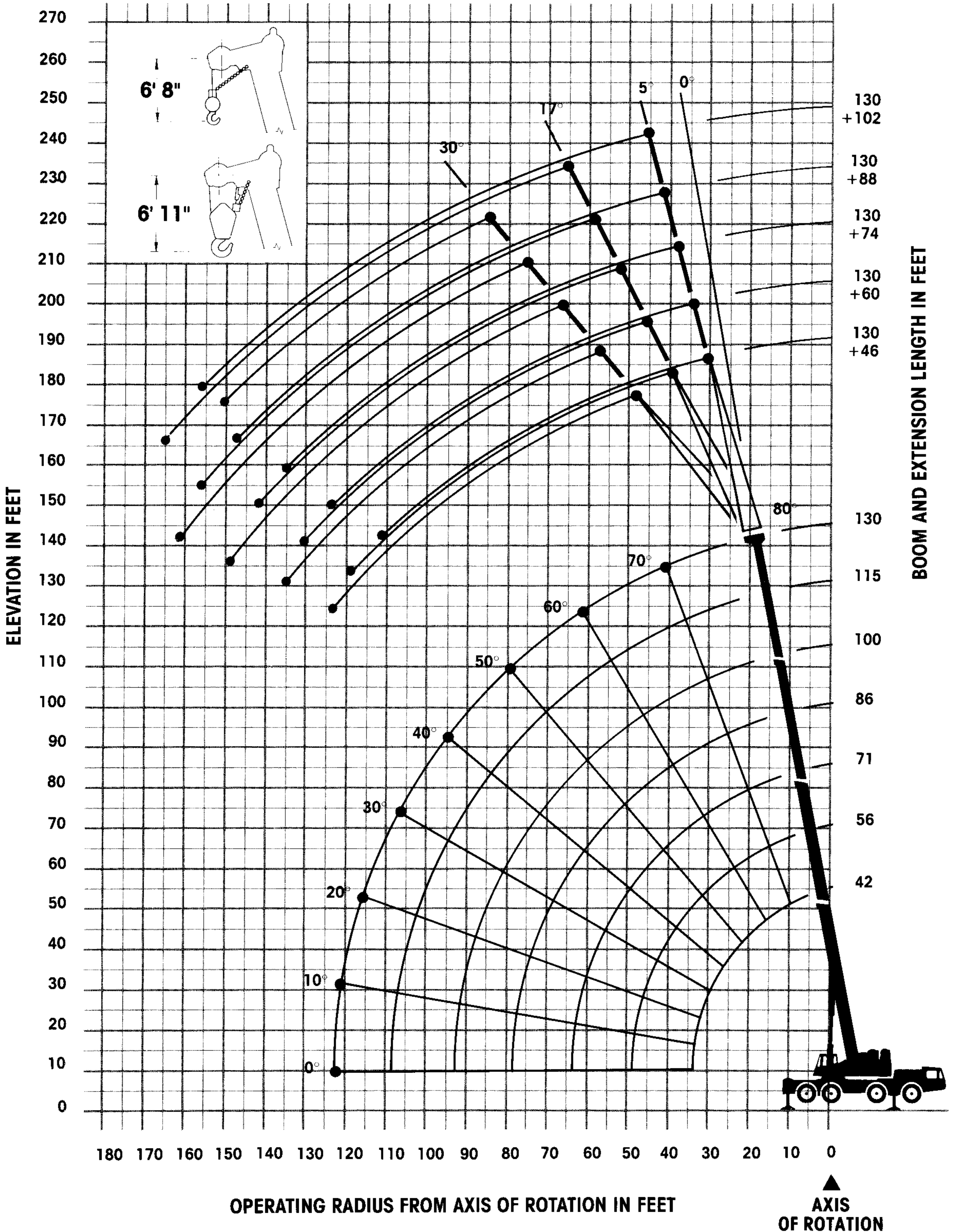


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85% Domestic/102ft jib/Four-axle carrier

RANGE DIAGRAM (UNLADEN BOOM)



RATED LIFTING CAPACITIES (POUNDS) 28,350 LBS COUNTERWEIGHT

130 FT MAIN BOOM WITH 46 FT - 102 FT FIXED OFFSET JIB ON OUTRIGGERS FULLY EXTENDED - 360°

Laden Main Boom Angles	46ft Jib						60ft Jib					
	5° Offset		17° Offset		30° Offset		5° Offset		17° Offset		30° Offset	
	REF RAD	LOAD	REF RAD	LOAD	REF RAD	LOAD	REF RAD	LOAD	REF RAD	LOAD	REF RAD	LOAD
80°	34'0"	16550	42'6"	12650	50'0"	8350	39'0"	12450	49'6"	8400	60'3"	5500
77.5°	41'6"	16200	50'6"	12000	57'9"	8150	47'0"	11750	57'9"	8050	68'3"	5300
75°	49'6"	15850	57'9"	11700	65'0"	7950	55'0"	11100	66'0"	7700	75'9"	5100
72.5°	57'0"	15450	65'0"	11000	71'9"	7600	63'3"	10450	73'9"	7300	83'0"	4950
70°	64'6"	14750	72'0"	10550	78'9"	7250	71'6"	9800	81'3"	6950	90'0"	4750
67.5°	72'0"	13450	78'9"	9900	85'3"	6950	79'9"	9350	88'6"	6700	96'9"	4600
65°	79'9"	12350	85'6"	9250	91'6"	6600	87'3"	8900	95'9"	6500	103'3"	4500
62.5°	86'3"	11100	91'9"	8350	97'3"	6400	94'9"	8150	102'3"	6050	109'6"	4400
60°	92'6"	10100	97'9"	8150	103'3"	6050	101'6"	7400	109'0"	5600	115'9"	4300
55°	104'3"	8700	109'6"	7400	114'6"	5850	114'6"	6600	121'9"	5200	127'3"	4050
50°	114'9"	7300	120'3"	6600	125'0"	5500	126'0"	5850	133'6"	4750	138'0"	3750

130 FT MAIN BOOM WITH 46 FT - 102 FT FIXED OFFSET JIB ON OUTRIGGERS FULLY EXTENDED - 360°

Laden Main Boom Angles	74ft Jib						88ft Jib					
	5° Offset		17° Offset		30° Offset		5° Offset		17° Offset		30° Offset	
	REF RAD	LOAD	REF RAD	LOAD	REF RAD	LOAD	REF RAD	LOAD	REF RAD	LOAD	REF RAD	LOAD
80°	50'0"	9000	55'9"	5950	68'9"	3750	46'0"	6900	63'0"	4500	78'9"	2650
77.5°	51'9"	8500	64'6"	5700	77'0"	3650	55'6"	6600	72'6"	4400	87'6"	2650
75°	60'9"	8050	73'6"	5500	85'3"	3500	65'0"	6200	81'9"	4200	96'0"	2500
72.5°	69'6"	7500	81'9"	5200	93'0"	3400	74'0"	5750	90'3"	3950	104'3"	2400
70°	78'0"	7050	89'6"	4950	100'3"	3200	83'3"	5300	98'9"	3650	112'3"	2200
67.5°	86'3"	6750	97'6"	4750	107'6"	3150	92'6"	5050	107'0"	3500	119'9"	2150
65°	94'6"	6400	105'0"	4600	114'6"	3100	101'0"	4850	115'0"	3300	127'0"	2100
62.5°	102'3"	5950	113'9"	4400	121'0"	2950	109'6"	4400	122'9"	3200	133'9"	2000
60°	110'0"	5400	119'0"	4300	127'6"	2850	117'9"	4300	130'3"	3100	140'3"	1900
55°	124'0"	4850	132'3"	3850	139'9"	2750	133'6"	3950	144'6"	2850	153'3"	1850
50°	137'6"	4500	144'6"	3550	151'0"	2650	148'0"	3650	158'0"	2650	164'6"	1750

130 FT MAIN BOOM WITH 46 FT - 102 FT FIXED OFFSET JIB ON OUTRIGGERS FULLY EXTENDED - 360°

Laden Main Boom Angles	102ft Jib					
	5° Offset		17° Offset		30° Offset	
	REF RAD	LOAD	REF RAD	LOAD	REF RAD	LOAD
80°	47'6"	4650	67'3"	2350	87'0"	1850
77.5°	58'3"	4500	77'6"	2300	96'6"	1750
75°	68'9"	4400	87'3"	2200	105'6"	1650
72.5°	79'0"	4200	96'6"	2150	114'0"	1600
70°	89'0"	4050	105'6"	2100	122'9"	1500
67.5°	98'9"	3950	114'6"	2000	130'6"	1400
65°	108'0"	3650	123'0"	1900	138'0"	1350
62.5°	117'0"	3350	131'3"	1800	145'6"	1300
60°	126'0"	3300	139'3"	1750	152'6"	1200
55°	142'3"	3000	154'6"	1650		
50°	158'0"	2750	167'3"	1550		

WEIGHT REDUCTIONS FOR LOAD HANDLING DEVICES

Hookblocks	
110 Tons, 6 sheave	3527 lbs
55 Tons, 3 sheave	1808 lbs
30 Tons, 2 sheave	1036 lbs
15 Tons, 1 sheave	838 lbs
10 Tons, Headache Ball	243 lbs
33ft Non-Telescopic Swingaway	
Stowed	772 lbs
Erected	4630 lbs
33ft – 58ft Telescopic Swingaway	
Stowed	1543 lbs
Erected (retracted)(33ft)	6504 lbs
Erected (extended)(58ft)	8377 lbs
Auxiliary boom nose	247 lbs

NOTES FOR LIFTING CAPACITIES

WARNING: THIS CHART IS ONLY A GUIDE. The Notes below are for illustration only and should not be relied upon to operate the crane. The individual crane's load chart, operating instructions and other instruction plates must be read and understood prior to operating the crane.

1. All rated loads have been tested to and meet minimum requirements of SAE J1063 OCT80 - Cantilevered Boom Crane Structures - Method of Test, and do not exceed 85% of the tipping load on outriggers (75% on rubber) as determined by SAE J765 OCT80 Crane Stability Test Code.
2. Capacities given do not include the weight of hookblocks, slings, auxiliary lifting equipment and load handling devices. Their weights **MUST** be added to the load to be lifted. When more than minimum required reeving is used, the additional rope weight shall be considered part of the load.
3. Capacities appearing above the bold line are based on structural strength, and tipping should not be relied upon as a capacity limitation.
4. All capacities are for crane on firm level surface. It may be necessary to have structural supports under the outrigger floats or tires to spread the load to a larger bearing surface.
5. When either boom length or radius or both are between values listed, the smallest load shown at either the next larger radius or boom length shall be used.
6. For outrigger operation, **ALL** outriggers shall be fully extended with tires raised free of the ground before raising the boom or lifting loads.



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Constant improvement and engineering progress make it necessary that the company reserves the right to make specification, equipment and price changes without notice. Illustrations shown may include optional equipment and accessories and may not include all standard equipment. Optional equipment is designated by (*) in specifications folder.