

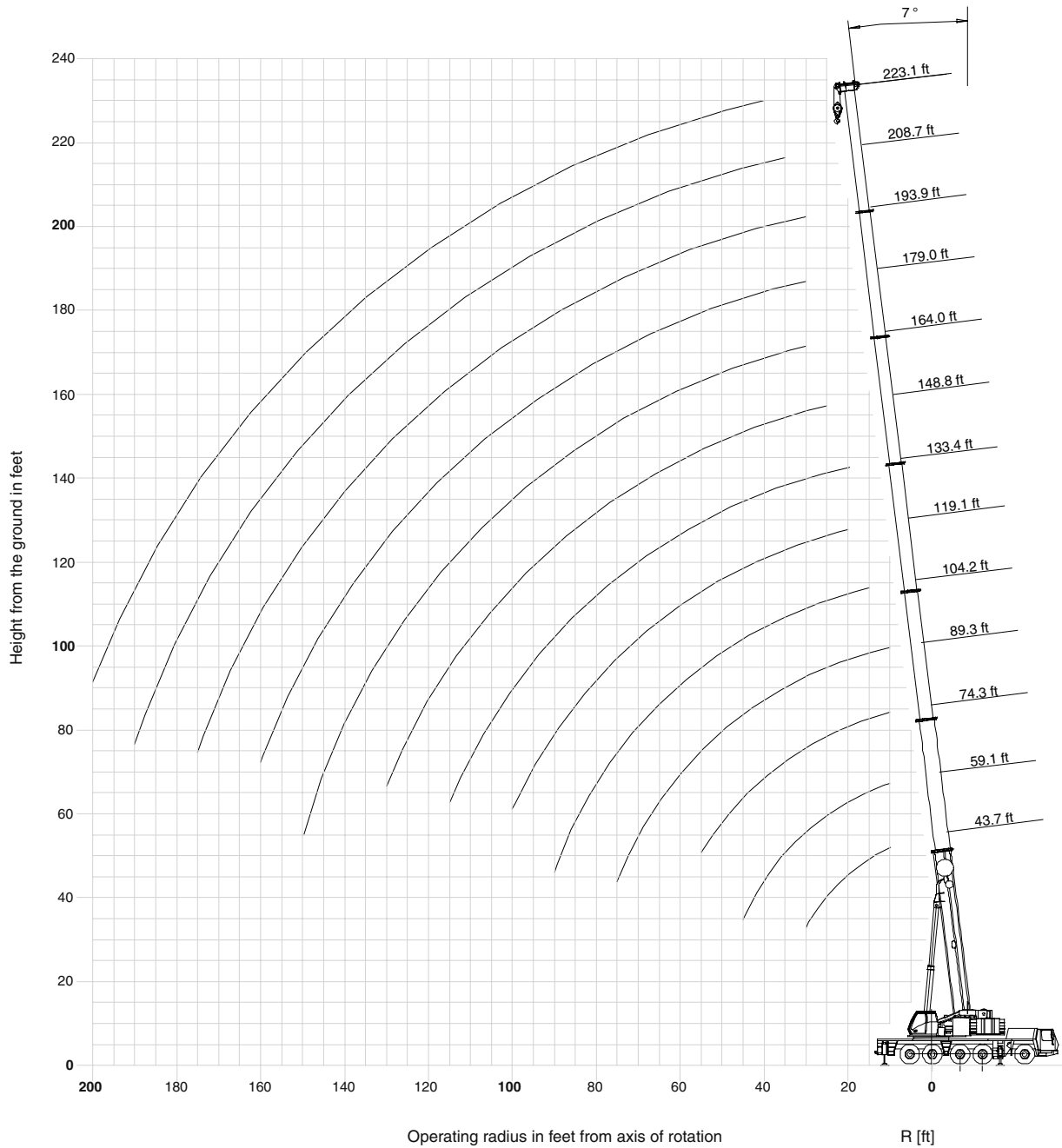


LIFTING CHARTS - All Terrain Cranes

GROVE MODEL GMK5275 - 275 TON CAPACITY

working range


44'-223' Main Boom




THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

STERLING CRANE

load charts


44-223 ft.
 (13.3-68 m)


169,700 lbs.
 (77,000 kg)


100%
 26'-7" spread


360°


Pounds x 1000






Feet	43.7'	59.1'	74.3'	89.3'	104.2'	119.1'	133.4'	148.8'	164.0'	179.0'	193.9'	208.7'	223.1'
8	*550.0												
10	346.0	332.0	312.0	244.0									
15	272.0	270.0	260.0	242.0	185.0								
20	220.0	222.0	215.0	212.0	182.0	144.0	106.0						
25	184.0	185.0	181.0	181.0	166.0	140.0	106.0	86.0					
30	152.0	157.0	157.0	155.0	151.0	129.0	105.0	86.0	69.0	55.0	45.0		
35		136.0	136.0	135.0	136.0	118.0	96.0	86.0	69.0	55.0	45.0	36.4	
40		121.0	119.0	118.0	120.0	108.0	88.0	82.0	69.0	55.0	45.0	36.4	30.8
45		99.0	106.0	104.0	106.0	99.0	81.0	75.0	68.0	55.0	45.0	36.4	30.8
50			95.0	93.0	95.0	92.0	76.0	70.0	63.0	55.0	45.0	36.4	30.8
55			83.0	84.0	85.0	85.0	72.0	64.0	59.0	52.0	45.0	36.4	30.8
60				76.0	77.0	79.0	67.0	59.0	54.0	49.0	44.0	36.4	30.8
65				70.0	70.0	72.0	63.0	54.0	50.0	46.0	41.2	36.4	30.8
70				63.0	64.0	66.0	60.0	50.0	47.0	43.4	39.0	36.0	30.8
75				50.0	58.0	61.0	57.0	46.0	43.0	40.4	36.8	34.4	30.8
80					53.0	55.0	54.0	42.8	39.6	37.6	34.8	32.6	30.4
85					49.0	51.0	51.0	40.2	37.2	35.2	33.0	31.0	29.2
90					39.2	46.0	48.0	37.6	34.6	32.8	31.2	29.4	28.0
95						42.4	44.0	35.2	32.4	30.8	29.4	28.0	26.8
100						38.2	40.8	33.2	30.4	28.8	27.8	26.4	25.6
105							37.6	31.4	28.8	27.2	26.4	24.8	24.4
110							34.8	29.6	27.0	25.6	24.8	23.0	23.2
115							30.4	28.0	25.2	23.8	23.0	21.4	22.0
120								26.6	23.2	21.8	21.2	20.4	20.8
125								25.2	21.4	20.0	19.4	19.4	19.4
130								24.4	20.2	19.0	18.4	18.4	18.0
135									19.2	18.0	17.4	17.4	17.2
140									18.2	17.0	16.4	16.6	16.4
145									17.2	16.0	15.6	15.8	15.6
150									12.8	15.4	14.8	15.0	15.0
155										14.8	14.0	14.2	14.2
160										14.4	13.2	13.4	13.6
165											12.6	12.8	13.0
170											11.8	12.2	12.4
175											11.4	11.6	11.8
180												11.0	11.2
185												10.6	10.6
190												9.6	10.2
195													9.6
200													9.2

* Over the rear with special equipment
 "Loads greater than 297,000 lb. can only be lifted with additional equipment"
 "Loads greater than 335,000 lb. can only be lifted with special equipment"

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STERLING CRANE





load charts

 **44-223 ft.**
 (13.3-68 m)
  **112,400 lbs.**
 (51,000 kg)
  **100%**
 26'-7" spread
  **360°**



Pounds (thousands)

Feet	43.7'	59.1'	74.3'	89.3'	104.2'	119.1'	133.4'	148.8'	164.0'	179.0'	193.9'	208.7'	223.1'
10	336.0	332.0	312.0	244.0									
15	262.0	260.0	258.0	242.0	185.0								
20	210.0	211.0	208.0	210.0	182.0	144.0	106.0						
25	176.0	177.0	176.0	175.0	166.0	140.0	106.0	86.0					
30	149.0	150.0	150.0	148.0	150.0	129.0	105.0	86.0	69.0	55.0	45.0		
35		132.0	130.0	127.0	124.0	118.0	96.0	86.0	69.0	55.0	45.0	36.4	
40		114.0	111.0	110.0	103.0	102.0	88.0	82.0	69.0	55.0	45.0	36.4	30.8
45		98.0	95.0	94.0	90.0	88.0	81.0	75.0	68.0	55.0	45.0	36.4	30.8
50			83.0	82.0	81.0	76.0	76.0	70.0	63.0	55.0	45.0	36.4	30.8
55			72.0	71.0	72.0	67.0	68.0	64.0	59.0	52.0	45.0	36.4	30.8
60				62.0	64.0	62.0	60.0	57.0	54.0	49.0	44.0	36.4	30.8
65				57.0	56.0	58.0	54.0	50.0	49.0	46.0	41.2	36.4	30.8
70				51.0	50.0	52.0	49.0	45.0	43.8	43.2	39.0	36.0	30.8
75				46.0	45.0	47.0	44.0	40.8	39.6	39.0	36.8	34.4	30.8
80					41.6	42.0	40.0	37.0	35.8	35.4	34.8	32.6	30.4
85					39.2	38.2	36.0	34.2	32.4	32.0	32.0	31.0	29.2
90					35.8	34.6	32.6	32.8	29.4	29.2	29.2	29.4	28.0
95						31.4	29.4	31.4	26.8	26.6	26.6	27.4	26.8
100						28.8	26.8	28.6	24.4	24.4	24.4	25.0	25.6
105							25.2	26.0	22.2	22.8	22.2	23.0	23.6
110							24.2	23.8	20.0	21.2	20.4	21.2	21.8
115							23.4	21.8	18.4	20.2	19.0	19.4	20.2
120								20.0	17.8	19.4	18.0	18.6	18.6
125								18.4	17.0	18.4	17.2	17.6	17.2
130								16.8	16.2	17.8	16.4	16.6	15.8
135									15.6	16.8	15.8	15.8	14.6
140									15.0	15.4	15.0	14.8	13.4
145										14.4	14.2	13.6	12.4
150										13.2	13.2	12.6	11.2
155										12.2	12.2	11.4	10.2
160										11.4	11.2	10.6	9.2
165											10.6	9.6	8.4
170											9.8	8.8	7.6
175											9.2	8.0	6.8
180												7.2	6.0
185												6.6	5.2
190												6.0	4.6
195													4.0
200													3.4

 **44-223 ft.**
 (13.3-68 m)
  **90,300 lbs.**
 (41,000 kg)
  **100%**
 26'-7" spread
  **360°**



Pounds (thousands)

Feet	43.7'	59.1'	74.3'	89.3'	104.2'	119.1'	133.4'	148.8'	164.0'	179.0'	193.9'	208.7'	223.1'
10	332.0	328.0	312.0	244.0									
15	256.0	256.0	254.0	242.0	185.0								
20	207.0	208.0	206.0	206.0	182.0	144.0	106.0						
25	172.0	173.0	173.0	171.0	166.0	140.0	106.0	86.0					
30	146.0	149.0	146.0	138.0	131.0	128.0	105.0	86.0	69.0	55.0	45.0		
35		124.0	117.0	114.0	110.0	105.0	96.0	86.0	69.0	55.0	45.0	36.4	
40		102.0	101.0	95.0	94.0	88.0	87.0	82.0	69.0	55.0	45.0	36.4	30.8
45		84.0	85.0	81.0	80.0	76.0	75.0	71.0	68.0	55.0	45.0	36.4	30.8
50			72.0	72.0	70.0	70.0	65.0	61.0	59.0	55.0	45.0	36.4	30.8
55			64.0	64.0	61.0	62.0	57.0	54.0	52.0	51.0	45.0	36.4	30.8
60				55.0	56.0	55.0	51.0	47.0	46.0	45.0	44.0	36.4	30.8
65				49.0	51.0	49.0	45.0	42.0	40.6	40.0	39.6	36.4	30.8
70				43.6	45.0	44.0	40.6	39.8	36.2	35.6	35.4	36.0	30.8
75				38.4	40.6	39.4	36.4	37.6	32.4	32.0	31.8	32.4	30.8
80					36.6	35.4	33.0	34.0	29.0	29.4	29.2	30.2	29.8
85					33.0	31.6	30.0	31.0	26.4	28.2	27.8	28.6	27.0
90					29.8	28.6	28.6	28.4	25.0	27.0	26.2	26.6	24.6
95						25.8	27.4	25.6	23.2	25.6	24.6	24.4	22.4
100						23.4	25.2	23.2	21.2	24.0	23.0	22.4	20.4
105							22.8	21.0	20.4	22.2	20.8	20.6	18.6
110							21.0	19.0	19.4	20.4	19.8	18.8	17.0
115							19.2	17.2	18.4	18.6	18.4	17.4	15.6
120								16.0	17.8	17.0	17.0	16.0	14.2
125								15.2	17.0	15.8	16.0	14.6	13.0
130								14.6	15.8	15.0	14.6	13.4	11.8
135									14.6	14.2	13.4	12.2	10.6
140									13.4	13.0	12.2	11.2	9.6
145										12.0	11.2	10.0	8.8
150										11.0	10.2	9.0	7.8
155										10.2	9.2	8.2	7.0
160										9.4	8.4	7.4	6.0
165											7.6	6.6	5.2
170											7.0	5.8	4.6
175											6.2	5.2	3.8
180												4.4	3.2
185												3.8	
190												3.2	
195													
200													

Loads greater than 297,000 lb. can only be lifted with additional equipment
 Loads greater than 335,000 lb. can only be lifted with special equipment

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STERLING CRANE

load charts


44-223 ft.
(13.3-68 m)


46,200 lbs.
(21,000 kg)


100%
26'-7" spread


360°



Pounds (thousands)

Feet	43.7'	59.1'	74.3'	89.3'	104.2'	119.1'	133.4'	148.8'	164.0'	179.0'	193.9'	208.7'	223.1'
10	320.0	318.0	312.0	244.0									
15	248.0	248.0	246.0	242.0	185.0								
20	199.0	200.0	187.0	175.0	158.0	144.0	106.0						
25	154.0	148.0	138.0	128.0	123.0	113.0	106.0	86.0					
30	114.0	111.0	105.0	103.0	96.0	94.0	87.0	81.0	69.0	55.0	45.0		
35		90.0	87.0	83.0	82.0	77.0	71.0	66.0	63.0	55.0	45.0	36.4	
40		72.0	72.0	68.0	68.0	64.0	59.0	59.0	52.0	51.0	45.0	36.4	30.8
45		58.0	60.0	61.0	58.0	54.0	50.0	51.0	43.8	43.0	42.0	36.4	30.8
50			50.0	52.0	50.0	47.0	45.0	43.4	39.2	40.6	39.6	36.0	30.8
55			45.0	46.0	43.2	40.2	41.2	37.4	36.8	37.4	36.6	34.0	30.8
60				39.2	37.8	36.0	36.0	32.6	34.6	34.0	32.2	29.8	27.4
65				33.8	33.2	33.8	31.8	30.6	31.4	30.2	28.4	26.2	24.0
70				29.4	29.0	30.6	28.2	29.0	28.4	26.8	25.2	23.2	21.0
75				22.8	25.4	27.4	25.0	27.0	25.4	24.0	22.4	20.4	18.4
80					22.2	24.2	23.2	24.4	23.0	21.4	20.0	18.2	16.2
85					22.0	21.4	20.8	22.0	20.6	19.2	17.8	16.0	14.2
90					19.6	19.0	19.4	20.0	18.6	17.2	16.0	14.2	12.4
95						17.4	18.4	18.0	16.8	15.6	14.2	12.6	10.8
100						16.6	16.4	16.2	15.2	14.0	12.6	11.0	9.2
105							14.8	14.6	13.8	12.6	11.2	9.8	8.0
110							13.4	13.0	12.4	11.2	10.0	8.4	6.8
115							12.0	11.6	11.0	10.0	8.8	7.4	5.6
120								10.4	9.8	9.0	7.8	6.4	4.6
125								9.4	8.6	8.0	6.8	5.4	3.8
130								8.4	7.6	7.0	6.0	4.6	2.8
135									6.8	6.0	5.2	3.8	
140									6.0	5.2	4.4	3.0	
145										4.4	3.6		
150										3.6	2.8		
155										3.0			
160													


44-223 ft.
(13.3-68 m)


0


100%
26'-7" spread


360°



Pounds (thousands)

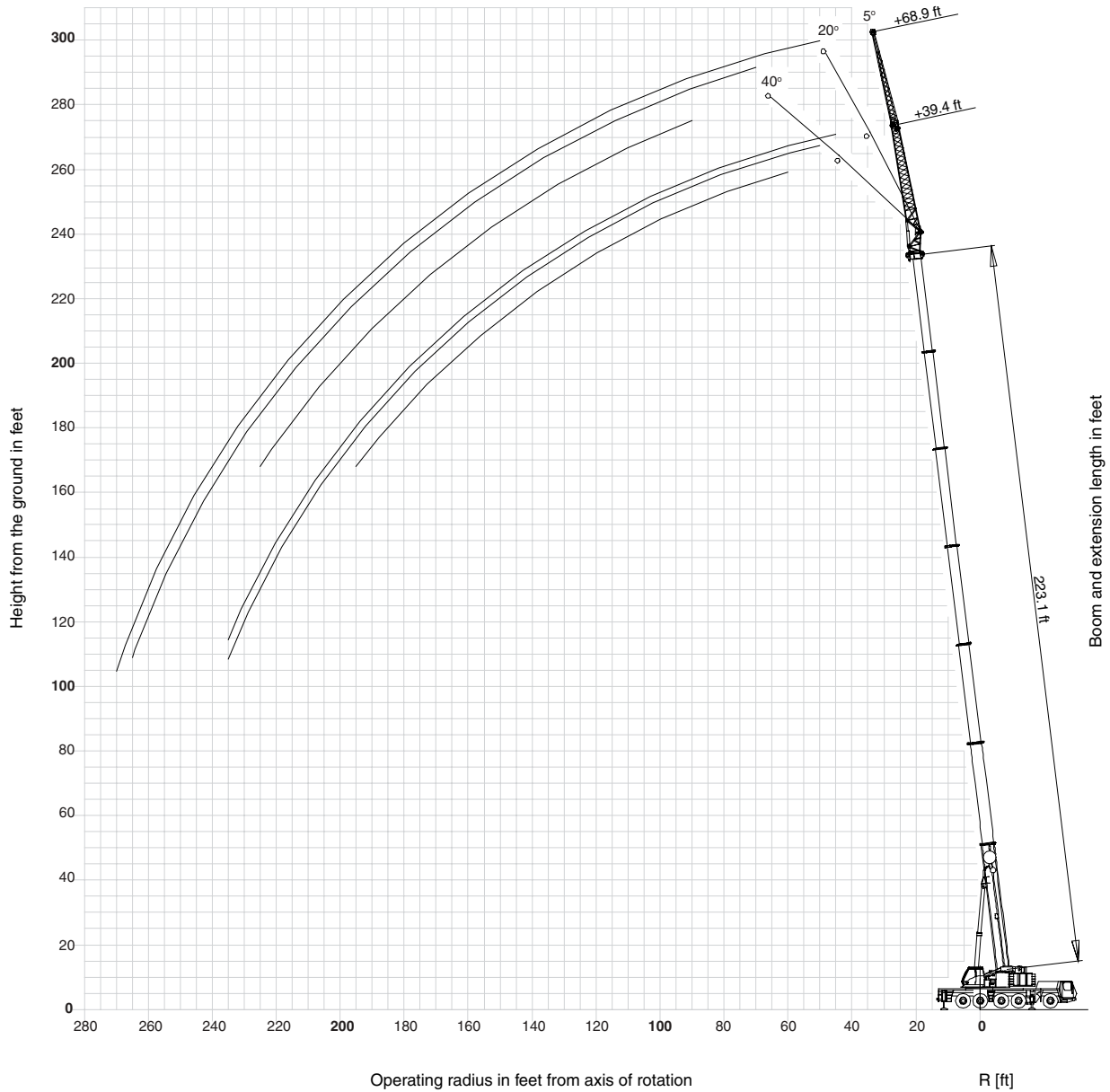
Feet	43.7'	59.1'	74.3'	89.3'	104.2'	119.1'	133.4'	148.8'	164.0'	177.6	192.6
10	308.0	308.0	286.0	232.0							
15	222.0	185.0	160.0	144.0	125.0						
20	122.0	114.0	105.0	100.0	90.0	79.0	76.0				
25	81.0	80.0	77.0	72.0	65.0	63.0	57.0	56.0			
30	56.0	58.0	57.0	54.0	53.0	49.0	48.0	45.0	41.2	37.6	34.4
35		44.0	44.0	44.0	42.4	41.2	38.8	36.4	33.4	30.6	28.0
40		34.2	35.6	36.0	35.0	33.8	32.0	30.0	27.6	25.2	22.8
45		27.4	28.8	29.6	29.0	28.0	26.6	25.0	23.0	20.8	18.8
50			23.8	24.8	24.2	23.6	22.4	21.0	19.2	17.2	15.4
55			19.8	20.8	20.4	20.0	19.0	17.8	16.2	14.4	12.8
60				17.6	17.4	17.0	16.2	15.0	13.6	12.0	10.4
65				15.0	14.8	14.6	13.8	12.8	11.4	9.8	8.4
70				12.6	12.6	12.4	11.8	10.8	9.4	8.0	6.8
75				5.8	10.8	10.6	10.0	9.2	7.8	6.6	5.2
80					9.2	9.0	8.4	7.6	6.4	5.2	4.0
85					7.6	7.8	7.2	6.4	5.2	4.0	2.8
90					6.2	6.6	6.0	5.2	4.0	2.8	
95						5.4	4.8	4.2	3.0		
100						4.4	4.0	3.2			
105							3.2				
110											
115											
120											

Loads greater than 297,000 lb. can only be lifted with additional equipment
 Loads greater than 335,000 lb. can only be lifted with special equipment

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working range

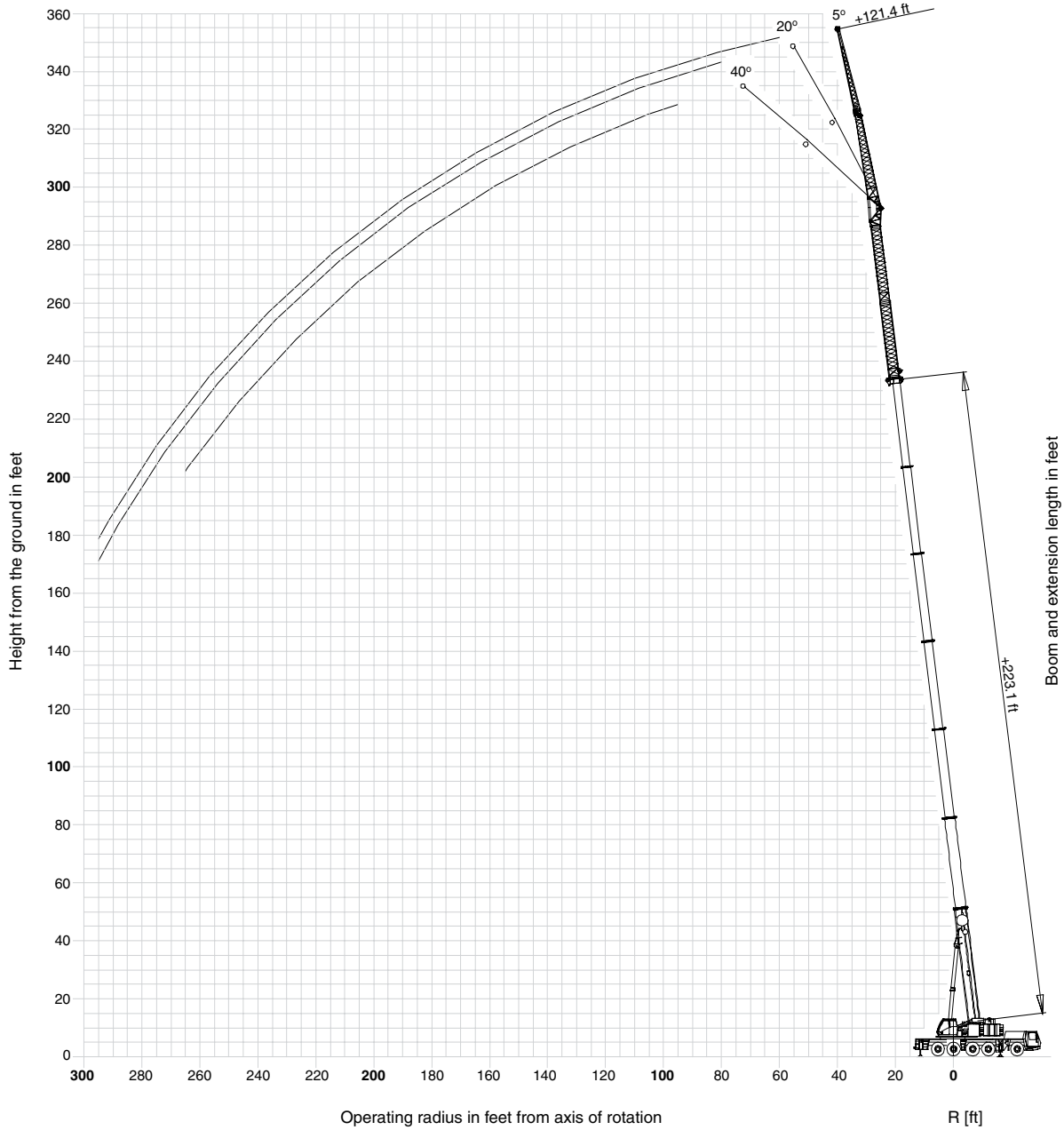
223' Main Boom with 39.4 ft. and 68.9 ft. Swingaway



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working range

223' Main Boom, 68.9' Swingaway and 2 x 26 ft. Inserts



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STERLING CRANE

load charts



223 ft.
(68 m)



39.4-68.9-95.1-121.4 lbs.
(12-21-29-37 m)



169,700 lbs.
(77,000 kg)



100%
26'-7" spread



360°



Pounds (thousands)

Radius	223' + 39.4'			223' + 68.9'			223' + 95.1'			223' + 121.4'		
	5°	5°-20°	20°-40°	5°	5°-20°	20°-40°	5°	5°-20°	20°-40°	5°	5°-20°	20°-40°
	x 1000 lb.											
45	16.4											
50	16.4	16.4		10.0								
55	16.4	16.4		10.0			7.4					
60	16.4	16.4	16.4	10.0			7.4			5.0		
65	16.4	16.4	16.4	10.0			7.4			5.0		
70	16.4	16.4	16.4	10.0	10.0		7.4			5.0		
75	16.4	16.4	16.4	10.0	10.0		7.4	7.4		5.0		
80	16.4	16.4	16.4	10.0	10.0		7.4	7.4		5.0	5.0	
85	16.4	16.4	16.0	10.0	10.0		7.4	7.4		5.0	5.0	
90	16.4	16.2	15.6	10.0	10.0	9.4	7.4	7.4		5.0	5.0	
95	16.4	15.8	15.2	10.0	10.0	9.4	7.4	7.4	7.2	5.0	5.0	4.0
100	16.0	15.2	14.8	10.0	10.0	9.2	7.4	7.4	7.2	5.0	5.0	4.0
105	15.6	14.8	14.4	10.0	10.0	9.2	7.4	7.4	7.2	5.0	5.0	4.0
110	15.0	14.4	14.0	10.0	10.0	9.2	7.4	7.4	7.2	5.0	5.0	4.0
115	14.4	13.8	13.6	10.0	10.0	9.0	7.4	7.4	7.2	5.0	5.0	4.0
120	14.0	13.4	13.2	10.0	10.0	9.0	7.4	7.4	7.2	5.0	5.0	4.0
125	13.6	13.0	12.8	10.0	10.0	9.0	7.4	7.4	7.2	5.0	5.0	4.0
130	13.2	12.6	12.4	10.0	9.8	8.8	7.4	7.4	7.2	5.0	5.0	4.0
135	12.8	12.2	12.2	10.0	9.6	8.8	7.4	7.4	7.2	5.0	5.0	4.0
140	12.4	12.0	11.8	9.8	9.4	8.8	7.4	7.2	7.0	5.0	5.0	4.0
145	12.0	11.6	11.4	9.4	9.0	8.6	7.4	7.2	7.0	5.0	5.0	4.0
150	11.6	11.2	11.2	9.2	8.8	8.6	7.4	7.0	6.8	5.0	4.8	4.0
155	11.2	11.0	11.0	9.0	8.6	8.4	7.2	6.8	6.6	5.0	4.8	4.0
160	11.0	10.6	10.6	8.6	8.4	8.2	7.0	6.6	6.6	5.0	4.8	4.0
165	10.6	10.4	10.4	8.4	8.2	8.0	6.8	6.6	6.4	4.8	4.8	4.0
170	10.2	10.2	10.2	8.2	8.0	8.0	6.6	6.4	6.2	4.8	4.6	4.0
175	9.8	9.8	10.0	8.0	7.8	7.8	6.4	6.2	6.2	4.8	4.6	4.0
180	9.6	9.6	9.6	7.8	7.6	7.6	6.2	6.0	6.0	4.6	4.6	4.0
185	9.2	9.2	9.4	7.6	7.4	7.4	6.0	5.8	5.8	4.6	4.4	4.0
190	8.8	8.8	9.0	7.4	7.2	7.2	5.8	5.6	5.8	4.4	4.4	4.0
195	8.2	8.4	8.6	7.2	7.0	7.0	5.6	5.6	5.6	4.2	4.2	4.0
200	8.0	8.0		7.0	6.8	6.8	5.4	5.4	5.4	4.2	4.0	4.0
205	7.6	7.8		6.8	6.6	6.8	5.2	5.2	5.4	4.0	4.0	4.0
210	7.2	7.4		6.6	6.4	6.6	5.0	5.0	5.2	3.8	3.8	4.0
215	6.8	7.0		6.4	6.4	6.4	5.0	5.0	5.0	3.6	3.8	3.8
220	6.4	6.6		6.2	6.2	6.4	4.8	4.8	5.0	3.6	3.6	3.8
225	6.2	6.2		6.0	6.0	6.2	4.6	4.6	4.8	3.4	3.4	3.6
230	5.8	6.0		5.8	6.0		4.6	4.6	4.6	3.2	3.4	3.6
235	5.4	5.6		5.6	5.8		4.4	4.4	4.6	3.2	3.2	3.4
240				5.2	5.6		4.2	4.2	4.4	3.0	3.2	3.2
245				5.0	5.2		4.2	4.2	4.2	3.0	3.0	3.2
250				4.8	5.0		4.0	4.0		2.8	2.8	3.0
255				4.4	4.6		3.8	4.0		2.8	2.8	3.0
260				4.2	4.4		3.8	3.8		2.6	2.6	2.8
265				4.0	4.0		3.6	3.6		2.6	2.6	2.8
270				3.2			3.4	3.6		2.4	2.4	
275							3.2	3.4		2.4	2.4	
280							3.0	3.0		2.2	2.2	
285							2.6	2.6		2.2	2.2	
290							2.2	2.2		2.0	2.2	
295										2.0	2.0	

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STERLING CRANE

load charts



223 ft.
(68 m)



39.4-68.9-95.1-121.4 lbs.
(12-21-29-37 m)



112,400 lbs.
(51,000 kg)



100%
26'-7" spread



360°



Pounds (thousands)

Radius	223' + 39.4'			223' + 68.9'			223' + 95.1'			223' + 121.4'		
	5°	5°-20°	20°-40°	5°	5°-20°	20°-40°	5°	5°-20°	20°-40°	5°	5°-20°	20°-40°
	x 1000 lb.											
45	16.4											
50	16.4	16.4		10.0								
55	16.4	16.4		10.0			7.4					
60	16.4	16.4	16.4	10.0			7.4			5.0		
65	16.4	16.4	16.4	10.0			7.4			5.0		
70	16.4	16.4	16.4	10.0	10.0		7.4			5.0		
75	16.4	16.4	16.4	10.0	10.0		7.4	7.4		5.0		
80	16.4	16.4	16.4	10.0	10.0		7.4	7.4		5.0	5.0	
85	16.4	16.4	16.0	10.0	10.0		7.4	7.4		5.0	5.0	
90	16.4	16.2	15.6	10.0	10.0	9.4	7.4	7.4		5.0	5.0	
95	16.4	15.8	15.2	10.0	10.0	9.4	7.4	7.4	7.2	5.0	5.0	4.0
100	16.0	15.2	14.8	10.0	10.0	9.2	7.4	7.4	7.2	5.0	5.0	4.0
105	15.6	14.8	14.4	10.0	10.0	9.2	7.4	7.4	7.2	5.0	5.0	4.0
110	15.0	14.4	14.0	10.0	10.0	9.2	7.4	7.4	7.2	5.0	5.0	4.0
115	14.4	13.8	13.6	10.0	10.0	9.0	7.4	7.4	7.2	5.0	5.0	4.0
120	14.0	13.4	13.2	10.0	10.0	9.0	7.4	7.4	7.2	5.0	5.0	4.0
125	13.6	13.0	12.8	10.0	10.0	9.0	7.4	7.4	7.2	5.0	5.0	4.0
130	13.2	12.6	12.4	10.0	9.8	8.8	7.4	7.4	7.2	5.0	5.0	4.0
135	12.8	12.2	12.2	10.0	9.6	8.8	7.4	7.4	7.2	5.0	5.0	4.0
140	12.4	12.0	11.8	9.8	9.4	8.8	7.4	7.2	7.0	5.0	5.0	4.0
145	12.0	11.6	11.4	9.4	9.0	8.6	7.4	7.2	7.0	5.0	5.0	4.0
150	11.2	11.2	11.2	9.2	8.8	8.6	7.4	7.0	6.8	5.0	4.8	4.0
155	10.2	10.2	10.8	9.0	8.6	8.4	7.2	6.8	6.6	5.0	4.8	4.0
160	9.4	9.4	10.0	8.6	8.4	8.2	7.0	6.6	6.6	5.0	4.8	4.0
165	8.6	8.6	9.2	8.4	8.2	8.0	6.8	6.6	6.4	4.8	4.8	4.0
170	7.8	7.8	8.4	8.2	8.0	8.0	6.6	6.4	6.2	4.8	4.6	4.0
175	7.0	7.0	7.6	8.0	7.8	7.8	6.4	6.2	6.2	4.8	4.6	4.0
180	6.4	6.4	6.8	7.2	7.2	7.6	6.2	6.0	6.0	4.6	4.6	4.0
185	5.6	5.6	6.0	6.6	6.6	7.4	6.0	5.8	5.8	4.6	4.4	4.0
190	5.0	5.0	5.4	6.0	6.0	6.8	5.8	5.6	5.8	4.4	4.4	4.0
195	4.4	4.4	4.8	5.4	5.4	6.2	5.4	5.4	5.6	4.2	4.2	4.0
200	3.8	3.8		4.8	4.8	5.6	4.8	4.8	5.4	4.2	4.0	4.0
205	3.2	3.2		4.4	4.4	5.0	4.2	4.2	5.0	4.0	4.0	4.0
210	2.6	2.6		3.8	3.8	4.4	3.8	3.8	4.4	3.6	3.6	4.0
215	2.2	2.2		3.2	3.2	3.8	3.2	3.2	4.0	3.2	3.2	3.8
220				2.8	2.8	3.4	2.8	2.8	3.4	2.6	2.6	3.4
225				2.2	2.2	2.8	2.4	2.4	3.0	2.2	2.2	3.0
230							2.0	2.0	2.6			2.4
235									2.2			2.0

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STERLING CRANE

load charts



223 ft.
(68 m)



39.4-68.9-95.1-121.4 lbs.
(12-21-29-37 m)



90,300 lbs.
(41,000 kg)



100%
26'-7" spread



360°



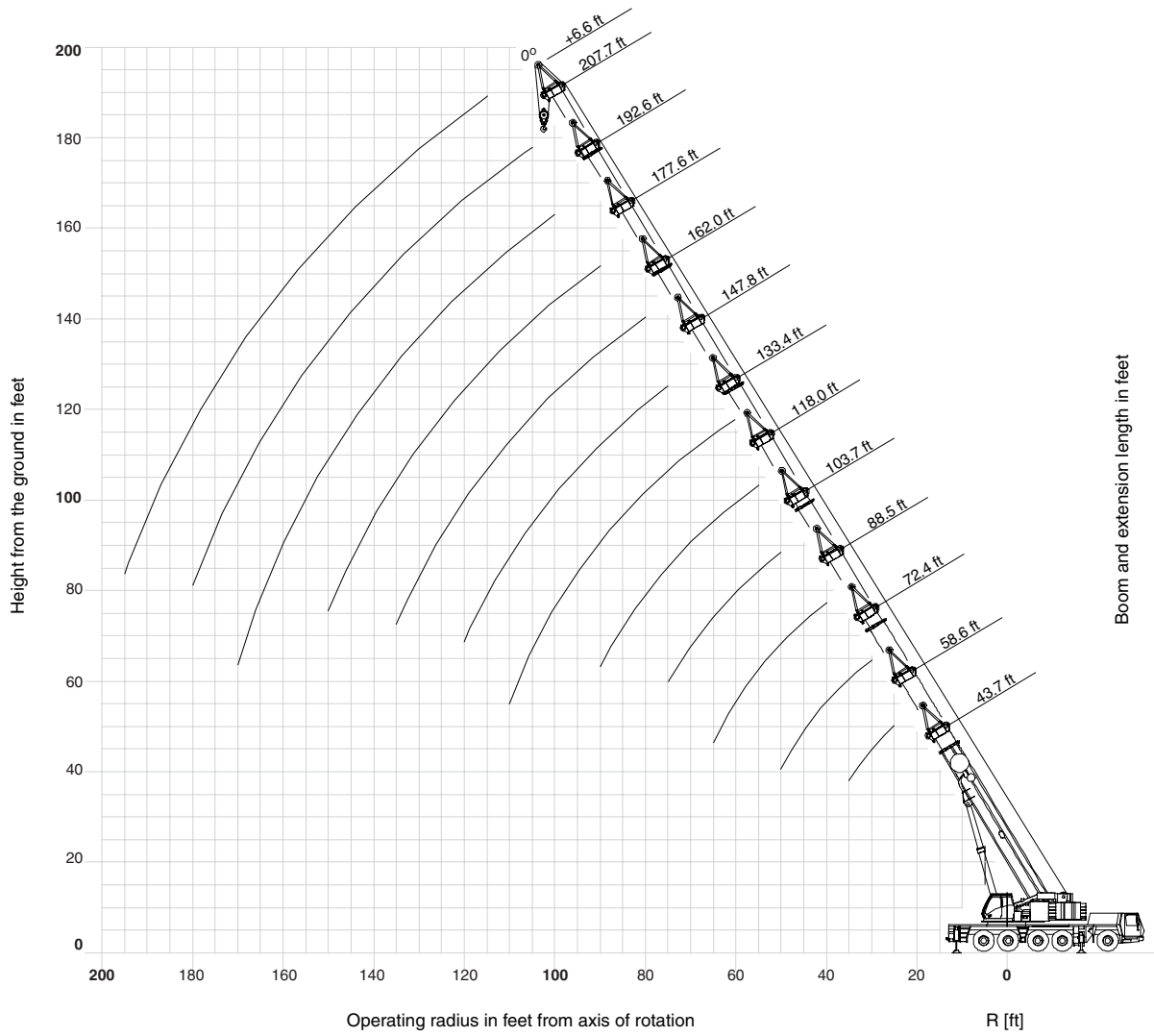
Pounds (thousands)

Radius	223' + 39.4'			223' + 68.9'			223' + 95.1'			223' + 121.4'		
	5°	5°-20°	20°-40°	5°	5°-20°	20°-40°	5°	5°-20°	20°-40°	5°	5°-20°	20°-40°
	x 1000 lb.											
45	16.4											
50	16.4	16.4		10.0								
55	16.4	16.4		10.0			7.4					
60	16.4	16.4	16.4	10.0			7.4			5.0		
65	16.4	16.4	16.4	10.0			7.4			5.0		
70	16.4	16.4	16.4	10.0	10.0		7.4			5.0		
75	16.4	16.4	16.4	10.0	10.0		7.4	7.4		5.0		
80	16.4	16.4	16.4	10.0	10.0	9.4	7.4	7.4		5.0	5.0	
85	16.4	16.4	16.0	10.0	10.0		7.4	7.4		5.0	5.0	
90	16.4	16.2	15.6	10.0	10.0	9.4	7.4	7.4		5.0	5.0	
95	16.4	15.8	15.2	10.0	10.0	9.4	7.4	7.4	7.2	5.0	5.0	4.0
100	16.0	15.2	14.8	10.0	10.0	9.2	7.4	7.4	7.2	5.0	5.0	4.0
105	15.6	14.8	14.4	10.0	10.0	9.2	7.4	7.4	7.2	5.0	5.0	4.0
110	15.0	14.4	14.0	10.0	10.0	9.2	7.4	7.4	7.2	5.0	5.0	4.0
115	14.4	13.8	13.6	10.0	10.0	9.0	7.4	7.4	7.2	5.0	5.0	4.0
120	13.8	13.4	13.2	10.0	10.0	9.0	7.4	7.4	7.2	5.0	5.0	4.0
125	12.6	12.6	12.8	10.0	10.0	9.0	7.4	7.4	7.2	5.0	5.0	4.0
130	11.6	11.6	12.4	10.0	9.8	8.8	7.4	7.4	7.2	5.0	5.0	4.0
135	10.4	10.4	11.2	10.0	9.6	8.8	7.4	7.4	7.2	5.0	5.0	4.0
140	9.4	9.4	10.2	9.8	9.4	8.8	7.4	7.2	7.0	5.0	5.0	4.0
145	8.6	8.6	9.2	9.4	9.0	8.6	7.4	7.2	7.0	5.0	5.0	4.0
150	7.6	7.6	8.4	8.6	8.6	8.6	7.4	7.0	6.8	5.0	4.8	4.0
155	6.8	6.8	7.4	7.8	7.8	8.4	7.2	6.8	6.6	5.0	4.8	4.0
160	6.0	6.0	6.6	7.0	7.0	8.2	6.8	6.6	6.6	5.0	4.8	4.0
165	5.4	5.4	6.0	6.2	6.2	7.4	6.2	6.2	6.4	4.8	4.8	4.0
170	4.8	4.8	5.2	5.6	5.6	6.6	5.4	5.4	6.2	4.8	4.6	4.0
175	4.0	4.0	4.6	5.0	5.0	6.0	4.8	4.8	6.0	4.6	4.6	4.0
180	3.4	3.4	4.0	4.4	4.4	5.4	4.2	4.2	5.2	4.0	4.0	4.0
185	2.8	2.8	3.4	3.8	3.8	4.6	3.6	3.6	4.6	3.6	3.6	4.0
190	2.4	2.4	2.8	3.2	3.2	4.0	3.2	3.2	4.0	3.0	3.0	4.0
195			2.2	2.8	2.8	3.6	2.6	2.6	3.6	2.6	2.6	3.4
200				2.2	2.2	3.0	2.2	2.2	3.0	2.0	2.0	2.8
205						2.4			2.4			2.4
210						2.0			2.0			2.0

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working range

Heavy Duty Jib - 6.6 ft.

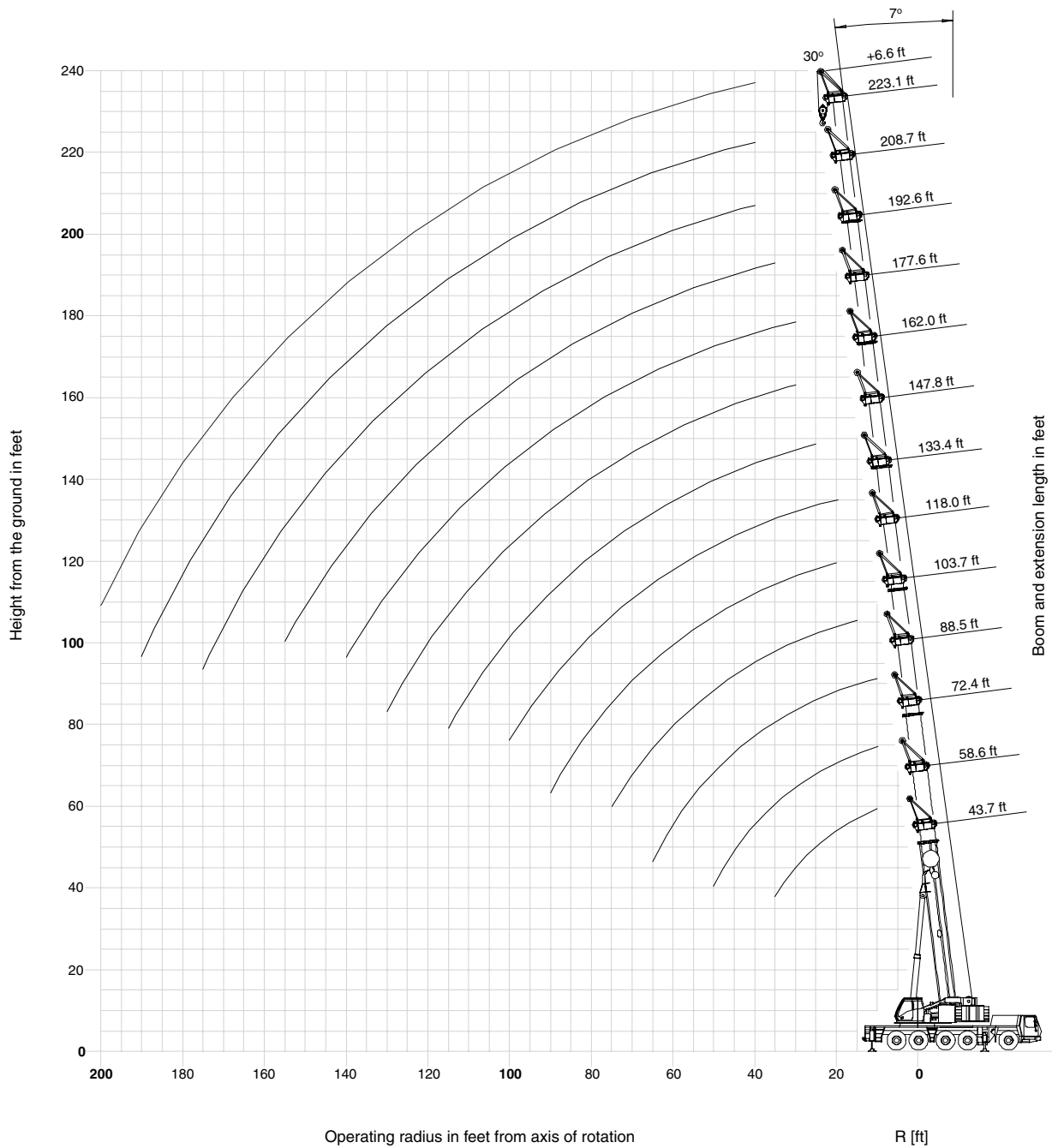


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STERLING CRANE

working range

Heavy Duty Jib – 6.6 ft.



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STERLING CRANE

load charts


44-223 ft.
(13.3-68 m)


6.6 ft.


169,700 lbs.
(77,000 kg)


100%
26'-7" spread


360°



Pounds (thousands)

Radius	43.7' + 6.6'		88.5' + 6.6'		133.4' + 6.6'		177.6' + 6.6'		223' + 6.6'	
	0°	30°	0°	30°	0°	30°	0°	30°	0°	30°
10		41.8								
15		41.8		41.8						
20		41.8		41.8						
25	41.8	41.8		41.8		41.8				
30	41.8	41.8		41.8		41.8				
35	41.8	41.8		41.8		41.8		41.8		
40				41.8		41.8		41.8		25.0
45				41.8		41.8		41.8		25.0
50			41.8	41.8		41.8		41.8		25.0
55			41.8	41.8		41.8		41.8		25.0
60			41.8	41.8		41.8		41.8		25.0
65			41.8	41.8		41.8		41.8		25.0
70			41.8	41.8		41.8		41.0		25.0
75			41.8	41.8	41.8	41.8		38.8		25.0
80					41.8	41.8		36.6		25.0
85					41.8	41.8		34.4		25.0
90					41.8	41.8		32.4		25.0
95					41.8	41.8		30.4		25.0
100					41.0	41.4	22.8	28.6		24.2
105					37.8	38.2	21.0	26.8		22.8
110					34.8	35.2	20.0	25.2		21.4
115					32.2	32.6	19.2	23.8		20.0
120							18.4	21.6		19.2
125							17.6	19.8		18.2
130							16.8	18.6		17.4
135							16.2	17.6		16.6
140							15.6	16.6		15.8
145							15.0	15.8		15.0
150							14.4	15.0		14.4
155							14.0	14.2		13.8
160							13.4			13.2
165							13.0			12.6
170							12.2			12.0
175										11.4
180										10.8
185										10.4
190										9.8
195										9.4
200										8.8

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specifications

Superstructure – North American Version

Boom

44 ft. - 223 ft. (13.3 m - 68 m) 7 section, full power Mega Form boom with **Twin Lock Pinning**.
Maximum tip height: 233 ft. (71 m)

Boom Nose

Eight nylatron sheaves, mounted on heavy duty tapered roller bearings with removable pin-type rope guards. Quick reeve boom nose. Removable auxiliary boom nose with removable pin type rope guard.

Boom Elevation

Single lift cylinder with safety valve provides boom angle from -1.5° to +83°.

Hydraulic Offsettable Lattice Extension

39 ft. – 69 ft. (12 - 21 m) bi-fold lattice swingaway extension, hydraulically offsettable and luffing under load, 5°- 40°. Maximum tip height: 302 ft (92 m)

Lattice Inserts

2 x 26 ft. (8 m) inserts for use with lattice swingaway extension to increase length to 95 ft. (29 m) or 121 ft. (37 m)
Maximum tip height: 354 ft (107.7 m)

Load Moment & Anti-Two Block System

Load moment and anti-two block system with audio/visual warning and control lever lockout provides electronic display of boom angle, length, radius, tip height, relative load moment, maximum permissible load, load indication and warning of impending two-block condition.

Cab

All aluminum constructed cab with acoustical lining, hydraulic tilted to 20°. Includes tinted safety glass, adjustable operator's seat with hydraulic suspension, opening windows at side and rear, hinged windshield with wiper, sun visor and window shade. Other features include hot water heater/defroster, armrest integrated crane controls and ergonomically arranged instrumentation.

Swing

3 planetary gear boxes with fixed displacement axial piston motors. Infinitely variable to 1.3 rpm. Free swing or hydrostatically engaged brake controlled by swing lever. Swing brake selected by foot operated switch.

Counterweight

169,700 lbs. (77 t) consisting of various sections with hydraulic installation/removal system controlled from the superstructure cab.

Engine

Cummins QSB6.7, 6 cylinder
Horsepower: 220 bhp (164 kW) at 2200 rpm
Torque: 700 ft./lb. (949 Nm) at 1500 rpm
Off-road: EPA/CARB/EUROMOT (III)

Fuel Tank Capacity

61 gal. (230 l)

Electrical System

3 phase alternator: 28V/80A
2 batteries: 12V/170Ah

Hydraulic System

3 separate circuits, 1 axial piston variable displacement pump (load sensing) with electronic power limiting control for crane functions and 2 gear pumps for swing and outrigger functions. Thermostatically controlled oil coolers keep oil at optimum operating temperature.
Hydraulic tank capacity: 242 gal. (915 l)

Hoist

Main and auxiliary hoist are powered by axial piston motor with planetary gear and brake. "Thumb-thumper" hoist drum rotation indicator alerts operator of hoist movement.

	Main	Auxiliary
Rope length:	951 ft. (290 m)	951 ft. (290 m)
Rope diameter:	22 mm	22 mm
Line speed:	410 ft./min. (125 m/min)	410 ft./min. (125 m/min)
Line pull:	21,020 lbs. 93.5 kN)	21,020 lbs. (93.5 kN)

*Optional Equipment

- *Work lights, mounted on boom base section
- *Boom mounted aircraft warning light
- *Timer for diesel heater
- *Radio/CD player for superstructure cab
- *Stainless steel exhaust system with spark arrestor
- *Air conditioning
- *Hook blocks/headache ball
- *Engine independent diesel cab heater, with engine pre-heater
- *Additional cab mounted work light
- *Strobe light
- *Working range limiter
- *Data logger

*Denotes optional equipment

specifications

Carrier – North American Version

Chassis

Box type, torsion resistant frame is fabricated from high strength steel.

Outrigger System

Four hydraulic two stage outrigger beams with vertical cylinders and outrigger pads, 23.6" (600 mm) square . Outrigger can be set in 5 positions:

Full	- 26.6' (8.1 m)
Partial	- 22.4' (6.8 m)
Partial	- 18.4' (5.6 m)
Partial	- 14.4' (4.4 m)
Retracted	- 9.0' (2.7 m)

Independent horizontal and vertical movement controlled from each side of carrier and the superstructure cab. Electronic crane level indicators.

Transmission

Allison 6 speeds forward, 1 reverse
2 speed transfer case

Drive/Steer

10x8x10

Axles

1st axle line – steer
2nd axle line – steer/(optional drive)
3rd axle line – drive/steer (permanent drive with 10x6, disconnects for highway with 10x8)
4th axle line – drive/steer (connects for all wheel steer)
5th axle line – drive/steer
Drive axles with planetary hub reduction and center mounted gearing. Standard inter-axle and cross axle differential locks.

Suspension

Grove exclusive MEGATRAK suspension. Independent hydro-pneumatic system acting on all wheels with hydraulic lockout. Suspension can be raised 6.3" (160 mm) or lowered 4.7" (120 mm), both longitudinally and transversely. Features an automatic leveling system for highway travel.

Tires

10 tires, 16.00R25 (Vehicle width – 10.2' [3.1 m])

Steering

Dual circuit, hydraulic power assisted steering system. Transfer case mounted, ground driven emergency steering pump. Axles 1, 2, 3 and 5 steer on highway. Separate steering of the 4th and 5th axles for all wheel and crab steering, controlled by an electronic rocker switch.

Engine

Cummins QSX15, 6 cylinder
Horsepower: 535 bhp (399 kW) at 2100 rpm
Torque: 1873 ft./lb. (2539 Nm) at 1400 rpm
Off-road: EPA /CARB/EUROMOT (III)
Standard compression brake, disconnected when hydraulic transmission retarder is optioned

Fuel Tank Capacity

105 gallons (397 L).

Electrical System

3 phase alternator: 28V/80A
2 batteries: 12V/170Ah

Brakes

Service brakes: pneumatic dual circuit acting on all wheels.
Parking brake: pneumatically operated spring loaded brake acting on axle lines 2, 3, 4 and 5.
Air dryer.

Cab

Two-man, aluminum construction with the following features: safety glass, driver and passenger seats with hydraulic suspension, engine-dependent hot water heater, power windows, heated rear view mirrors, complete instrumentation and driving controls.

Electrical System

24V system with three phase alternator, 28V/100A
2 batteries, 12V/170 Ah

Maximum Speed

53 mph (85 kph)

Gradeability (Theoretical)

50% - 14.00 tires
45% - 16.00/20.5 tires

Miscellaneous Standard Equipment

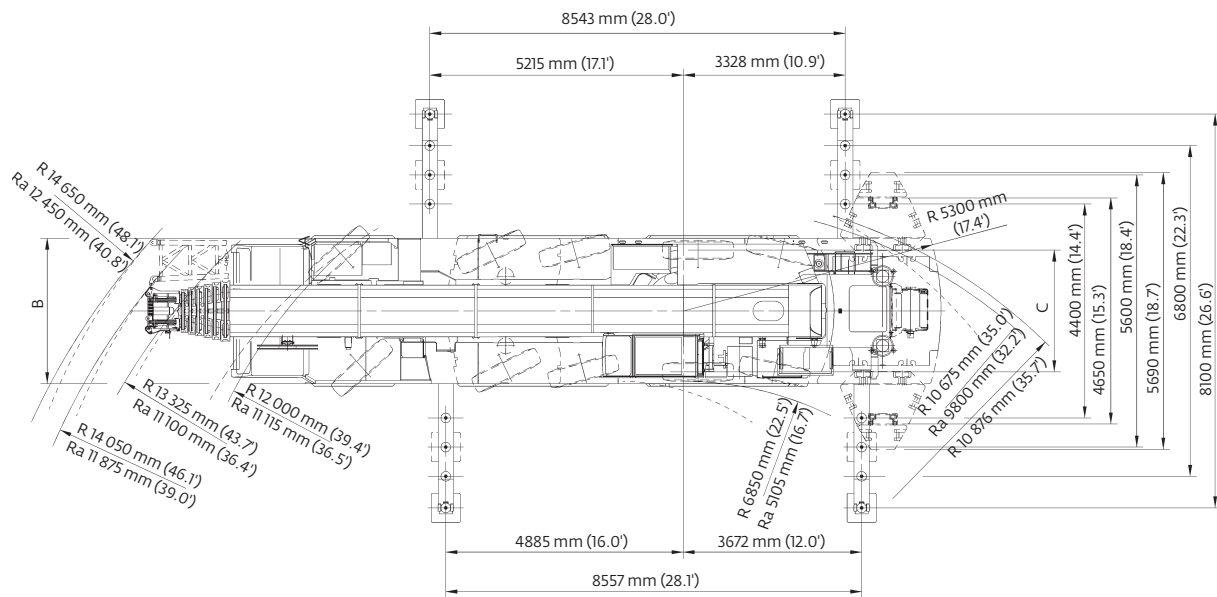
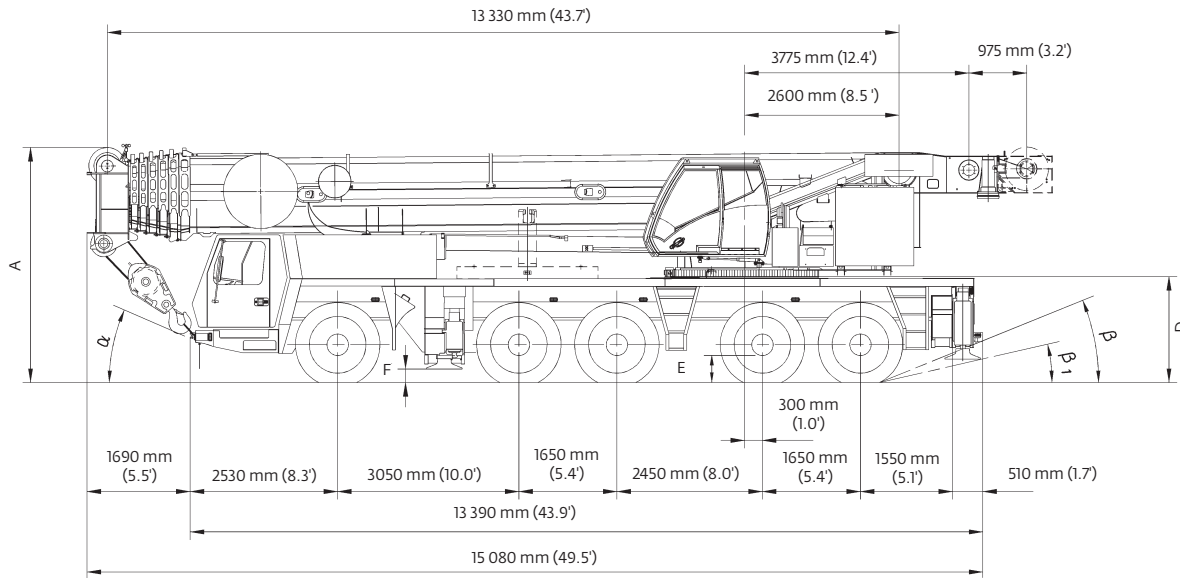
Work light; tool kit; fire extinguishers; auxiliary boom nose; radio/CD player in carrier cab, heated rear view mirrors, wind speed indicator.

*Optional Equipment

- *Timer for diesel heater
- *Stainless steel exhaust system with spark arrestor
- *Air conditioning
- *14.00R25 tires (vehicle width 9.8 ft.[3.0 m])
- *20.5R25 tires (vehicle width 10.2 ft.[3.1 m])
- *10x6x10 drive/steer
- *Transmission retarder (in lieu of engine compression brake)
- *Engine independent diesel cab heater, with engine pre-heater
- *Strobe light
- *Work lights for outriggers
- *Spare tire and wheel with carry bracket
- *Aluminum edging for decking
- *Rear mounted stowage box
- *Outrigger pad load indicator
- *Trailer hitch
- *Steel outrigger pads

*Denotes optional equipment

Dimensions North American version

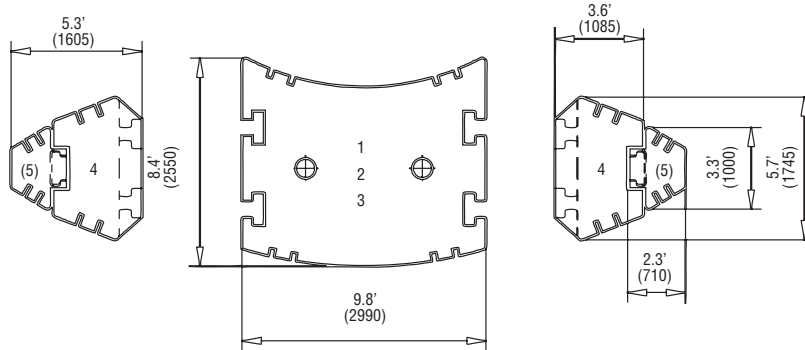
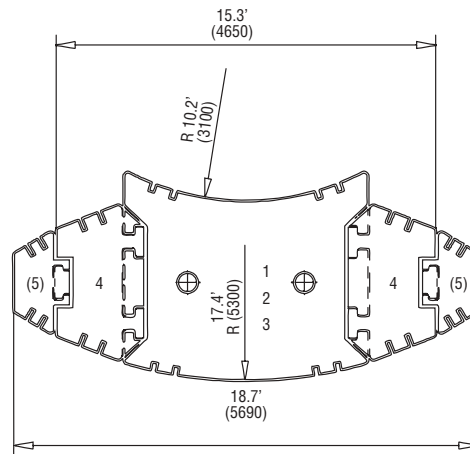
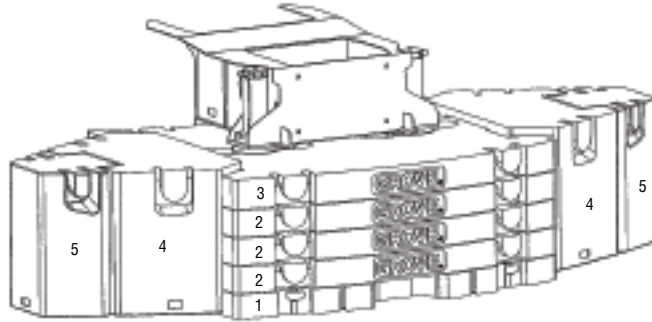


Tires	A	A _{130 mm (0.47)}	B	C	D	E	F	α	β	β_1
14.00 R25	3950 mm (13')	3820 mm (12.5')	2990 mm (9.8')	2570 mm (8.4')	1780 mm (5.8')	400 mm (1.3')	228 mm (0.7')	23°	22°	13°
16.00 R25	4000 mm (13.1')	3870 mm (12.7')	3000 mm (9.8')	2510 mm (8.2')	1830 mm (6.0')	450 mm (1.5')	258 mm (0.8')	25°	24°	15°
20.5 R25	4000 mm (13.1')	3870 mm (12.7')	3000 mm (9.8')	2530 mm (8.3')	1830 mm (6.0')	450 mm (1.5')	258 mm (0.8')	25°	24°	15°

Ra = Radius all wheels steered
*Lowered

STERLING CRANE

counterweight



Counterweight Configuration lb. (kg)

	1 (Baseplate)	2 (Stackable)	3 (Stackable)	4 (Wing)	5 (Wing)
	24,200 (11 000)	22,046 (10 000)	22,046 (10 000)	22,046 (10 000)	6,600 (3 000)
()	•				
()	•	•			
8 ()	•	X			
9 ()	•	X			
()	•	X	•		
(7)	•	X	•	X	
9 7 (77)	•	X	•	X	X