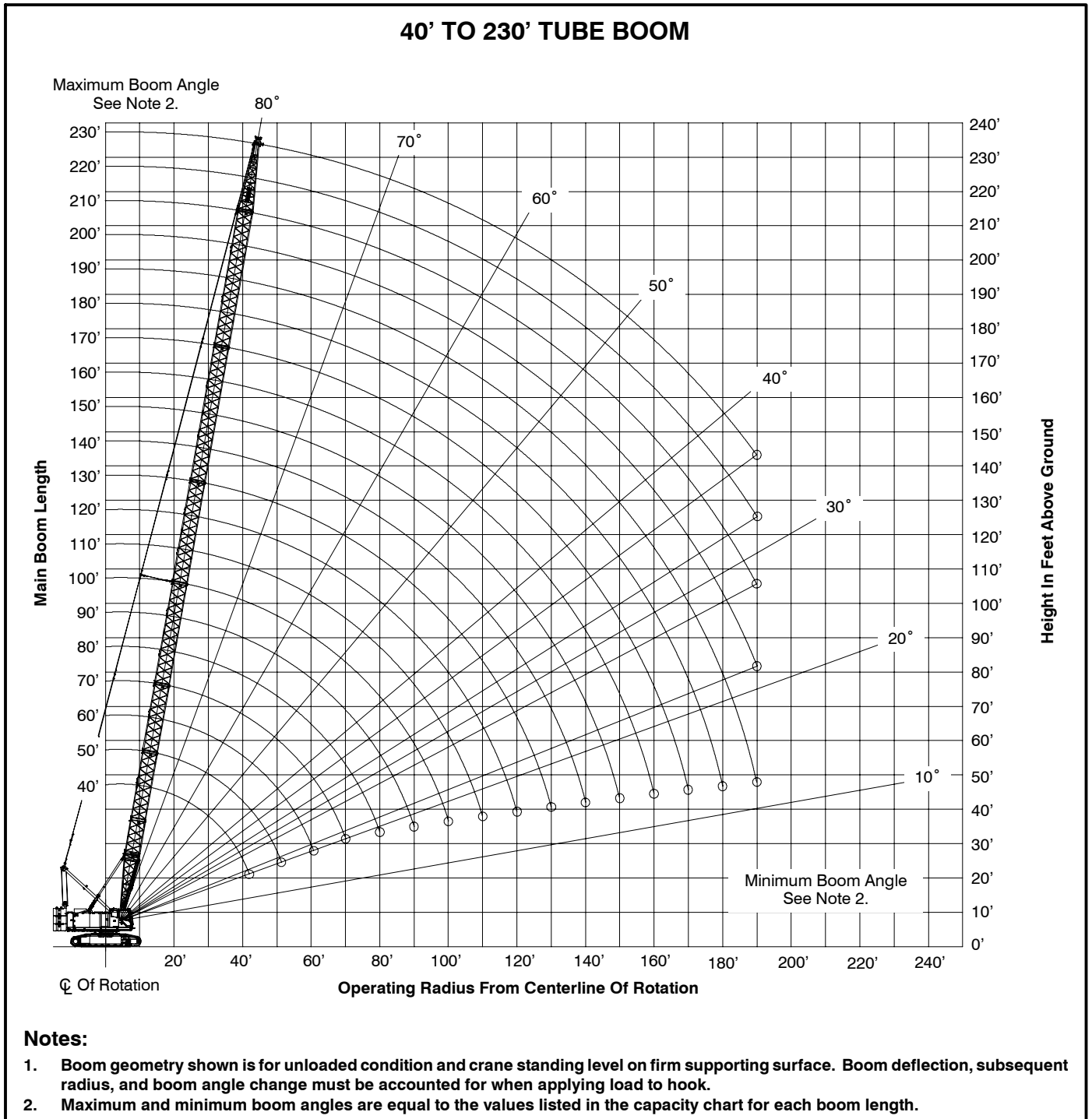




LIFTING CHARTS - Crawler Cranes

LINK-BELT MODEL 218HSL - 110 TON CAPACITY

Main Boom Working Range Diagram

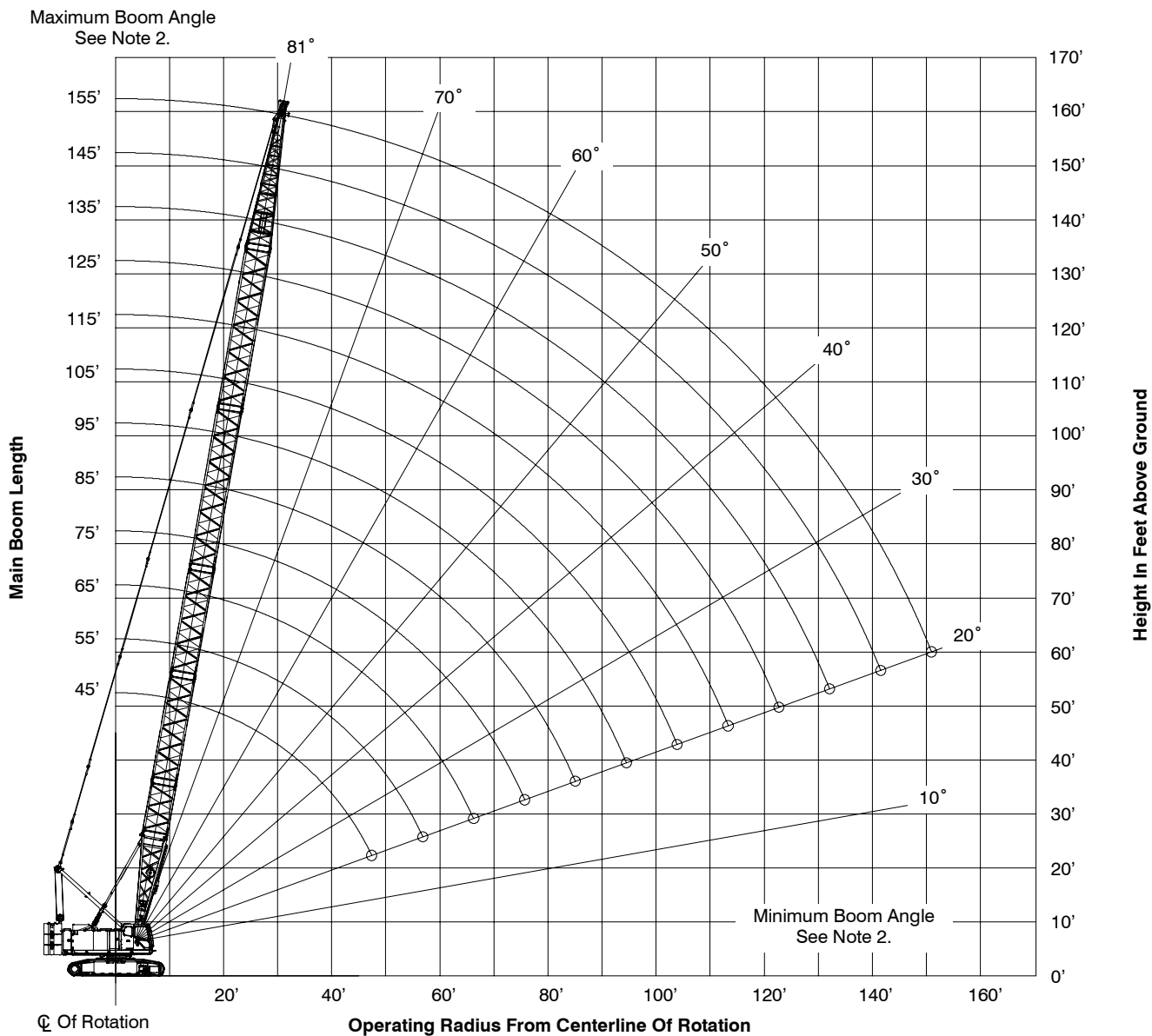


Notes:

1. Boom geometry shown is for unloaded condition and crane standing level on firm supporting surface. Boom deflection, subsequent radius, and boom angle change must be accounted for when applying load to hook.
2. Maximum and minimum boom angles are equal to the values listed in the capacity chart for each boom length.

STERLING CRANE

45' TO 155' ANGLE BOOM



Notes:

1. Boom geometry shown is for unloaded condition and crane standing level on firm supporting surface. Boom deflection, subsequent radius, and boom angle change must be accounted for when applying load to hook.
2. Maximum and minimum boom angles are equal to the values listed in the capacity chart for each boom length.

Main Boom Load Chart

Tube Boom Lift Capacity Chart – 360° Rotation ABC+A [62,820+22,200 lb (28 495+10 070kg)] Counterweight – Side Frames Extended [All capacities are listed in kips (mt)]										
Load Radius ft (m)	Boom Length – ft (m)									
	40 (12.2)	50 (15.2)	60 (18.3)	70 (21.3)	80 (24.4)	90 (27.4)	100 (30.5)	110 (33.5)	120 (36.6)	130 (39.6)
11 (3.4)	220.0 (99.8)									
12 (3.7)	208.4 (94.5)									
13 (4.0)	195.3 (88.6)									
14 (4.3)	183.4 (83.2)	183.4 (83.2)								
15 (4.6)	173.1 (78.5)	173.1 (78.5)	169.9 (77.1)							
16 (4.9)	163.7 (74.3)	163.7 (74.3)	163.7 (74.3)							
17 (5.2)	155.4 (70.5)	155.4 (70.5)	155.4 (70.5)	153.6 (69.7)						
18 (5.5)	147.7 (67.0)	147.7 (67.0)	147.7 (67.0)	147.7 (67.0)						
19 (5.8)	137.5 (62.4)	137.7 (62.5)	137.8 (62.5)	137.8 (62.5)	136.3 (61.8)					
20 (6.1)	126.6 (57.4)	126.7 (57.5)	126.8 (57.5)	126.8 (57.5)	126.7 (57.5)					
25 (7.6)	90.2 (40.9)	90.3 (41.0)	90.4 (41.0)	90.3 (41.0)	90.2 (40.9)	90.2 (40.9)	90.1 (40.9)	89.9 (40.8)		
30 (9.1)	69.8 (31.7)	69.9 (31.7)	69.9 (31.7)	69.9 (31.7)	69.8 (31.7)	69.7 (31.6)	69.5 (31.5)	69.4 (31.5)	69.3 (31.4)	69.1 (31.3)
35 (10.7)	56.7 (25.7)	56.8 (25.8)	56.8 (25.8)	56.8 (25.8)	56.7 (25.7)	56.5 (25.6)	56.4 (25.6)	56.3 (25.5)	56.1 (25.4)	55.9 (25.4)
40 (12.2)	47.6 (21.6)	47.7 (21.6)	47.7 (21.6)	47.6 (21.6)	47.5 (21.5)	47.4 (21.5)	47.3 (21.5)	47.1 (21.4)	47.0 (21.3)	46.8 (21.2)
50 (15.2)		35.8 (16.2)	35.9 (16.3)	35.8 (16.2)	35.7 (16.2)	35.6 (16.1)	35.4 (16.1)	35.2 (16.0)	35.1 (15.9)	34.9 (15.8)
60 (18.3)			28.5 (12.9)	28.4 (12.9)	28.3 (12.8)	28.2 (12.8)	28.0 (12.7)	27.9 (12.7)	27.7 (12.6)	27.5 (12.5)
70 (21.3)				23.3 (10.6)	23.3 (10.6)	23.1 (10.5)	23.0 (10.4)	22.8 (10.3)	22.7 (10.3)	22.5 (10.2)
80 (24.4)					19.6 (8.9)	19.5 (8.8)	19.3 (8.8)	19.2 (8.7)	19.0 (8.6)	18.8 (8.5)
90 (27.4)						16.7 (7.6)	16.5 (7.5)	16.4 (7.4)	16.2 (7.3)	16.0 (7.3)
100 (30.5)							14.3 (6.5)	14.2 (6.4)	14.0 (6.4)	13.8 (6.3)
110 (33.5)								12.4 (5.6)	12.3 (5.6)	12.1 (5.5)
120 (36.6)									10.8 (4.9)	10.6 (4.8)
130 (39.6)										9.4 (4.3)

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Main Boom Load Chart

Tube Boom Lift Capacity Chart – 360° Rotation ABC+A [62,820+22,200 lb (28 495+10 070kg)] Counterweight – Side Frames Extended [All capacities are listed in kips (mt)]										
Load Radius ft (m)	Boom Length – ft (m)									
	140 (42.7)	150 (45.7)	160 (48.8)	170 (51.8)	180 (54.9)	190 (57.9)	200 (61.0)	210 (64.0)	220 (67.1)	230 (70.1)
25 (7.6)										
30 (9.1)	69.0 (31.3)									
35 (10.7)	55.8 (25.3)	55.6 (25.2)	55.5 (25.2)	55.3 (25.1)						
40 (12.2)	46.6 (21.1)	46.5 (21.1)	46.3 (21.0)	46.1 (20.9)	45.9 (20.8)	45.8 (20.8)	43.1 (19.6)			
50 (15.2)	34.7 (15.7)	34.5 (15.6)	34.4 (15.6)	34.2 (15.5)	34.0 (15.4)	33.8 (15.3)	33.6 (15.2)	33.4 (15.2)	31.3 (14.2)	26.6 (12.1)
60 (18.3)	27.3 (12.4)	27.1 (12.3)	27.0 (12.2)	26.8 (12.2)	26.6 (12.1)	26.4 (12.0)	26.2 (11.9)	26.0 (11.8)	24.4 (11.1)	23.5 (10.7)
70 (21.3)	22.3 (10.1)	22.1 (10.0)	21.9 (9.9)	21.7 (9.8)	21.5 (9.8)	21.3 (9.7)	21.1 (9.6)	20.9 (9.5)	20.7 (9.4)	20.5 (9.3)
80 (24.4)	18.6 (8.4)	18.4 (8.3)	18.2 (8.3)	18.0 (8.2)	17.8 (8.1)	17.6 (8.0)	17.4 (7.9)	17.2 (7.8)	17.0 (7.7)	16.8 (7.6)
90 (27.4)	15.8 (7.2)	15.7 (7.1)	15.5 (7.0)	15.3 (6.9)	15.1 (6.8)	14.9 (6.8)	14.7 (6.7)	14.4 (6.5)	14.2 (6.4)	14.0 (6.4)
100 (30.5)	13.7 (6.2)	13.5 (6.1)	13.3 (6.0)	13.1 (5.9)	12.9 (5.9)	12.7 (5.8)	12.5 (5.7)	12.2 (5.5)	12.0 (5.4)	11.8 (5.4)
110 (33.5)	11.9 (5.4)	11.7 (5.3)	11.5 (5.2)	11.3 (5.1)	11.1 (5.0)	10.9 (4.9)	10.7 (4.9)	10.5 (4.8)	10.3 (4.7)	10.0 (4.5)
120 (36.6)	10.4 (4.7)	10.3 (4.7)	10.1 (4.6)	9.9 (4.5)	9.7 (4.4)	9.5 (4.3)	9.2 (4.2)	9.0 (4.1)	8.8 (4.0)	8.6 (3.9)
130 (39.6)	9.2 (4.2)	9.0 (4.1)	8.8 (4.0)	8.6 (3.9)	8.4 (3.8)	8.2 (3.7)	8.0 (3.6)	7.8 (3.5)	7.6 (3.4)	7.4 (3.4)
140 (42.7)	8.2 (3.7)	8.0 (3.6)	7.8 (3.5)	7.6 (3.4)	7.4 (3.4)	7.2 (3.3)	7.0 (3.2)	6.8 (3.1)	6.5 (2.9)	6.3 (2.9)
150 (45.7)		7.1 (3.2)	6.9 (3.1)	6.7 (3.0)	6.5 (2.9)	6.3 (2.9)	6.1 (2.8)	5.9 (2.7)	5.7 (2.6)	5.4 (2.4)
160 (48.8)			6.1 (2.8)	5.9 (2.7)	5.7 (2.6)	5.5 (2.5)	5.3 (2.4)	5.1 (2.3)	4.9 (2.2)	4.7 (2.1)
170 (51.8)				5.2 (2.4)	5.0 (2.3)	4.8 (2.2)	4.6 (2.1)	4.4 (2.0)	4.2 (1.9)	4.0 (1.8)
180 (54.9)					4.2 (1.9)	4.2 (1.9)	4.0 (1.8)	3.8 (1.7)	3.6 (1.6)	3.4 (1.5)
190 (57.9)						3.4 (1.5)	3.5 (1.6)	3.2 (1.5)	3.0 (1.4)	2.8 (1.3)
200 (61.0)							2.6 (1.2)	2.6 (1.2)	2.6 (1.2)	2.4 (1.1)
210 (64.0)										
220 (67.1)										
230 (70.1)										

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Main Boom Load Chart

Angle Boom Lift Capacity Chart – 360° Rotation ABC+A [62,820+22,200 lb (28 495+10 070kg)] Counterweight – Side Frames Extended [All capacities are listed in kips (mt)]												
Load Radius ft (m)	Boom Length – ft (m)											
	45.0 (13.7)	55.0 (16.8)	65.0 (19.8)	75.0 (22.9)	85.0 (25.9)	95.0 (29.0)	105.0 (32.0)	115.0 (35.1)	125.0 (38.1)	135.0 (41.1)	145.0 (44.2)	155.0 (47.2)
12 (3.7)	208.0 (94.3)											
13 (4.0)	194.9 (88.4)	194.9 (88.4)										
14 (4.3)	183.0 (83.0)	183.0 (83.0)										
15 (4.6)	172.8 (78.4)	172.8 (78.4)	172.8 (78.4)									
16 (4.9)	163.4 (74.1)	163.4 (74.1)	163.2 (74.0)									
17 (5.2)	155.2 (70.4)	154.7 (70.2)	154.0 (69.9)	153.3 (69.5)								
18 (5.5)	146.9 (66.6)	146.4 (66.4)	145.7 (66.1)	145.0 (65.8)	144.3 (65.5)							
19 (5.8)	139.4 (63.2)	138.9 (63.0)	138.3 (62.7)	137.6 (62.4)	136.9 (62.1)							
20 (6.1)	129.5 (58.7)	129.5 (58.7)	129.3 (58.6)	129.1 (58.6)	128.9 (58.5)	128.7 (58.4)						
25 (7.6)	91.8 (41.6)	91.7 (41.6)	91.5 (41.5)	91.2 (41.4)	91.0 (41.3)	90.7 (41.1)	90.4 (41.0)	90.1 (40.9)	89.7 (40.7)			
30 (9.1)	70.6 (32.0)	70.5 (32.0)	70.2 (31.8)	70.0 (31.8)	69.7 (31.6)	69.3 (31.4)	69.0 (31.3)	68.7 (31.2)	68.3 (31.0)	68.0 (30.8)	67.6 (30.7)	67.2 (30.5)
35 (10.7)	57.0 (25.9)	56.9 (25.8)	56.6 (25.7)	56.3 (25.5)	56.0 (25.4)	55.7 (25.3)	55.3 (25.1)	55.0 (24.9)	54.6 (24.8)	54.2 (24.6)	53.9 (24.4)	53.5 (24.3)
40 (12.2)	47.6 (21.6)	47.4 (21.5)	47.2 (21.4)	46.9 (21.3)	46.5 (21.1)	46.2 (21.0)	45.8 (20.8)	45.5 (20.6)	45.1 (20.5)	44.7 (20.3)	44.3 (20.1)	43.9 (19.9)
50 (15.2)		35.1 (15.9)	34.9 (15.8)	34.6 (15.7)	34.2 (15.5)	33.9 (15.4)	33.5 (15.2)	33.1 (15.0)	32.7 (14.8)	32.3 (14.7)	31.9 (14.5)	31.5 (14.3)
60 (18.3)			27.2 (12.3)	26.9 (12.2)	26.5 (12.0)	26.2 (11.9)	25.8 (11.7)	25.4 (11.5)	25.0 (11.3)	24.6 (11.2)	24.2 (11.0)	23.8 (10.8)
70 (21.3)				21.6 (9.8)	21.3 (9.7)	20.9 (9.5)	20.6 (9.3)	20.2 (9.2)	19.8 (9.0)	19.3 (8.8)	18.9 (8.6)	18.5 (8.4)
80 (24.4)					17.5 (7.9)	17.1 (7.8)	16.7 (7.6)	16.4 (7.4)	15.9 (7.2)	15.5 (7.0)	15.1 (6.8)	14.7 (6.7)
90 (27.4)						14.2 (6.4)	13.8 (6.3)	13.5 (6.1)	13.0 (5.9)	12.6 (5.7)	12.2 (5.5)	11.8 (5.4)
100 (30.5)							11.6 (5.3)	11.2 (5.1)	10.8 (4.9)	10.4 (4.7)	9.9 (4.5)	9.5 (4.3)
110 (33.5)								9.3 (4.2)	8.9 (4.0)	8.5 (3.9)	8.1 (3.7)	7.7 (3.5)
120 (36.6)									7.4 (3.4)	7.0 (3.2)	6.6 (3.0)	6.2 (2.8)
130 (39.6)										5.7 (2.6)	5.3 (2.4)	4.9 (2.2)
140 (42.7)											4.2 (1.9)	3.8 (1.7)

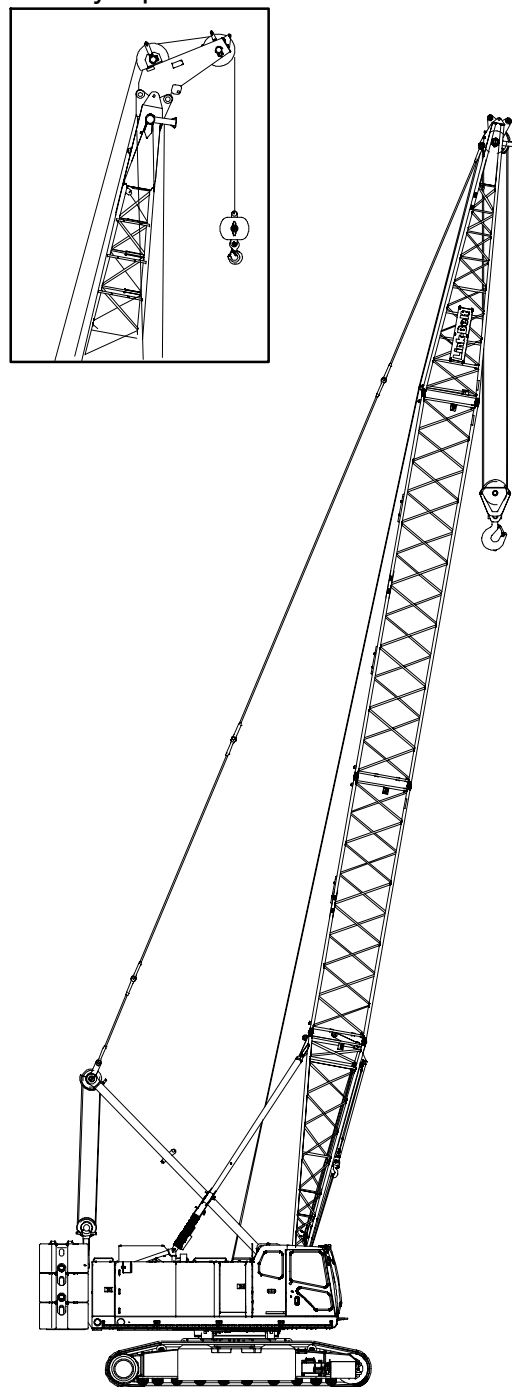
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Main Boom Make-up

Tube Boom Make-Up

Boom Length ft (m)	Tube Boom Extensions ft (m)			
	10 (3.05)	20 (6.14)	30 (9.10)	40 (12.19)
40 (12.19)				
50 (15.24)	1			
60 (18.29)		1		
70 (21.34)			1	
80 (24.38)				1
90 (27.43)	1			1
100 (30.48)		1		1
110 (33.53)			1	1
120 (36.58)				2
130 (39.62)	1			2
140 (42.67)		1		2
150 (45.72)			1	2
160 (48.77)	1		1	2
170 (51.82)		1	1	2
180 (54.86)	1	1	1	2
190 (57.91)	1		2	2
200 (60.96)		1	2	2
210 (64.01)	1	1	2	2
220 (67.06)		2	2	2
230 (70.10)	1	2	2	2

Optional 5 ft (1.5m)
Auxiliary Tip Extension



Notes:

1. Capacities shown are in kips/metric tons (1 kip = 1,000 lb / 1 metric ton = 0.45 kips) and are not more than 75% of the tipping loads with the crane standing level on firm supporting surface. A deduction must be made from these capacities for weight of hook block, hook ball, sling, grapple, load weighing device, etc. When using main hook while jib or tip extension is attached, reduce capacities by values shown in Crane Rating Manual. See Operator's Manual for all limitations when raising or lowering attachment.
2. The capacities in the shaded areas are based on structural strength. The capacities in the non-shaded areas are based on stability ratings.
3. For recommended reeving, parts of line, wire rope type, and wire rope inspection, see Wire Rope Capacity Chart, Operator's Manual, and Parts Manual.
4. Load ratings are based on freely suspended loads and make no allowances for such factors as the effect of the wind, ground conditions, and operating speeds. The operator shall therefore reduce load ratings in order to take these conditions into account. Refer to the Crane Rating Manual for Wind Speed Restrictions.
5. The 26 ft (7.92m) live mast must be used for all capacities listed.
6. The least stable rated condition is over the side.
7. Booms must be erected and lowered over the end for maximum stability.
8. Main boom length must not exceed 260 ft (79.25m).

Angle Boom Make-Up

Boom Length ft (m)	Angle Boom Extensions ft (m)		
	10 (3.05)	20 (6.14)	30 (9.10)
45 (13.72)			
55 (16.76)	1		
65 (19.81)		1	
75 (22.86)			1
85 (25.91)	1		1
95 (28.96)		1	1
105 (32.00)			2
115 (35.05)	1		2
125 (38.10)		1	2
135 (41.15)	1	1	2
145 (44.20)		2	2
155 (47.24)	1	2	2

Notes:

- Capacities shown are in kips/metric tons (1 kip = 1,000 lb / 1 metric ton = 0.45 kips) and are not more than 75% of the tipping loads with the crane standing level on firm supporting surface. A deduction must be made from these capacities for weight of hook block, hook ball, sling, grapple, load weighing device, etc. When using main hook while jib or tip extension is attached, reduce capacities by values shown in Crane Rating Manual. See Operator's Manual for all limitations when raising or lowering attachment.
- The capacities in the shaded areas are based on structural strength. The capacities in the non-shaded areas are based on stability ratings.
- For recommended reeving, parts of line, wire rope type, and wire rope inspection, see Wire Rope Capacity Chart, Operator's Manual, and Parts Manual.
- Load ratings are based on freely suspended loads and make no allowances for such factors as the effect of the wind, ground conditions, and operating speeds. The operator shall therefore reduce load ratings in order to take these conditions into account. Refer to the Crane Rating Manual for Wind Speed Restrictions.
- The 26 ft (7.92m) live mast must be used for all capacities listed.
- The least stable rated condition is over the side.
- Booms must be erected and lowered over the end for maximum stability.
- Main boom length must not exceed 260 ft (79.25m).
- Do not operate at radii and boom lengths where the Crane Rating Manual lists no capacity. Do not use longer booms or jibs than those listed in the Crane Rating Manual. Any of the above can cause a tipping condition, or boom and jib failure.
- These capacities are in compliance with ASME/ANSI B30.5 at date of manufacture.
- These capacities apply only to the crane as originally manufactured and normally equipped by Link-Belt Construction Equipment Company.

