

Lifting Capacities

Lattice Boom Crawler Crane

LS-308H II

110-ton* (100 metric ton)

HYLAB Series

Angle Boom Capacities

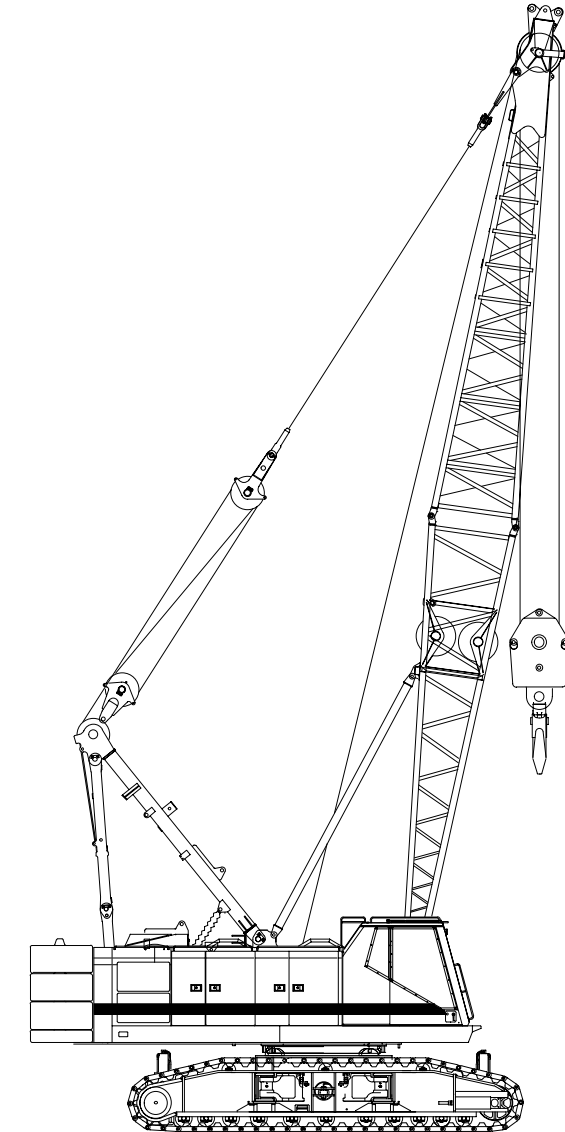
50' – 160' (15.24 – 48.76 m)

Duty Cycle Capacities

- 50' – 120' (15.24 – 36.58 m) Angle Boom
- Extended Side Frames
- Dragline
- Clamshell / Magnet
- "AB" and "A" Counterweight Options

Angle Boom Capacities

- 50' – 160' (15.24 – 48.77 m) Angle Boom
- 25' (7.62 m) Open Throat Top Section
- Extended / Retracted Side Frames
- 360° Rotation Capacities
- Over End Blocked Capacities
- "AB", "A", and "O" Counterweight Options



CAUTION: This material is supplied for reference use only. Operator must refer to in-cab Crane Rating Manual to determine allowable machine lifting capacities and operating procedures.

* – Nominal capacity rating may vary based on specification



WARNING

READ AND UNDERSTAND THE OPERATOR'S AND SAFETY MANUALS AND THE FOLLOWING INSTRUCTIONS AND CHART VALUES BEFORE OPERATING THE CRANE. OPERATION WHICH DOES NOT FOLLOW THESE INSTRUCTIONS MAY RESULT IN AN ACCIDENT. THIS DOCUMENT IS INTENDED FOR REFERENCE USE ONLY.

OPERATING INSTRUCTIONS

GENERAL:

1. Rated lifting capacities in pounds as shown on lift charts pertain to this crane as originally manufactured and normally equipped. Modifications to the crane or use of optional equipment other than that specified can result in a reduction of capacity.
2. Construction equipment can be dangerous if improperly operated or maintained. Operation and maintenance of this crane must be in compliance with the information in the Operator's, Parts, and Safety Manuals supplied with this crane. If these manuals are missing, order replacements through the distributor.
3. The operator and other personnel associated with this crane shall read and fully understand the latest applicable American National Standards Institute (ANSI) safety standards for cranes.
4. All capacities listed in this book are in compliance with ASME/ANSI B30.5c-1998, SAE J987-April 1994, and SAE J-765 October 1990.
5. Rated lifting capacities do not account for the effects of wind on a suspended load or boom. Lifting capacities should be considered acceptable for wind speeds less than 20 mph and appropriately reduced for wind speeds greater than 20 mph. (See General Wind Restrictions Guide.)
6. The capacities listed are for the crane equipped with or without live mast and with the gantry in the raised position.
7. The least stable rated condition is over the side.
8. Booms should be erected and lowered over the end for maximum stability. See Lifting Capabilities before erecting or lowering boom.
9. 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 this Crane Rating Manual. Any of the above can cause a tipping condition, or boom and jib failure.
10. These capacities apply only to the crane as originally manufactured and normally equipped by Link-Belt Construction Equipment Company.

LIFT CRANE OPERATION:

1. Capacities shown are in pounds 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, etc. When using main hook while jib is attached, reduce capacities by values shown on Capacity Deductions For Lifting Off Main Boom Hook With Jib Installed. When using main hook while 5 foot tip extension or pile driver lead adapter is attached, reduce capacities by values shown on Capacity Deductions For Lifting Off Main Boom Hook With 5 Foot Tip Extension or Pile Driver Lead Adapter Installed. See Operator's Manual for all limitations when raising or lowering attachment.
2. The crane capacities in the shaded areas are based on structural strength. The crane capacities in the non-shaded areas are based on stability.
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. Rated lifting capacities are based on correct reeving. Deduction must be made for excessive reeving. Any reeving over minimum required (see Wire Rope Capacity Chart) is considered excessive and must be accounted for when making lifts. Use Working Range Diagram to estimate the extra feet of rope. See Wire Rope Capacity for the weight to deduct for each extra foot of wire rope before attempting to lift a load.
4. Rated lifting capacities in this Crane Rating Manual are based on freely suspended loads and make no allowances for such factors as the effect of ground conditions and operating speeds. The operator shall therefore reduce load ratings in order to take these conditions into account.

FOR OVER END BLOCKED CAPACITIES ONLY:

1. These capacities can be lifted over either end with the crane standing level on a firm supporting surface with adequate blocking placed under the tread member sprockets/idlers, to prevent rocking.
2. Do not travel with a load.

TRAVELING WITH A LOAD:

1. All 360° Rotation Capacities listed in this Crane Rating Manual are pick and carry capacities.
2. The boom must be pointing straight over one end of the crawler lower. If the load was lifted over the side, swing the load over the end and/or if the load was lifted at a long radius and the load is at or near capacity for that radius, boom up to obtain a greater lifting capacity before beginning travel.
3. Engage the swing lock and apply swing brake.
4. Travel slowly and cautiously on a firm and level-supporting surface.

DEFINITIONS:

1. Load Radius: Horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of the vertical hoist line or tackle with load applied.
2. Boom Angle: The angle between the boom base section and horizontal with freely suspended load at the rated radius.
3. Working Area: Area measured in a circular arc about the centerline of rotation as shown on the Working Area Diagram.
4. Freely Suspended Load: Load hanging free with no direct external force applied except by the hoist line.
5. Side Load: Horizontal side force applied to the lifted load either on the ground or in the air.

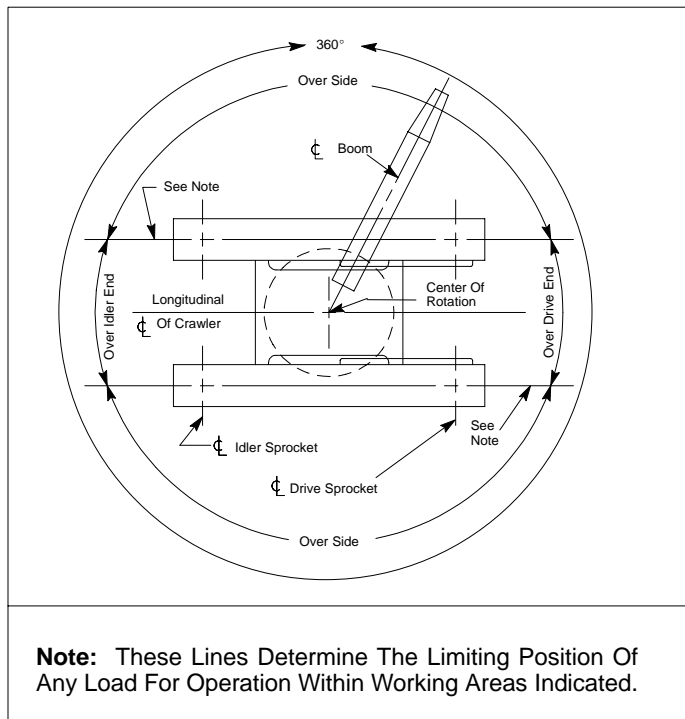
WIRE ROPE CAPACITY

Parts of Line	1 1/8"				3/4"	7/8"	Notes
	Type "DB"	Type "RB"	Type "M"	Type "LB"	Type "LB"	Type "DB"	
1	37,100	28,600	37,100	40,800	16,800	22,700	Capacities shown are in pounds and working loads must not exceed the ratings on the capacity charts in this Crane Rating Manual. Study Operator's Manual for wire rope inspection procedures.
2	74,200	57,200	—	81,600	33,600	45,400	
3	111,300	85,800	—	122,400	50,400	68,100	
4	148,400	114,400	—	163,200	67,200	90,800	
5	185,500	143,000	—	204,000	84,000	113,500	
6	222,600	171,600	—	244,800	100,800	136,200	
Rope wt per foot	2.34	2.50	2.23	1.04	1.04	2.34	
LBCE Type	Description						
DB	6 x 26 (6 x 19 Class) – Warrington Seale – Extra Improved Plow Steel – Preformed – Right Lay – Regular Lay – I.W.R.C.						
LB	6 Strand, Compacted Strand, Seale or Warrington Seale, I.W.R.C., Preformed Right Lay – Regular Lay						
RB*	19 x 19 Rotation Resistant– Extra Extra Improved Plow Steel – Preformed – Right Lay – Regular Lay. Swaged – SF = 5:1						
M	6 x 25 (6 x 19 Class) – Filler Wire – Extra Improved PLow Steel – Preformed – Independent Wire Rope Center – Right LAy, Lang LAy						
Notes:							
1. Capacities shown are in pounds and working loads must not exceed the ratings on the capacity charts in the Crane Rating Manual.							
2. Study Operator's Manual for wire rope inspection procedures and single part of line applications.							

LIFTOFF CAPABILITIES

Counterweight (Side Frames)	Over End (Gantry In Raised Position)	
	Maximum Boom (ft.)	Maximum Boom + Jib (ft.)
NO (RETRACTED)	80	N/A
NO (EXTENDED)	100	N/A
A (RETRACTED)	110	N/A
A (EXTENDED)	130	N/A
AB (EXTENDED)	160 (See Note 4)	140 + 75
Counterweight (Side Frames)	Over Side (Gantry In Raised Position)	
	Maximum Boom (ft.)	Maximum Boom + Jib (ft.)
NO (RETRACTED)	80	N/A
NO (EXTENDED)	100	N/A
A (RETRACTED)	110	N/A
A (EXTENDED)	130	N/A
AB (EXTENDED)	—	—

WORKING AREAS



NOTES:

1. For maximum boom and maximum boom + jib combinations only – adequate blocking must be placed under side frame sprockets/idlers to prevent rocking. The ramps supplied with the crane are considered to be adequate blocking.
2. Crane on firm and level surface.
3. Gantry pins must be installed with the gantry in the raised position.
4. For maximum stability, booms must be erected and lowered over the end blocked with no load and with the hook block on the ground.

GENERAL WIND RESTRICTIONS GUIDE

⚠ WARNING

Failure to follow these wind speed restrictions may result in structural failure of the boom, which would cause property damage and/or bodily injury.

1. The effects of the wind force on the hook load are the responsibility of the user and are not taken into account. When hoisting any load in windy conditions, the load wind area and load controllability must be considered for safe crane operation.
2. Wind speed is to be determined at the boom top section.

WIND SPEED CHART

Boom and Boom + Jib Lengths: 50' to 215'	
DESCRIPTION	ALLOWABLE WINDSPEEDS
1. Normal Lifting Operation. (See Capacity Charts.)	0–20 m.p.h.
2. Reduced Operation. Capacities must be reduced by 20%.	21–30 m.p.h.
3. Reduced Operation. Capacities must be reduced by 40%.	31–40 m.p.h.
4. Reduced Operation. Capacities must be reduced by 70%.	41–45 m.p.h.
4. No Operation. Store Attachment On Ground.	Over 45 m.p.h.

BOOM BASE SELF ASSEMBLY LIFTING SHEAVES CAPACITIES

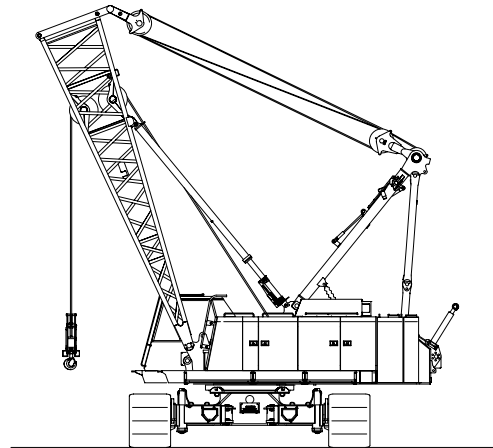
Radius (ft)	Boom Angle (deg)	Capacity (lb)
9.1	82.0	26,500
10.0–20.0	79.1–41.9	26,500

NOTES:

1. Rated capacities are for 360° rotation.
2. Gantry must be pinned in the raised position when lifting loads with the sheaves in the base section.
3. Backstops must be assembled to base section.
4. For self assembly/disassembly of counterweights, boom extensions, and side frames only.
5. Rated capacities are for extended or retracted side frames with or without counterweight or on carbody jacks without counterweight.
6. Reeve boom base section self assembly lifting sheaves with front drum rope only.

CRANE ASSEMBLY COMPONENT WEIGHTS

Component	Weight	
	lbs.	kg
1. 25 Ft. Top Section With 3–Sheave Lift/Drag Head Machinery, with Basic Pendants	5,530	2 508
2. 25 Ft. Top Section With 3–Sheave Lift/Drag Head Machinery and 5 Ft. Tip Extension With Basic Pendants	6,195	2 809
3. 25 Ft. "Plate" Base Section With Lifting Sheaves 25 Ft. "Lattice" Base Section With Lifting Sheaves	5,528 4,660	2 507 2 114
4. Boom Extensions		
• 10' Boom Extension With Pendants	1,596	724
• 20' Boom Extension With Pendants	2,638	1 196
• 30' Boom Extension With Pendants	3,613	1 638
5. Upper Counterweights		
• Counterweight "A" Base Slab Counterweight 1 Left Wing Counterweight 1 Right Wing Counterweight	23,668	10 736
• Counterweight "B" 2 Left Wing Counterweights 2 Right Wing Counterweights	27,183	12 320
Left Wing Counterweights (each)	6,615	3 000
Right Wing Counterweights (each)	6,836	3 100
6. Side Frames (Each)	23,561	10 687
7. Tube Jib Including Strut, Head Machinery, and Pendants		
• 30' Tube Jib Assembly	1,676	760
• 15' Extension With Pendants	319	145



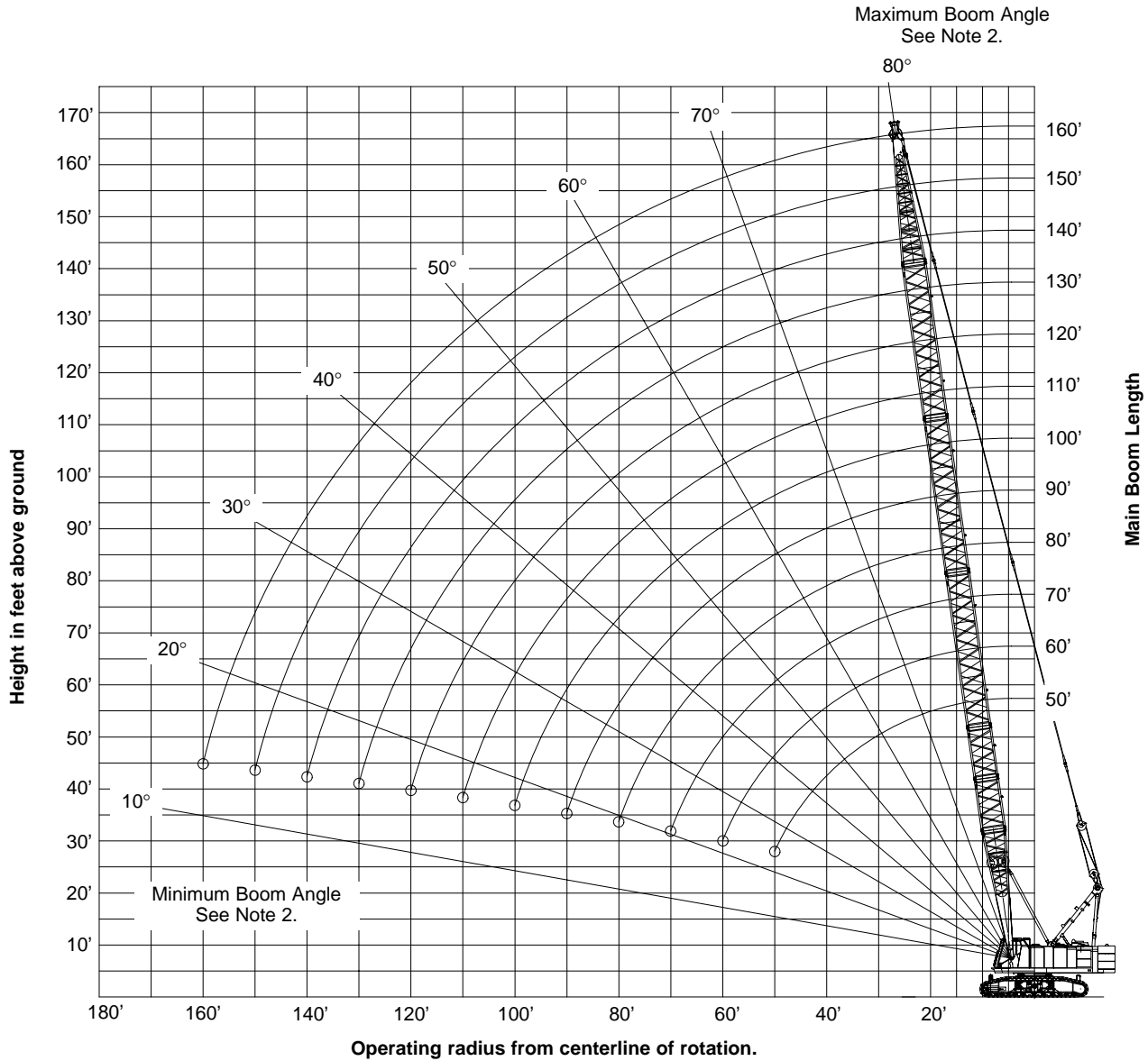
DUTY CYCLE NOTES FOR ANGLE BOOM

- The capacities included in the “Duty Cycle Capacities – Angle Boom” curve are the maximum allowable, and are base on an LS-308H II crawler crane with “AB” (50,851 lb) or “A” (23,668 lb) counterweight standing level on firm supporting surface under ideal job conditions.
- Capacities are based on 75% of minimum tipping loads for dragline; 67.5% for clamshell.
- Capacities are maximum recommended by PCSA Standard #4. Operator must make allowances for soft or uneven supporting surfaces, rapid cycle operations, bucket suction, or other unfavorable conditions which may require smaller buckets for most efficient operation.
- Weight of bucket plus load must not exceed these capacities.
- Dragline operation is not recommended with boom angles less than 35°.
- Boom length for dragline/clamshell attachment operation should not exceed 120’.
- Retractable high gantry must be pinned in the raised position for all capacities on the “Duty Cycle Capacities – Angle Boom” curve.
- These capacities apply to the crane as originally manufactured and normally equipped by Link-Belt Construction Equipment Company.

Boom Length (ft)	Load Radius (ft)	Boom Angle (deg)	“AB” Cwt 360° Rotation Side Frames Extended		“A” Cwt 360° Rotation Side Frames Extended	
			Dragline (lb)	Clamshell Magnet (lb)	Dragline (lb)	Clamshell Magnet (lb)
50	11.4	82.0	–	32,250	–	32,250
50	12	81.3	–	32,250	–	32,250
50	13	80.1	–	32,250	–	32,250
50	14	79.0	–	32,250	–	32,250
50	15	77.8	–	32,250	–	32,250
50	16	76.6	–	32,250	–	32,250
50	17	75.4	–	32,250	–	32,250
50	18	74.2	–	32,250	–	32,250
50	19	73.1	–	32,250	–	32,250
50	20	71.9	–	32,250	–	32,250
50	25	65.7	–	32,250	–	32,250
50	30	59.2	32,250	32,250	32,250	32,250
50	35	52.3	32,250	32,250	32,250	32,250
50	40	44.6	32,250	32,250	31,300	28,100
50	50	24.3	–	32,250	–	20,500
60	12.8	82.0	–	32,250	–	32,250
60	13	81.8	–	32,250	–	32,250
60	14	80.8	–	32,250	–	32,250
60	15	79.8	–	32,250	–	32,250
60	16	78.9	–	32,250	–	32,250
60	17	77.9	–	32,250	–	32,250
60	18	76.9	–	32,250	–	32,250
60	19	75.9	–	32,250	–	32,250
60	20	75.0	–	32,250	–	32,250
60	25	69.9	–	32,250	–	32,250
60	30	64.8	–	32,250	–	32,250
60	35	59.4	32,250	32,250	32,250	32,250
60	40	53.6	32,250	32,250	30,900	27,800
60	50	40.6	32,500	32,250	22,400	20,100
60	60	22.1	–	22,700	–	15,400
70	14.2	82.0	–	32,250	–	32,250
70	15	81.3	–	32,250	–	32,250
70	16	80.5	–	32,250	–	32,250
70	17	79.7	–	32,250	–	32,250
70	18	78.8	–	32,250	–	32,250
70	19	78.0	–	32,250	–	32,250
70	20	77.1	–	32,250	–	32,250
70	25	72.9	–	32,250	–	32,250
70	30	68.6	–	32,250	–	32,250
70	35	64.1	–	32,250	–	32,250
70	40	59.5	32,250	32,250	30,500	27,400
70	50	49.4	32,100	28,800	22,000	19,800
70	60	37.4	24,900	22,400	16,700	15,000
70	70	20.5	–	17,900	–	11,700
80	15.6	82.0	–	32,250	–	32,250
80	16	81.7	–	32,250	–	32,250
80	17	81.0	–	32,250	–	32,250
80	18	80.2	–	32,250	–	32,250
80	19	79.5	–	32,250	–	32,250
80	20	78.8	–	32,250	–	32,250
80	25	75.1	–	32,250	–	32,250
80	30	71.4	–	32,250	–	32,250
80	35	67.5	–	32,250	–	32,250
80	40	63.6	–	32,250	–	27,100
80	50	55.3	31,700	28,500	21,700	19,500
80	60	46.0	24,500	22,000	16,400	14,700
80	70	34.9	19,600	17,600	12,800	11,500
80	80	19.1	–	14,400	–	9,000

Boom Length (ft)	Load Radius (ft)	Boom Angle (deg)	“AB” Cwt 360° Rotation Side Frames Extended		“A” Cwt 360° Rotation Side Frames Extended	
			Dragline (lb)	Clamshell Magnet (lb)	Dragline (lb)	Clamshell Magnet (lb)
90	17	82.0	–	32,250	–	32,250
90	18	81.3	–	32,250	–	32,250
90	19	80.7	–	32,250	–	32,250
90	20	80.0	–	32,250	–	32,250
90	25	76.8	–	32,250	–	32,250
90	30	73.5	–	32,250	–	32,250
90	35	70.1	–	32,250	–	32,250
90	40	66.7	–	32,250	–	26,900
90	50	59.6	31,400	28,200	21,300	19,100
90	60	51.9	24,200	21,700	16,000	14,400
90	70	43.2	19,300	17,300	12,400	11,100
90	80	32.9	–	14,100	–	8,800
90	90	18.0	–	11,700	–	7,000
100	18.3	82.0	–	32,250	–	32,250
100	19	81.6	–	32,250	–	32,250
100	20	81.0	–	32,250	–	32,250
100	25	78.1	–	32,250	–	32,250
100	30	75.2	–	32,250	–	32,250
100	35	72.2	–	32,250	–	32,250
100	40	69.2	–	32,250	–	26,500
100	50	62.9	–	27,900	–	18,900
100	60	56.2	23,800	21,400	15,700	14,100
100	70	49.0	18,900	17,000	12,000	10,800
100	80	40.9	15,300	13,700	9,400	8,400
100	90	31.2	–	11,300	–	6,600
100	100	17.1	–	9,400	–	5,200
110	19.7	82.0	–	32,250	–	32,250
110	20	81.9	–	32,250	–	32,250
110	25	79.2	–	32,250	–	32,250
110	30	76.6	–	32,250	–	32,250
110	35	73.9	–	32,250	–	32,250
110	40	71.1	–	32,250	–	26,200
110	50	65.5	–	27,600	–	18,500
110	60	59.7	23,400	21,000	15,300	13,700
110	70	53.4	18,500	16,600	11,700	10,500
110	80	46.6	14,900	13,400	9,000	8,100
110	90	38.9	12,200	10,900	7,000	6,300
110	100	29.7	–	9,000	–	4,800
110	110	16.3	–	7,400	–	3,700
120	21.1	82.0	–	32,250	–	32,250
120	25	80.1	–	32,250	–	32,250
120	30	77.7	–	32,250	–	32,250
120	35	75.2	–	32,250	–	31,900
120	40	72.8	–	32,250	–	25,900
120	50	67.7	–	27,200	–	18,100
120	60	62.4	–	20,700	–	13,400
120	70	56.9	18,100	16,200	11,300	10,100
120	80	51.0	14,500	13,000	8,600	7,700
120	90	44.5	11,800	10,600	6,600	5,900
120	100	37.2	9,700	8,700	5,100	4,500
120	110	28.4	–	7,200	–	3,400
120	120	15.6	–	5,800	–	2,400

50' TO 160' MAIN 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.

CAPACITY DEDUCTIONS FOR LIFTING OFF MAIN BOOM HOOK WITH JIB INSTALLED

When using main boom hook, while jib is attached, reduce boom capacities by the values in the following chart:

Jib Length (ft.)	Capacity Deduction (lb)
30	2,100
45	2,800
60	3,500
75	4,400

CAPACITY DEDUCTIONS FOR LIFTING OFF MAIN BOOM HOOK WITH 5 FOOT TIP EXTENSION OR PILE DRIVER LEAD ADAPTERS INSTALLED

When using main boom hook, while 5 foot tip extension or pile driver lead adapter is attached, reduce boom capacities by the values in the following chart:

Extension/Adapter	Capacity Deduction (lb)
5' Tip	700
Pile Driver Lead Adapter	300

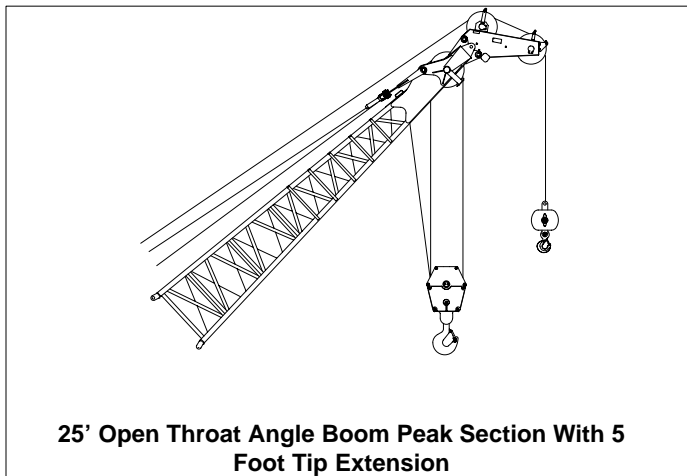
MAXIMUM ALLOWABLE CAPACITIES FOR 5 FOOT TIP EXTENSION

LIFTING CAPACITY TO BE THE SMALLEST OF THE FOLLOWING VALUES:

- 18,000 lb (Maximum).
- The standard crane lift capacity minus 700 lb for the crane configuration in use.

NOTES:

- All notes are to be adhered to as listed on the standard lift crane capacity charts .
- Reduce the main boom lift capacities by 700 lb when the tip extension is installed.
- The maximum boom length on which the tip extension can be installed is 150 ft.
- Do not lift or suspend a load from the boom tip extension and main boom at the same time.



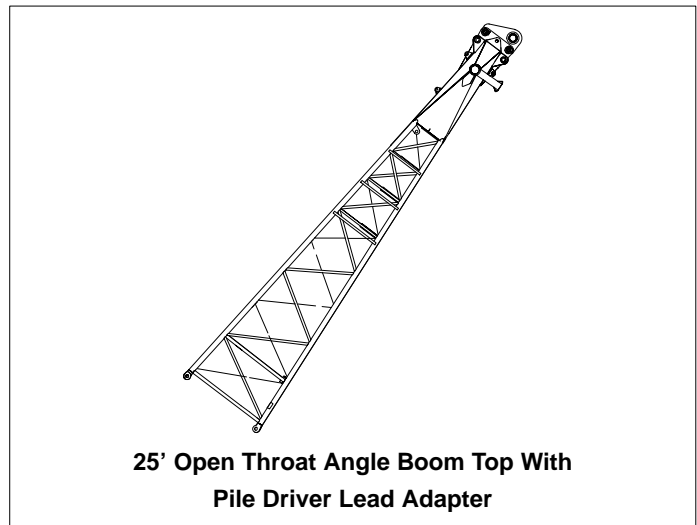
MAXIMUM ALLOWABLE CAPACITIES FOR PILE DRIVER LEAD ADAPTER

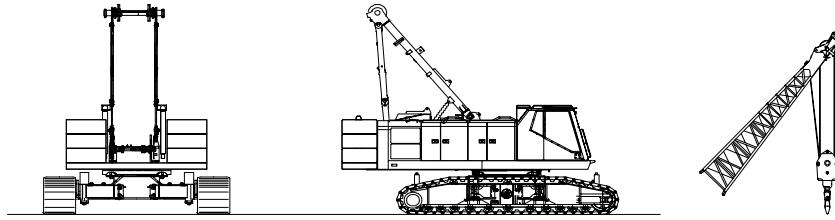
LIFTING CAPACITY TO BE THE SMALLEST OF THE FOLLOWING VALUES:

- 100,000 lbs.
- The standard crane lift capacity minus 300 lbs. for crane configuration in use.

NOTES:

- All notes are to be adhered to as listed on the standard lift crane capacity charts.
- Reduce the main boom lift capacities by 200 lb when the pile driver lead adapter is installed.
- The maximum boom length on which the pile driver lead adapter can be installed is 150 ft.





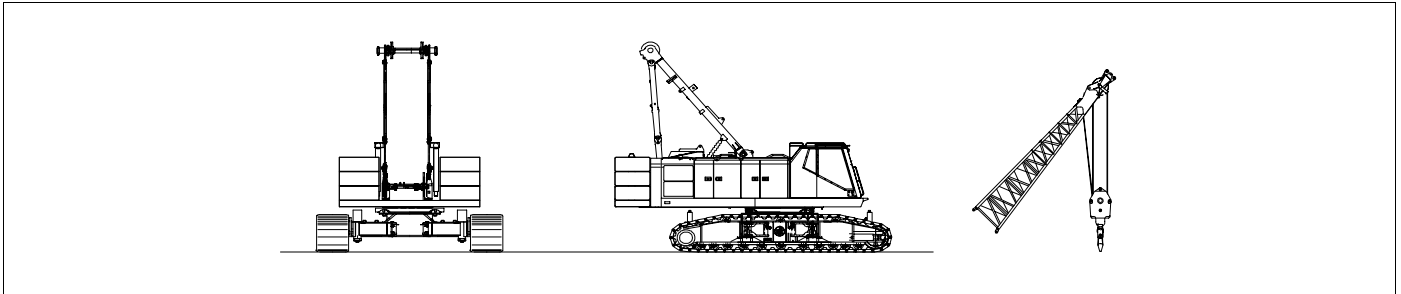
Note: Refer To Page 7 For “Capacity Deductions” Caused By Any Attachment At The Boom Tip.

MAIN BOOM CAPACITIES – 50 FT OPEN THROAT ANGLE BOOM							
Load Radius (ft)	Boom Angle (deg)	Over End Blocked	360° Rotation				
			Side Frames Extended			Side Frames Retracted	
			AB CTWT (lb)	AB CTWT (lb)	A CTWT (lb)	0 CTWT (lb)	A CTWT (lb)
11.4	82.0	220,000	220,000	189,700	170,700	128,200	78,600
12	81.3	201,100	201,100	180,800	162,600	117,000	71,600
13	80.1	186,700	186,700	167,800	136,900	102,400	62,500
14	79.0	174,200	174,200	156,500	115,500	90,900	55,300
15	77.8	163,300	163,300	146,600	99,700	81,600	49,500
16	76.6	153,600	153,600	131,700	87,600	74,000	44,700
17	75.4	144,900	144,900	117,500	78,000	67,600	40,700
18	74.2	137,100	137,100	106,000	70,200	62,200	37,300
19	73.1	130,100	130,100	96,500	63,800	57,500	34,300
20	71.9	123,800	122,400	88,500	58,400	53,400	31,800
25	65.7	99,300	86,300	62,000	40,500	39,100	22,800
30	59.2	80,000	66,200	47,300	30,500	30,500	17,400
35	52.3	63,800	53,400	37,900	24,100	24,700	13,700
40	44.6	52,800	44,500	31,300	19,700	20,500	11,100
50	24.3	38,800	32,900	22,800	13,900	14,900	7,600

MAIN BOOM CAPACITIES – 70 FT OPEN THROAT ANGLE BOOM							
Load Radius (ft)	Boom Angle (deg)	Over End Blocked	360° Rotation				
			Side Frames Extended			Side Frames Retracted	
			AB CTWT (lb)	AB CTWT (lb)	A CTWT (lb)	0 CTWT (lb)	A CTWT (lb)
14.17	82.0	170,200	170,200	152,800	112,400	88,500	53,500
15	81.3	161,300	161,300	144,800	99,500	80,900	48,700
16	80.5	151,700	151,700	131,400	87,300	73,200	43,900
17	79.7	143,100	143,100	117,100	77,600	66,800	39,900
18	78.8	135,500	135,500	105,600	69,800	61,400	36,500
19	78.0	128,500	128,500	96,000	63,300	56,700	33,500
20	77.1	122,200	121,900	87,900	57,800	52,600	31,000
25	72.9	97,900	85,700	61,400	39,800	38,300	21,900
30	68.6	79,300	65,500	46,500	29,800	29,600	16,500
35	64.1	63,100	52,600	37,100	23,300	23,800	12,800
40	59.5	52,000	43,700	30,500	18,900	19,600	10,200
50	49.4	38,000	32,100	22,000	13,100	14,000	6,700
60	37.4	29,400	24,900	16,700	9,500	10,400	4,400
70	20.5	23,600	19,900	13,100	7,000	7,900	2,800

MAIN BOOM CAPACITIES – 60 FT OPEN THROAT ANGLE BOOM							
Load Radius (ft)	Boom Angle (deg)	Over End Blocked	360° Rotation				
			Side Frames Extended			Side Frames Retracted	
			AB CTWT (lb)	AB CTWT (lb)	A CTWT (lb)	0 CTWT (lb)	A CTWT (lb)
12.78	82.0	188,600	188,600	169,500	142,800	105,000	64,000
13	81.8	185,600	185,600	166,800	136,900	102,000	62,100
14	80.8	173,200	173,200	155,600	115,500	90,500	54,900
15	79.8	162,300	162,300	145,700	99,600	81,300	49,100
16	78.9	152,600	152,600	131,500	87,500	73,600	44,300
17	77.9	144,000	144,000	117,300	77,900	67,200	40,300
18	76.9	136,300	136,300	105,800	70,000	61,800	36,900
19	75.9	129,300	129,300	96,300	63,600	57,100	33,900
20	75.0	123,000	122,200	88,200	58,100	53,000	31,400
25	69.9	98,600	86,000	61,700	40,200	38,700	22,400
30	64.8	79,700	65,900	46,900	30,100	30,000	16,900
35	59.4	63,400	53,000	37,500	23,700	24,200	13,300
40	53.6	52,400	44,100	30,900	19,300	20,100	10,700
50	40.6	38,400	32,500	22,400	13,500	14,500	7,100
60	22.1	29,800	25,300	17,200	9,900	10,900	4,900

MAIN BOOM CAPACITIES – 80 FT OPEN THROAT ANGLE BOOM							
Load Radius (ft)	Boom Angle (deg)	Over End Blocked	360° Rotation				
			Side Frames Extended			Side Frames Retracted	
			AB CTWT (lb)	AB CTWT (lb)	A CTWT (lb)	0 CTWT (lb)	A CTWT (lb)
15.56	82.0	154,900	154,900	138,700	92,200	76,100	45,600
16	81.7	150,800	150,800	131,300	87,200	72,900	43,600
17	81.0	142,300	142,300	117,000	77,500	66,500	39,600
18	80.2	134,700	134,700	105,400	69,600	61,100	36,100
19	79.5	127,800	127,800	95,800	63,100	56,400	33,200
20	78.8	121,500	121,700	87,700	57,600	52,300	30,600
25	75.1	97,300	85,400	61,100	39,600	37,900	21,600
30	71.4	79,100	65,200	46,300	29,500	29,200	16,100
35	67.5	62,800	52,300	36,800	23,000	23,400	12,500
40	63.6	51,700	43,300	30,200	18,600	19,200	9,800
50	55.3	37,700	31,700	21,700	12,800	13,600	6,300
60	46.0	29,100	24,500	16,400	9,200	10,000	4,000
70	34.9	23,300	19,600	12,800	6,700	7,500	2,500
80	19.1	19,200	16,000	10,100	4,900	5,700	—



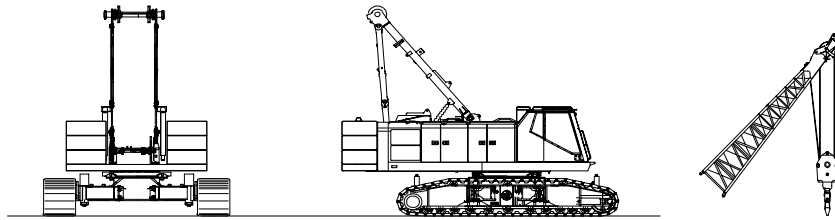
Note: Refer To Page 7 For “Capacity Deductions” Caused By Any Attachment At The Boom Tip.

MAIN BOOM CAPACITIES – 90 FT OPEN THROAT ANGLE BOOM								
Load Radius (ft)	Boom Angle (deg)	Over End Blocked	360° Rotation					PROHIBITED
			Side Frames Extended				Side Frames Retracted	
			AB CTWT (lb)	AB CTWT (lb)	A CTWT (lb)	0 CTWT (lb)	0 CTWT (lb)	
16.95	82.0	141,900	141,900	117,500	77,800	66,500		
18	81.3	133,900	133,900	105,200	69,500	60,700		
19	80.7	127,100	127,100	95,600	62,900	56,100		
20	80.0	120,800	120,800	87,500	57,400	52,000		
25	76.8	96,700	85,200	60,900	39,300	37,600		
30	73.5	78,900	64,900	46,000	29,200	28,900		
35	70.1	62,500	52,000	36,500	22,700	23,000		
40	66.7	51,400	43,000	29,900	18,200	18,900		
50	59.6	37,300	31,400	21,300	12,400	13,200		
60	51.9	28,800	24,200	16,000	8,800	9,700		
70	43.2	23,000	19,300	12,400	6,300	7,200		
80	32.9	18,800	15,700	9,800	4,600	5,300		
90	18.0	15,700	13,000	7,800	3,200	3,900		

MAIN BOOM CAPACITIES – 110 FT OPEN THROAT ANGLE BOOM								
Load Radius (ft)	Boom Angle (deg)	Over End Blocked	360° Rotation					PROHIBITED
			Side Frames Extended				Side Frames Retracted	
			AB CTWT (lb)	AB CTWT (lb)	A CTWT (lb)	0 CTWT (lb)	0 CTWT (lb)	
19.74	82.0	120,900	120,900	89,100		52,300		
20	81.9	119,300	119,300	87,100		51,300		
25	79.2	95,500	84,600	60,300		36,800		
30	76.6	78,300	64,300	45,300		28,100		
35	73.9	61,900	51,300	35,800		22,300		
40	71.1	50,800	42,300	29,200		18,100		
50	65.5	36,700	30,700	20,600		12,500		
60	59.7	28,000	23,400	15,300		8,900		
70	53.4	22,200	18,500	11,700		6,400		
80	46.6	18,100	14,900	9,000		4,500		
90	38.9	14,900	12,200	7,000		3,100		
100	29.7	12,500	10,100	5,400		2,000		
110	16.3	10,500	8,300	4,200		-		

MAIN BOOM CAPACITIES – 100 FT OPEN THROAT ANGLE BOOM								
Load Radius (ft)	Boom Angle (deg)	Over End Blocked	360° Rotation					PROHIBITED
			Side Frames Extended				Side Frames Retracted	
			AB CTWT (lb)	AB CTWT (lb)	A CTWT (lb)	0 CTWT (lb)	0 CTWT (lb)	
18.34	82.0	130,700	130,700	101,500	66,900	58,700		
19	81.6	126,300	126,300	95,400	62,700	55,700		
20	81.0	120,100	120,100	87,300	57,200	51,600		
25	78.1	96,100	84,900	60,600	39,000	37,200		
30	75.2	78,600	64,600	45,700	28,900	28,500		
35	72.2	62,200	51,600	36,100	22,400	22,700		
40	69.2	51,100	42,700	29,500	17,900	18,500		
50	62.9	37,000	31,000	21,000	12,100	12,900		
60	56.2	28,400	23,800	15,700	8,400	9,300		
70	49.0	22,600	18,900	12,000	6,000	6,800		
80	40.9	18,400	15,300	9,400	4,200	4,900		
90	31.2	15,300	12,600	7,400	2,800	3,500		
100	17.1	12,800	10,500	5,800	-	2,400		

MAIN BOOM CAPACITIES – 120 FT OPEN THROAT ANGLE BOOM								
Load Radius (ft)	Boom Angle (deg)	Over End Blocked	360° Rotation					PROHIBITED
			Side Frames Extended				Side Frames Retracted	
			AB CTWT (lb)	AB CTWT (lb)	A CTWT (lb)	0 CTWT (lb)	0 CTWT (lb)	
21.13	82.0	112,300	110,200	79,100				
25	80.1	94,800	84,300	60,000				
30	77.7	78,000	63,900	45,000				
35	75.2	61,600	51,000	35,500				
40	72.8	50,500	42,000	28,800				
50	67.7	36,300	30,300	20,200				
60	62.4	27,700	23,000	14,900				
70	56.9	21,900	18,100	11,300				
80	51.0	17,700	14,500	8,600				
90	44.5	14,500	11,800	6,600				
100	37.2	12,100	9,700	5,100				
110	28.4	10,100	8,000	3,800				
120	15.6	8,400	6,500	2,700				



Note: Refer To Page 7 For “Capacity Deductions” Caused By Any Attachment At The Boom Tip.

MAIN BOOM CAPACITIES – 130 FT OPEN THROAT ANGLE BOOM							
Load Radius (ft)	Boom Angle (deg)	Over End Blocked	360° Rotation				
			Side Frames Extended			Side Frames Retracted	
			AB CTWT (lb)	A CTWT (lb)	0 CTWT (lb)	A CTWT (lb)	0 CTWT (lb)
22.52	82.0	104,700	99,100	70,800	PROHIBITED		
25	80.9	94,100	84,000	59,700			
30	78.7	77,700	63,600	44,700			
35	76.4	61,300	50,600	35,100			
40	74.1	50,100	41,600	28,500			
50	69.5	35,900	29,900	19,900			
60	64.7	27,300	22,700	14,500			
70	59.7	21,500	17,700	10,900			
80	54.5	17,300	14,100	8,200			
90	48.8	14,100	11,400	6,200			
100	42.7	11,700	9,300	4,600			
110	35.7	9,700	7,500	3,400			
120	27.2	8,100	6,100	2,300			
130	15.0	6,700	4,900	–			

MAIN BOOM CAPACITIES – 150 FT OPEN THROAT ANGLE BOOM							
Load Radius (ft)	Boom Angle (deg)	Over End Blocked	360° Rotation				
			Side Frames Extended			Side Frames Retracted	
			AB CTWT (lb)	A CTWT (lb)	0 CTWT (lb)	A CTWT (lb)	0 CTWT (lb)
25.3	82.0	91,800	81,800	PROHIBITED			
30	80.2	76,600	62,900				
35	78.2	60,600	49,900				
40	76.3	49,400	40,900				
50	72.3	35,200	29,100				
60	68.3	26,500	21,900				
70	64.1	20,700	16,900				
80	59.7	16,500	13,300				
90	55.2	13,300	10,600				
100	50.4	10,900	8,400				
110	45.3	8,900	6,700				
120	39.6	7,200	5,300				
130	33.2	5,900	4,100				
140	25.3	4,700	3,100				
150	14.0	3,700	2,200				

MAIN BOOM CAPACITIES – 140 FT OPEN THROAT ANGLE BOOM							
Load Radius (ft)	Boom Angle (deg)	Over End Blocked	360° Rotation				
			Side Frames Extended			Side Frames Retracted	
			AB CTWT (lb)	A CTWT (lb)	0 CTWT (lb)	A CTWT (lb)	0 CTWT (lb)
23.91	82.0	97,800	89,800	PROHIBITED			
25	81.5	93,500	83,700				
30	79.5	77,400	63,300				
35	77.4	61,000	50,300				
40	75.3	49,800	41,200				
50	71.0	35,600	29,500				
60	66.6	26,900	22,300				
70	62.1	21,100	17,300				
80	57.3	16,900	13,700				
90	52.3	13,700	11,000				
100	46.9	11,300	8,900				
110	41.1	9,300	7,100				
120	34.4	7,600	5,700				
130	26.2	6,300	4,500				
140	14.4	5,100	3,500				

MAIN BOOM CAPACITIES – 160 FT OPEN THROAT ANGLE BOOM							
Load Radius (ft)	Boom Angle (deg)	Over End Blocked	360° Rotation				
			Side Frames Extended			Side Frames Retracted	
			AB CTWT (lb)	A CTWT (lb)	0 CTWT (lb)	A CTWT (lb)	0 CTWT (lb)
26.69	82.0	84,300	75,000	PROHIBITED			
30	80.8	76,000	62,600				
35	79.0	60,300	49,500				
40	77.2	49,100	40,500				
50	73.5	34,800	28,700				
60	69.7	26,200	21,500				
70	65.8	20,300	16,500				
80	61.8	16,100	12,900				
90	57.7	12,900	10,200				
100	53.3	10,500	8,000				
110	48.7	8,500	6,300				
120	43.8	6,800	4,900				
130	38.3	5,500	3,700				
140	32.1	4,300	2,700				
150	24.5	3,300	–				
160	13.5	2,400	–				

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