

# Lifting Capacities

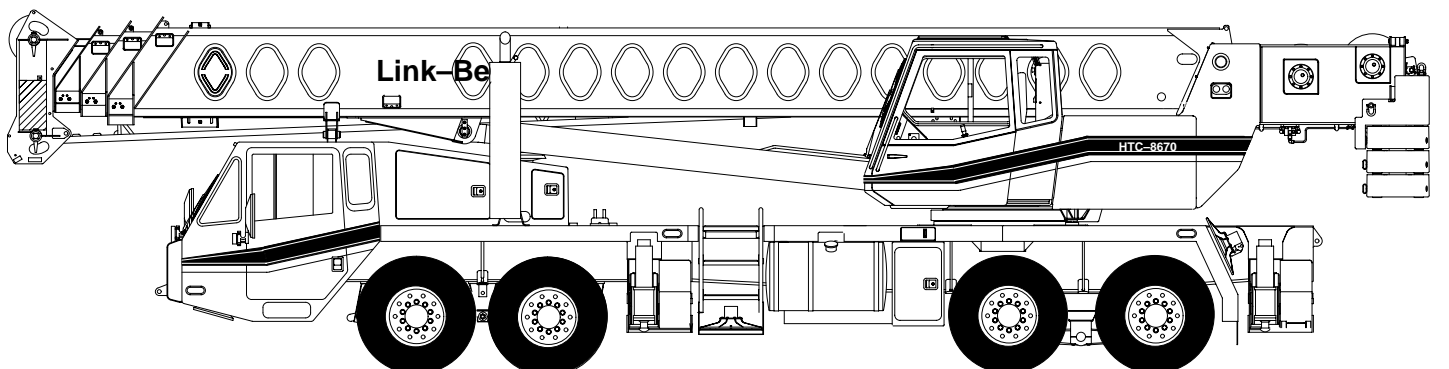
Telescopic Hydraulic Truck Crane

## HTC-8670      70-ton (63.5 metric ton)

Boom and fly capacities for this machine are listed by the following sections:

### Fully Extended Outriggers

- Working Range Diagram (16,000 lbs. Counterweight)
- 38 to 63.5 ft. (11.58 – 19.39 m) main boom capacities, **A-max** mode
- 38 to 115 ft. (11.58 – 35.05 m) main boom capacities, Basic Mode “B”
- 36.5 (11.13 m) ft. offset fly capacities, Basic Mode “B”
- 36.5 to 61 ft. (11.13 – 18.59 m) two-piece offset fly capacities, Basic mode “B”



**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.



## WARNING

**READ AND UNDERSTAND THE OPERATOR'S AND SAFETY MANUALS AND THE FOLLOWING INSTRUCTIONS AND RATED LIFTING CAPACITIES BEFORE OPERATING THE CRANE. OPERATION WHICH DOES NOT FOLLOW THESE INSTRUCTIONS MAY RESULT IN AN ACCIDENT.**

## 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 (ASME B30.5) safety standards for cranes.
- 4 . The rated lifting capacities are based on crane standing level on firm supporting surface.

### SET UP:

- 1 . The crane shall be leveled on a firm supporting surface. Depending on the nature of the supporting surface, it may be necessary to have structural supports under the outrigger pontoons or tires to spread the load to a larger bearing surface.
- 2 . When making lifts on outriggers, all tires must be free of supporting surface. All outrigger beams must be extended to the same length; fully retracted, intermediate extended, or fully extended. The front bumper outrigger must be properly extended.
- 3 . When operating on fully retracted outriggers, do not exceed 64° maximum boom angle with 16,000 lb. counterweight or 71° maximum boom angle with 12,000 lb. counterweight. Loss of backward stability will occur causing a backward tipping condition.
- 4 . When making lifts on tires, they must be inflated to the recommended pressure. (See Operation note 19 and Tire Inflation.)
- 5 . Before swinging boom to over side position on tires, or on fully retracted outriggers where capacities are not published, boom sections must be fully retracted and 45° boom angle maintained.
- 6 . For required parts of line, see Wire Rope Capacity and Winch Performance.
- 7 . Before setting up on intermediate outriggers, retracted outriggers, or tires, refer to Working Range Diagrams and rated lifting capacities to determine allowable crane configurations.

### OPERATION:

- 1 . Rated lifting capacities at rated radius shall not be exceeded. Do not tip the crane to determine allowable loads. For concrete bucket operation, weight of bucket and load shall not exceed 80% of rated lifting capacities. For clamshell bucket operation, weight of bucket and bucket contents is restricted to a maximum weight of 7,000 pounds or 80% of rated lifting capacity, whichever is less. For magnet operation, weight of magnet and load is restricted to a maximum weight of 7,000 pounds or 80% of rated lifting capacity, whichever is less. For clamshell and magnet operation, maximum boom length is restricted to 55 ft. and the boom angle is restricted to a minimum of 35 degrees. Lifts with either fly erected is prohibited for both clam and magnet operation.
- 2 . Rated lifting capacities shown on fully extended outriggers do not exceed 85% of the tipping loads. Rated lifting capacities shown on intermediate extended or fully retracted outriggers are determined by the formula, rated load = (tipping load – 0.1 X load factor)/1.25. Rated lifting capacities shown on tires do not exceed 75% of the tipping loads. Tipping loads are determined by SAE crane stability test code J-765.
- 3 . Rated lifting capacities in the shaded areas above the bold lines, are based on structural strength or hydraulic limitations and have been tested to meet minimum requirements of SAE J-1063 cantilevered boom crane structures— method of test. The rated lifting capacities below the bold lines are based on stability ratings. Some capacities are limited by a maximum obtainable 78° boom angle.
- 4 . Rated lifting capacities include the weight of the hook block, hook ball, slings, bucket, magnet, and auxiliary lifting devices. Their weights must be subtracted from the listed rated capacity to obtain the net load which can be lifted. Rated lifting capacities include the deduct for either fly stowed on the base of the boom. For deducts of either fly erected, but not used, see Capacity Deductions For Auxiliary Load Handling Equipment.
- 5 . Rated lifting capacities are based on freely suspended loads. No attempt shall be made to move a load horizontally on the ground in any direction.
- 6 . Rated lifting capacities are for lift crane service only.
- 7 . Do not operate at radii or boom lengths (minimum or maximum) where capacities are not listed. At these positions, the crane can tip or cause boom failure.
- 8 . The maximum loads which can be telescoped are not definable because of variation in loadings and crane maintenance, but it is permissible to attempt retraction and extension within the limits of the applicable load rating chart.
- 9 . For main boom capacities when either boom length or radius or both are between values listed, proceed as follows:
  - a . For boom lengths not listed, use rating for next longer boom length or next shorter boom length, whichever is smaller.
  - b . For load radii not listed, use rating for next larger radius.

- 10 . The user shall operate at reduced ratings to allow for adverse job conditions, such as: soft or uneven ground, out of level conditions, wind, side loads, pendulum action, jerking or sudden stopping of loads, hazardous conditions, experience of personnel, traveling with loads, electrical wires, etc. Side load on boom or fly is dangerous and shall be avoided.
- 11 . Rated lifting capacities do not account for wind on suspended load or boom. Rated capacities and boom length shall be appropriately reduced as wind velocity approaches or exceeds 20 mph.
- 12 . When making lifts with auxiliary head machinery, the effective length of the boom increases by 2 ft.
- 13 . Power sections of boom must be extended in accordance with boom mode "A" or "B". In boom mode "B" all power sections must be extended or retracted equally.
- 14 . Rated lifting capacities are based on correct reeving. Deduction must be made for excessive reeving. Any reeving over minimum required (see Wire Rope Capacity) is considered excessive and must be accounted for when making lifts. Use working range diagram to estimate the extra feet of rope then deduct 1 lb. for each extra foot of wire rope before attempting to lift a load.
- 15 . The loaded boom angle combined with the boom length give only an approximation of the operating radius. The boom angle, before loading, should be greater to account for deflection. For main boom capacities, the loaded boom angle is for reference only. For fly capacities, the loaded radius is for reference only.
- 16 . For fly capacities with main boom length less than 115 ft. and greater than 95 ft., the rated capacities are determined by the boom angle using the 115 ft. boom and fly chart. For angles not shown use the next lower boom angle to determine the rated capacity.
- 17 . For fly capacities with main boom length less than 95 ft., the rated capacities are determined by the boom angle only using the 95 ft. boom and fly chart. For angles not shown, use the next lower boom angle to determine the rated capacity.
- 18 . The 38 ft. boom length rated lifting capacities are based on boom fully retracted. If the boom is not fully retracted, do not exceed capacities shown for the 45 ft. boom length.
- 19 . Rated lifting capacities on tires depend on tire capacity, condition of tires, and tire air pressure. On tire capacities require lifting from main boom head only on a smooth and level surface. Pick and carry operations are restricted to maximum speed of 1 mph. The boom must be centered over the rear of the crane with two position travel swing lock engaged and the load must be restrained from swinging. For correct tire pressure, see "Tire Inflation".

### **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 . Loaded 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 center line 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.
- 6 . No Load Stability Limit: The radius or boom angle beyond which it is not permitted to position the boom because the crane can overturn without any load on the hook.
- 7 . Load Factor: Load applied at the boom tip which gives the same moment effect as the boom mass.

## BOOM EXTENSION

Boom Mode "A"	Boom Length (ft.)
Only inner mid section telescopes	38
	45
	55
	63.5
Inner Mid Section 308" Stroke	Base Section

Boom Mode "B"	Boom Length (ft.)		
Inner mid, outer mid and tip sections telescope simultaneously.	38		
	45		
	55		
	65		
	75		
	85		
	95		
	105		
	115		
Tip Section 308" Stroke	Outer Mid Section 308" Stroke	Inner Mid Section 308" Stroke	Base Section

## TIRE INFLATION

Tire Size	Operation	Tire Pressure (psi)
12 R 22.5	1 MPH Stationary	120 120

## PONTOON LOADINGS

Maximum Pontoon Load:	Maximum Pontoon Ground Bearing Pressure:
97,400 lbs.	215 psi

## CAPACITY DEDUCTIONS FOR AUXILIARY LOAD HANDLING EQUIPMENT

Load Handling Equipment:	(lbs.)
Auxiliary Head Attached	150
70-ton quick reeve 5 sheave hook block (see hook block for actual weight)	1,400
40-ton quick reeve 4 sheave hook block (see hook block for actual weight)	720
8.5-ton hook ball (see hook ball for actual weight)	360
Lifting From Main Boom With:	(lbs.)
36.5 ft. or 61 ft. fly stowed on base (see operation note 4)	0
36.5 ft. offset fly erected but not used	6,100
61 ft. offset fly erected but not used	7,600
Lifting From 36.5 ft. Offset Fly With:	
24.5 ft. fly tip erected but not used	PROHIBITED
24.5 ft. fly tip stowed on 36.5 ft. offset fly	PROHIBITED
Note: Capacity deductions are for Link-Belt supplied equipment only.	

## WINCH PERFORMANCE

Wire Rope Layer	Winch Line Pulls		Drum Rope Capacity (ft.)	
	Two Speed Winch		Layer	Total
	Low Speed Available lbs.*	High Speed Available lbs.		
1	16,805	8,290	110	110
2	15,620	7,710	118	228
3	14,590	7,200	126	354
4	13,690	6,760	134	488
5	12,890	6,360	143	631
6	12,190	6,020	151	782

\*Maximum lifting capacity: Type RB Rope = 12,920 Type ZB Rope = 15,600

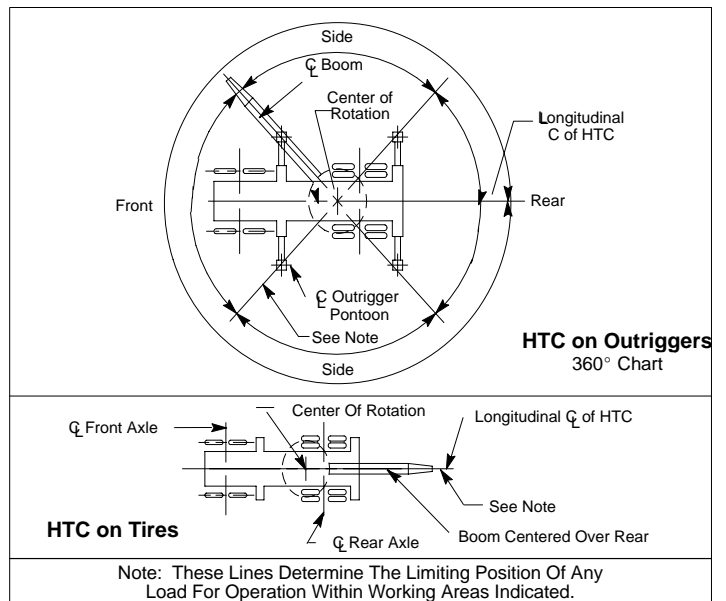
## WIRE ROPE CAPACITY

Maximum Lifting Capacities Based On Wire Rope Strength			
Parts of Line	3/4"		Notes
	Type RB	Type ZB	
1	12,920	15,600	Capacities shown are in pounds and working loads must not exceed the ratings on the capacity charts in the Crane Rating Manual.  Study Operator's Manual for wire rope inspection procedures and single part of line applications.
2	25,840	31,200	
3	38,760	46,800	
4	51,680	62,400	
5	64,600	78,000	
6	77,520	93,600	
7	90,440	109,200	
8	103,360	124,800	
9	116,280	140,400	
10	129,200	156,000	
LBCE		DESCRIPTION	
TYPE RB		18 X 19 Rotation Resistant – Compact Strand, High Strength Preformed, Right Regular Lay	
TYPE ZB		36 X 7 Rotation Resistant – Extra Improved Plow Steel – Right Regular Lay	

## HYDRAULIC CIRCUIT PRESSURE SETTINGS

Function	Pressure (PSI)
Front and Rear Winch	3,500
Outriggers	3,000
Boom Hoist	3,500
Telescope	3,000
Swing	1,500
Steering	1,600
Bumper Outrigger	650
Pilot Control	500
Counterweight Removal	1,700
Swing Park Brake Release	250

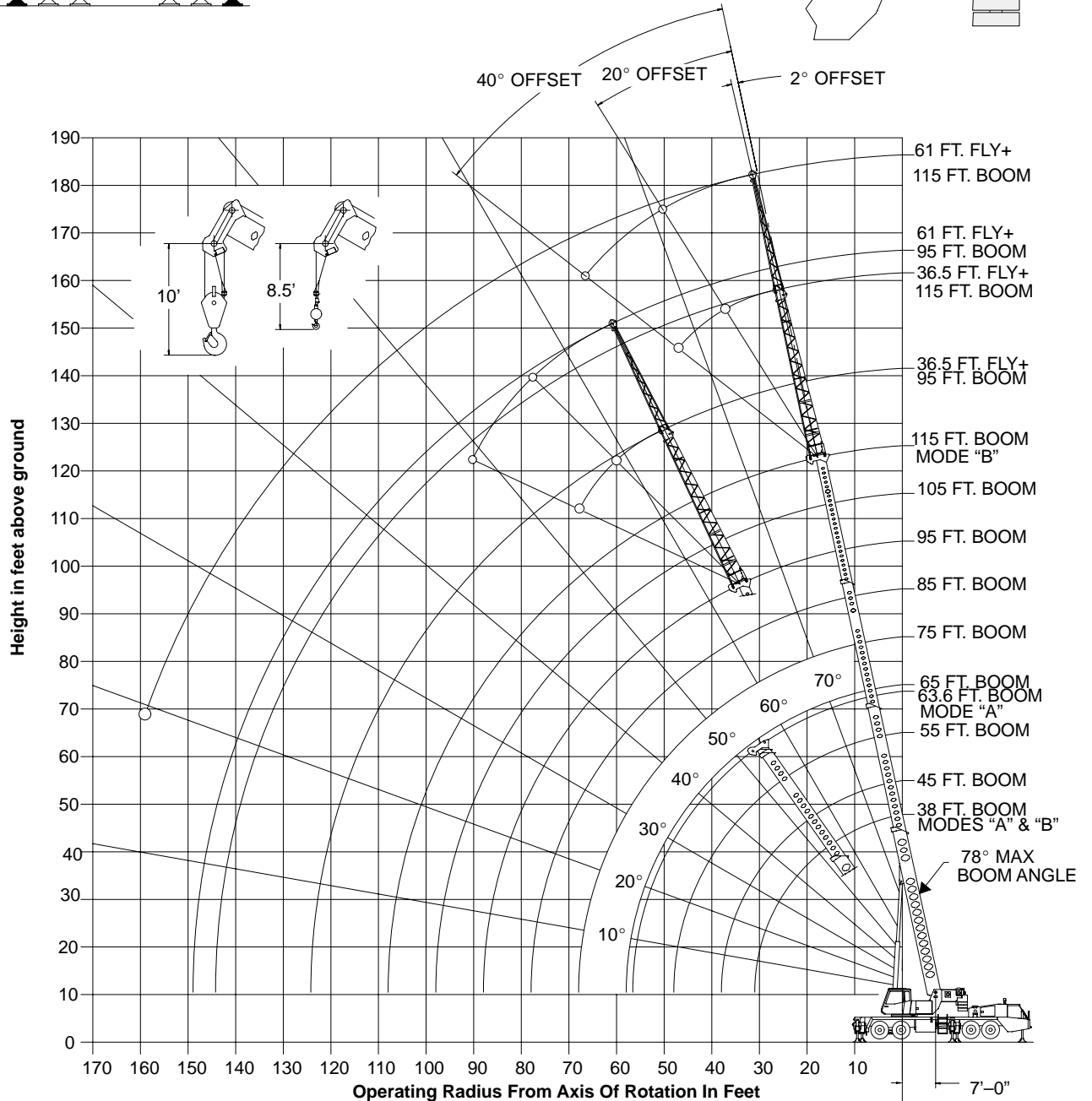
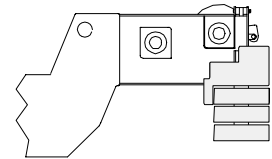
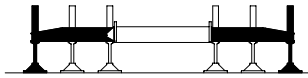
## WORKING AREAS



# WORKING RANGE DIAGRAM

**Working Range Diagram  
On Fully Extended Outriggers**

**16,000# Counterweight**



○ Denotes Main Boom + 61' Fly-Boom Mode "B"

⊙ OF ROTATION

**Note: Boom and fly geometry shown are 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.**



## WARNING

**Do Not Lower The Boom Below The Minimum Boom Angle For No Load As Shown In The Lift Charts For The Boom Lengths Given. Loss Of Stability Will Occur Causing A Tipping Condition.**

**Note: Refer To Page 4 For “Capacity Deductions” Caused By Auxiliary Load Handling Equipment.**

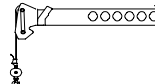


**Boom Mode “A”**  
16,000 lbs. Counterweight



Rated Lifting Capacities In Pounds On Fully Extended Outriggers See Set Up Note 2.

Load Radius (ft)	38 Ft.			45 Ft.		
	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear
9	69.0	140,000	140,000			
10	67.0	132,000	132,000	71.0	87,400	87,400
12	64.0	116,900	116,900	68.5	87,400	87,400
15	58.5	100,200	100,200	64.0	87,400	87,400
20	48.5	75,900	75,900	56.5	75,500	75,500
25	36.5	58,700	58,700	48.0	58,300	58,300
30	17.5	45,400	45,400	38.0	45,100	45,100
35				24.5	34,500	34,500
Min.Bm. Ang./Cap.	0 (31.0)	25,200	25,200	0 (38.0)	20,200	20,200
Load Radius (ft)	55 Ft.			60.3 Ft.		
	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear
10	75.0	85,600	85,600			
12	73.0	85,600	85,600	75.5	56,300	56,300
15	69.5	85,600	85,600	73.0	56,300	56,300
20	64.0	75,000	75,000	68.0	53,000	53,000
25	57.5	57,900	57,900	63.0	44,900	44,900
30	51.0	44,400	44,400	57.5	38,700	38,700
35	43.0	34,100	34,100	51.5	33,700	33,700
40	34.5	27,000	27,000	45.5	26,700	26,700
45	22.0	21,800	21,800	38.0	21,600	21,600
50				29.0	17,700	17,700
55				16.0	14,600	14,600
Min.Bm. Ang./Cap.	0 (48.0)	14,100	14,100	0 (56.6)	10,400	10,400

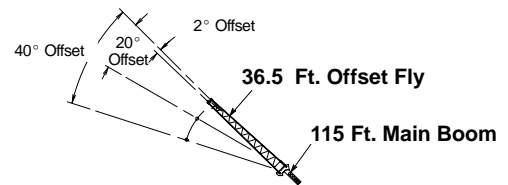
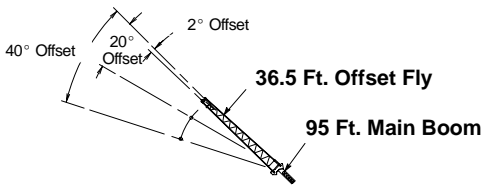


**Boom Mode “B”**  
16,000 lbs. Counterweight



Rated Lifting Capacities In Pounds On Fully Extended Outriggers See Set Up Note 2.

Load Radius (ft)	35.5 Ft.			45 Ft.			55 Ft.		
	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear
9	69.0	140,000	140,000						
10	67.0	132,000	132,000	71.0	42,000	42,000	74.5	42,000	42,000
12	64.0	116,900	116,900	68.0	42,000	42,000	72.5	42,000	42,000
15	58.5	100,200	100,200	64.0	42,000	42,000	69.0	42,000	42,000
20	48.5	75,900	75,900	56.5	42,000	42,000	63.5	42,000	42,000
25	36.5	58,700	58,700	48.0	42,000	42,000	57.5	42,000	42,000
30	17.5	45,400	45,400	38.0	42,000	42,000	50.5	42,000	42,000
35				24.5	35,600	35,600	43.0	36,300	36,300
40							34.0	29,100	29,100
45							22.0	23,800	23,800
Min.Bm. Ang./Cap.	0 (31.0)	25,200	25,200	0 (38.0)	19,200	19,200	0 (48.0)	13,700	13,700
Load Radius (ft)	65 Ft.			75 Ft.			85 Ft.		
	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear
12	75.5	42,000	42,000						
15	73.0	42,000	42,000	75.5	42,000	42,000	77.5	42,000	42,000
20	68.0	42,000	42,000	71.5	42,000	42,000	74.5	42,000	42,000
25	63.5	42,000	42,000	68.0	42,000	42,000	71.0	41,800	41,800
30	58.0	42,000	42,000	63.5	42,000	42,000	67.0	36,900	36,900
35	52.5	36,600	36,600	59.0	36,800	36,800	63.5	32,900	32,900
40	46.5	29,400	29,400	54.0	29,600	29,600	59.5	29,700	29,700
45	39.5	24,300	24,300	49.0	24,500	24,500	55.0	24,600	24,600
50	31.5	20,300	20,300	43.0	20,600	20,600	50.5	20,700	20,700
55	20.0	17,200	17,200	37.0	17,500	17,500	46.0	17,600	17,600
60				29.5	15,000	15,000	40.5	15,100	15,100
65				19.0	12,900	12,900	34.5	13,100	13,100
70							27.5	11,400	11,400
75							18.0	9,900	9,900
Min.Bm. Ang./Cap.	0 (58.0)	10,100	10,100	0 (68.0)	7,600	7,600	0 (78.0)	5,700	5,700
Load Radius (ft)	95 Ft.			105 Ft.			115 Ft.		
	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear	Loaded Boom Angle (Deg.)	360°	Over Rear
20	76.5	38,600	38,600						
25	73.5	33,800	33,800	75.5	30,300	30,300	77.0	24,500	24,500
30	70.0	29,800	29,800	72.5	27,000	27,000	74.5	24,500	24,500
35	67.0	26,600	26,600	69.5	24,100	24,100	72.0	22,200	22,200
40	63.5	23,900	23,900	66.5	21,700	21,700	69.5	20,000	20,000
45	60.0	21,700	21,700	63.5	19,600	19,600	66.5	18,100	18,100
50	56.0	19,800	19,800	60.5	17,900	17,900	63.5	16,300	16,300
55	52.5	17,700	17,700	57.0	16,200	16,200	61.0	14,900	14,900
60	48.0	15,200	15,200	53.5	14,900	14,900	58.0	13,600	13,600
65	43.5	13,200	13,200	50.0	13,300	13,300	54.5	12,500	12,500
70	38.5	11,600	11,600	46.0	11,600	11,600	51.5	11,600	11,600
75	33.0	10,100	10,100	41.5	10,200	10,200	48.0	10,300	10,300
80	26.5	8,800	8,800	37.0	8,900	8,900	44.0	9,000	9,000
85	17.0	7,700	7,700	31.5	7,800	7,900	40.0	7,800	7,900
90				25.5	6,800	6,900	35.5	6,900	7,000
95				16.5	5,900	6,000	30.5	6,000	6,100
100							24.5	5,200	5,400
105							16.0	4,600	4,700
Min.Bm. Ang./Cap.	0 (88.0)	4,300	4,300	0 (98.0)	3,100	3,100	0 (108.0)	2,200	2,200



**Boom Mode "B"**  
16,000 lbs. Counterweight

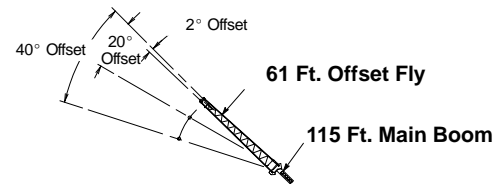
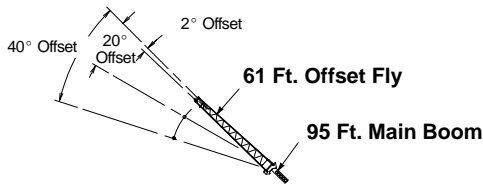
Rated Lifting Capacities In Pounds On Fully Extended Outriggers See Set Up Note 2.

Load Radius (ft)	2° Offset		20° Offset		40° Offset	
	Loaded Boom Angle (Deg.)	360°	Loaded Boom Angle (Deg.)	360°	Loaded Boom Angle (Deg.)	360°
30	76.5	16,900				
35	74.0	14,400				
40	72.0	13,700	76.5	10,200		
45	69.5	13,100	74.5	9,600		
50	67.5	12,400	72.0	9,100	76.5	6,800
55	65.0	11,800	69.5	8,700	74.0	6,800
60	62.5	11,200	67.0	8,300	71.5	6,600
65	60.0	10,500	64.5	7,900	68.5	6,400
70	57.5	9,800	62.0	7,600	66.0	6,300
75	55.0	9,300	59.5	7,300	63.0	6,100
80	52.0	8,700	56.5	7,000	60.0	6,000
85	49.0	8,300	53.5	6,700	57.0	5,900
90	46.0	7,800	50.5	6,500	53.5	5,800
95	42.5	7,200	47.0	6,300	50.0	5,700
100	39.0	6,500	43.5	6,100	46.0	5,700
105	35.0	5,800	39.5	6,000	41.5	5,700
110	30.5	5,100	35.0	5,400		
115	25.0	4,600	29.5	4,800		
120	18.5	4,100	22.0	4,200		
Min.Bm. Ang./Cap.	0	1,600	0	1,700	0	1,900

**Boom Mode "B"**  
16,000 lbs. Counterweight

Rated Lifting Capacities In Pounds On Fully Extended Outriggers See Set Up Note 2.

Load Radius (ft)	2° Offset		20° Offset		40° Offset	
	Loaded-Boom-Angle (Deg.)	360°	Loaded Boom Angle (Deg.)	360°	Loaded Boom Angle (Deg.)	360°
35	76.5	10,500				
40	75.0	10,500				
45	73.0	10,500	77.5	9,200		
50	71.5	10,500	75.5	8,900		
55	69.5	10,500	73.5	8,600	77.5	6,800
60	68.0	10,500	71.5	8,200	75.0	6,600
65	66.0	10,200	69.5	8,000	73.0	6,500
70	63.5	9,500	67.5	7,700	71.0	6,300
75	61.5	8,700	65.5	7,400	68.5	6,200
80	59.0	8,000	63.5	7,200	66.5	6,100
85	57.0	7,400	61.0	7,000	64.0	6,000
90	54.5	6,900	58.5	6,800	61.5	5,900
95	52.0	6,400	56.0	6,500	59.0	5,800
100	49.0	5,900	53.5	6,100	56.5	5,700
105	46.5	5,500	50.5	5,600	53.5	5,700
110	43.5	4,900	48.0	5,200	50.5	5,400
115	40.5	4,300	44.5	4,700	47.0	4,900
120	37.0	3,800	41.0	4,100	43.0	4,300
125	33.0	3,300	37.0	3,600		
130	29.0	2,900	32.5	3,100		
135	24.0	2,500	27.5	2,700		
140	17.5	2,200	20.5	2,300		
Min.Bm. Ang./Cap.	0	400	0	400	0	500



**Boom Mode "B"**  
16,000 lbs. Counterweight

Rated Lifting Capacities In Pounds On Fully Extended Outriggers See Set Up Note 2.

Load Radius (ft)	2° Offset		20° Offset		40° Offset	
	Loaded Boom Angle (Deg.)	360°	Loaded Boom Angle (Deg.)	360°	Loaded Boom Angle (Deg.)	360°
35	77.5	9,500				
40	75.5	9,100				
45	74.0	8,500				
50	72.0	7,900				
55	70.0	7,400	77.0	5,200		
60	68.0	6,900	75.0	4,900		
65	66.0	6,400	73.0	4,600		
70	64.0	6,000	71.0	4,400	77.5	3,400
75	62.0	5,600	69.0	4,200	75.0	3,300
80	60.0	5,300	66.5	4,000	73.0	3,200
85	57.5	5,000	64.5	3,900	70.5	3,100
90	55.5	4,700	62.5	3,700	68.0	3,100
95	53.0	4,500	60.0	3,600	65.5	3,000
100	50.5	4,200	57.5	3,400	63.0	2,900
105	48.0	4,000	55.0	3,300	60.0	2,900
110	45.5	3,800	52.0	3,200	57.5	2,800
115	43.0	3,600	49.5	3,100	54.0	2,800
120	40.0	3,500	46.5	3,000	50.5	2,800
125	36.5	3,300	43.0	2,900	47.0	2,800
130	33.0	3,200	39.5	2,900	42.5	2,800
135	29.0	3,100	35.0	2,800		
140	24.5	3,000	30.0	2,800		
145	18.0	2,700	22.5	2,800		
Min.Bm. Ang./Cap.	0	700	0	800	0	1,000

**Boom Mode "B"**  
16,000 lbs. Counterweight

Rated Lifting Capacities In Pounds On Fully Extended Outriggers See Set Up Note 2.

Load Radius (ft)	2° Offset		20° Offset		40° Offset	
	Loaded Boom Angle (Deg.)	360°	Loaded Boom Angle (Deg.)	360°	Loaded Boom Angle (Deg.)	360°
40	77.5	7,100				
45	76.5	7,100				
50	75.0	7,100				
55	73.5	7,000				
60	72.0	6,700	78.0°	4,900		
65	70.0	6,400	76.0	4,700		
70	68.5	6,200	74.5	4,500		
75	67.0	5,900	73.0	4,300		
80	65.0	5,600	71.0	4,200	76.5	3,300
85	63.5	5,300	69.0	4,000	74.5	3,200
90	61.5	5,100	67.5	3,900	72.5	3,100
95	59.5	4,800	65.5	3,700	70.5	3,000
100	57.5	4,600	63.5	3,600	68.5	3,000
105	55.5	4,400	61.5	3,500	66.5	2,900
110	53.5	4,200	59.5	3,400	64.0	2,900
115	51.5	4,000	57.0	3,300	62.0	2,800
120	49.0	3,800	55.0	3,200	59.5	2,800
125	46.5	3,400	52.5	3,100	57.0	2,800
130	44.0	3,100	50.0	3,000	54.0	2,700
135	41.5	2,900	47.5	2,900	51.0	2,700
140	38.5	2,600	44.5	2,800	48.0	2,700
145	35.5	2,300	41.5	2,500	44.0	2,700
150	32.0	2,000	38.0	2,300		
155	28.0	1,700	33.5	2,000		
160	23.5	1,400	28.5	1,600		

**WARNING**

Do Not Lower 61 Ft. Offset Fly In Working Position Below 20 Degrees Unless Main Boom Length Is 108 Ft. Or Less, Since Loss Of Stability Will Occur Causing A Tipping Condition.

