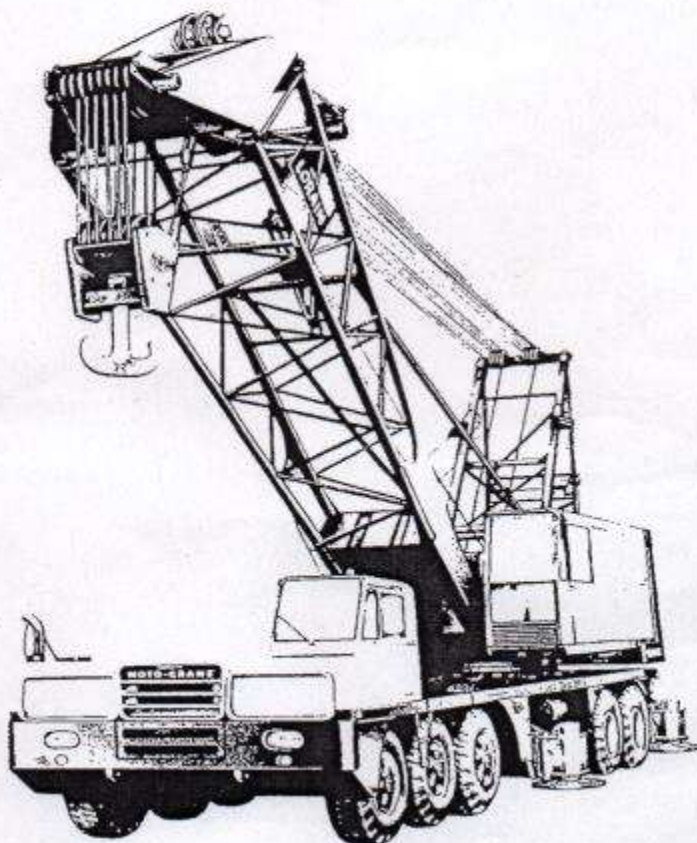


VALUE IS OUR FIRST SPECIFICATION

LORAIN MC-8150

MOTO-CRANE[®]
SPECIFICATIONS
10X4



OUTSTANDING PERFORMANCE FEATURES

TANDEM DRUM DESIGN for outstanding cable capacity.

ALL-GEAR DRIVE . . . enclosed gears lubricated by forced filtered oil.

HYDRAULIC SWING . . . independent precision control.

ONE-PIECE TURNTABLE BED AND SIDE FRAMES . . . maximum strength, perfect shaft alignment.

VERY LOW WEIGHT for its rating, for better roadability.

BRAND NEW SUPERSTRUCTURE DESIGN . . . LORAIN-DESIGNED AND BUILT CARRIER 10 x 4, box frame chassis, planetary axles.

HAMMERHEAD BOOM PEAK . . . for short boom, maximum lifts.

LONG TAPERED BOOM PEAK . . . available for maximum reaches, capacities.

POWER LOAD LOWERING . . . available on both hoist drums.

EXCLUSIVE SQUARE-TUBULAR-CHORD BOOM . . . round tubular lacing . . . aircraft type alloy steel . . . long-lived, light weight, sturdy.

POWERSPAN OUTRIGGERS . . . set in seconds; precise leveling, plus straight down motion.

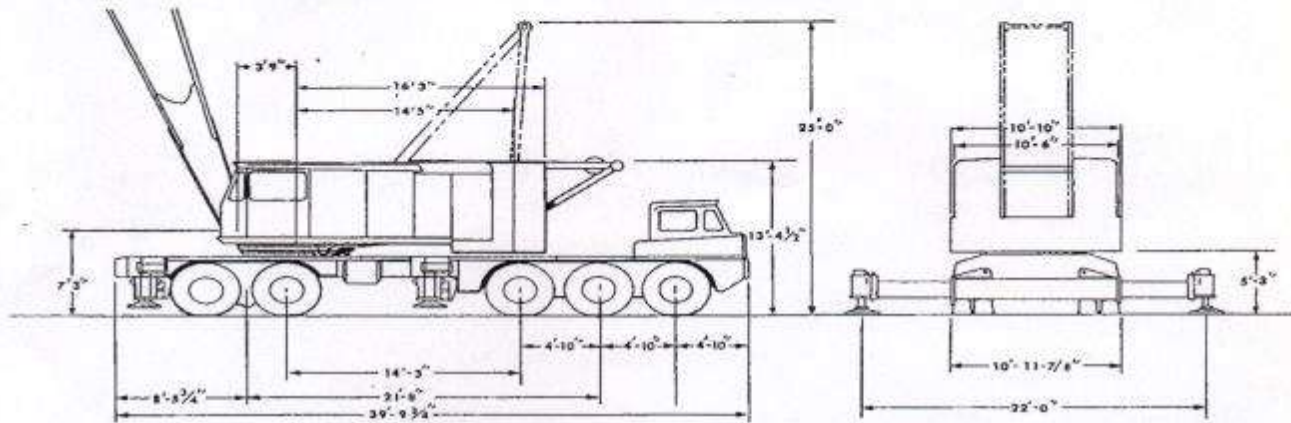
EXCLUSIVE SHEAR-BALL[®] TURNTABLE CONNECTION . . . 10-year written warranty.

BIG, DUAL DRUM, 2-SPEED BOOM HOIST . . . metered air controls.

RETARDER . . . for precision work . . . standard.

TORQUE CONVERTER . . . standard.

DIMENSIONS AND SPECIFICATIONS... 10X4... D-21 BOOM



TURNTABLE SPECIFICATIONS

Power		Cummins N-855-C-TC, 6 cyl.
Bore and Stroke		5 1/2 in. x 6 in.
Displacement		855 cu. in.
Horsepower		246 H.P.
Power Take-Off		Torque Converter
Fuel Tank		100 gals.

Operating Characteristics

Line Pulls and Line Speeds:	Hand Throttle	Foot Throttle
Rear Drum 25" P.D. Lugging		
1st Layer	26,940# @ 196 F.P.M.	21,870# @ 297 F.P.M.
3rd Layer	23,620# @ 224 F.P.M.	19,170# @ 340 F.P.M.
Front Drum 21" P.D. Lugging		
1st Layer	30,470# @ 166 F.P.M.	24,730# @ 252 F.P.M.
3rd Layer	25,600# @ 198 F.P.M.	20,775# @ 300 F.P.M.
Swing Speed		0-4 R.P.M.

Controls

Hoist and Derricking Clutches	Metered Air
Swing	Independent Hydraulic

Other Equipment

Boom Hoist	2-Speed, Dual Drum
Gantry	Power Operated Back Hitch
Counterweights (with Hydraulic Kit for Removal)	24,100 and 34,500 lbs.

Turntable Connection

MOTO-CRANE SPECIFICATIONS

Power		Cummins, NTC-335, 6 cyl.
Bore and Stroke		5 1/2 in. x 6 in.
Displacement		855 cu. in.
Horsepower		335 H.P.
Power Take-Off		Plate Clutch
Fuel Tank		120 gals.

Transmissions

Main	11 Speeds
Auxiliary	3 Speeds
Speeds Forward	33
Speeds Reverse	6

Speeds:	Low-low	0.7 M.P.H.	High-high	38.0 M.P.H.
Outriggers	POWRSPAN, Hydraulically Operated, Complete with Floats			

Rear Bogie

Axles (Planetary)	Double Reduction Gear Drive
	First reduction thru hypoid gears; final reduction thru planetary wheel hubs; high-traction differentials. Interaxle differentials with lockout.

Mounting	Two axles in tandem, with "through-drive", mounted on equalizer beams.
Front Tridem	Three non-driving axles on equalizer beams
Steering	Centralized, Hydraulic Power Assist
Turning Radius (to Front Corner of Vehicle)	67 ft.
Brakes (Spring-set for Emergency and Parking)	Air
Rear	4 Brakes, 20" in. dia. x 7 in. wide
Front	6 Brakes, 17" in. dia. x 4 in. wide
Tires (Tube)	14:00 x 24, 18-P.R.
Guide Rails for undocking turntable	Available

BOOM EQUIPMENT

Crane Boom		Square-Tubular-Chord
Design		Pin Connected
Type of Connection		Pin Connected
Basic Length—Hammerhead Boom	33 ft. 30-ft. base, 3 ft. top	
Long Tapered Boom	90 ft. 30-ft. base, 60 ft. 12 pc) top	
Number of Hoist Line Sheaves on Anti-Friction Bearings		6
Hammerhead Boom		4
Long Tapered Boom		4
(Additional Sheave Available for Hammerhead Boom)		

Jib		30 ft.
Two-Piece*Pin-Connected Type		
*Extendible with 10-ft. & 20-ft. Center Sections to 70 ft.		

Lifting Crane Component

Lagging	21 in. and 25 in. P.D. Full Width
Floating Harness	18 Parts of Line
Boom Stops	Telescopic Type
Swing Brake	Standard
Harness Extending Cylinder	Standard
Retarder	Standard
Power Load Lowering Both Hoist Drums	Available
Third Drum	Available
High Speed Hoist	Available

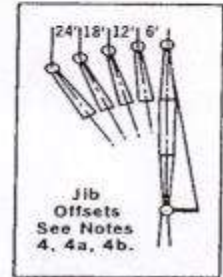
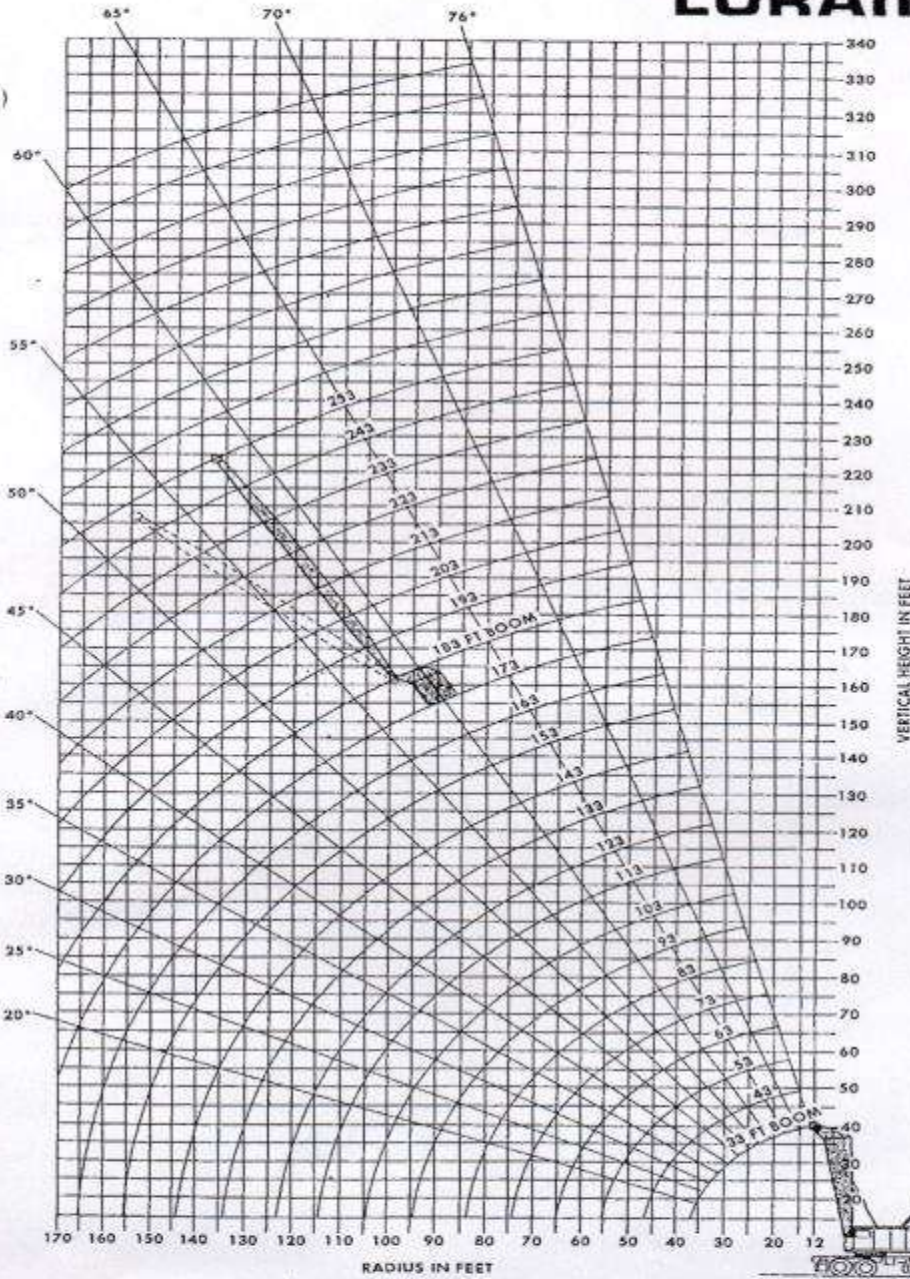
APPROXIMATE SHIPPING WEIGHTS*

Standard Equipped Machines with Basic Boom		201,500 lbs.
Lifting Crane (Hammerhead Boom)		
*Total weight of unit may be reduced 58,600 lbs. by taking off removable counterweights for road travel—(hydraulic removal kit included.) Additional reductions may be made by removal of outriggers boxes and beams and undocking turntable.		

VALUE IS OUR FIRST SPECIFICATION

LORAIN MC-8150

MOTO-CRANE
LIFTING CAPACITIES
AND WORKING RANGES



**D-21 BOOM
WORKING
RANGES
MC-8150
10X4**

**HAMMERHEAD
BOOM**

MC-8150 WITH D-21 HAMMERHEAD BOOM - 10 X 4 CRANE LIFTING CAPACITIES - POUNDS

MAXIMUM COUNTERWEIGHT												
Boom Length	Radius	Boom Angle	With Outriggers Over Rear And Side	Boom Length	Radius	Boom Angle	With Outriggers Over Rear And Side	Boom Length	Radius	Boom Angle	With Outriggers Over Rear And Side	
33 Ft.	12	82.5	300000	123 Ft.	30	79.4	123400	CAPACITIES BELOW INCLUDE JIB (See Note 4a)				
	15	73.2	248300		40	74.5	81000					
	20	68.0	193400		50	69.6	58900					
	25	57.9	155000		60	64.6	45600					
	30	45.9	126200		70	59.3	36700					
43 Ft.	15	80.2	247500		80	53.7	30300	193 Ft.	40	80.2	30000	
	20	73.2	192800		90	47.6	25400		50	77.2	30000	
	25	66.1	154900		100	40.7	21700		60	74.2	30000	
	30	58.4	126100		110	32.7	18700		80	67.8	20000	
	40	39.6	82600		120	22.0	16200		100	61.3	19900	
53 Ft.	15	82.0	247000		133 Ft.	30	80.2	116800	120	54.2	14400	
	20	76.5	192300	40		75.8	80900	140	46.4	10600		
	25	70.8	154000	50		71.4	58700	160	37.4	7800		
	30	64.9	125900	60		66.7	45400	180	25.7	5700		
	40	51.9	82400	70		61.9	36500	190	17.4	4800		
63 Ft.	20	78.7	191900	143 Ft.	80	56.9	30000	203 Ft.	45	79.1	30000	
	25	74.1	153500		90	51.5	25200		50	77.9	30000	
	30	69.2	125700		100	45.6	21400		60	75.0	30000	
	40	58.9	82200		110	39.0	18400		80	69.0	20000	
	50	47.2	60300		120	31.4	16000		100	62.9	19600	
73 Ft.	20	80.2	191400		153 Ft.	130	21.1	13900	120	56.3	14100	
	25	76.3	153100			143 Ft.	35	78.9	98200	140	49.1	10300
	30	72.2	125600				40	76.9	80600	160	41.0	7600
	40	63.6	87000				50	72.7	58500	180	31.3	5400
	50	54.3	60100				60	68.3	45200	200	16.9	3800
60	43.4	46800	70				64.0	36200	213 Ft.	45	79.8	30000
70	29.4	38000	80	59.5		29800	50	78.4		30000		
83 Ft.	20	81.3	184700	90		54.7	24900	60		75.7	30000	
	25	77.9	152300	100		49.5	21200	80		70.1	20000	
	30	74.3	125400	110		43.9	18500	100		64.2	19400	
	40	66.9	81800	120		37.6	15700	120	58.0	13900		
	50	59.1	59800	130	30.2	13700	140	51.4	10100			
93 Ft.	25	79.2	151800	163 Ft.	140	29.1	11700	160	44.1	7300		
	30	76.0	125300		150	19.6	10200	180	35.5	5200		
	40	69.4	81600		153 Ft.	35	79.7	96400	200	24.4	3500	
	50	62.8	59600			40	77.7	80400	223 Ft.	45	80.2	22000
	60	55.5	46400			50	73.9	58300		50	79.0	22000
70	47.4	37500	60			69.9	44900	60		76.4	22000	
80	38.0	31000	70			65.8	36000	80		71.0	14000	
90	25.7	26200	80		61.7	29500	100	65.4		14500		
103 Ft.	25	80.2	149800		90	57.3	24700	120	59.7	13600		
	30	77.4	125100		100	52.7	20900	140	53.5	9800		
	40	71.7	81400		110	47.7	17900	160	46.7	7000		
	50	65.6	59400	120	42.3	15400	180	39.0	4900			
	60	59.3	46100	130	36.3	13400	233 Ft.	50	79.4	15000		
70	52.5	37200	140	29.1	11700	60		76.9	15000			
80	44.9	30300	150	19.6	10200	80		71.8	10000			
90	36.0	25900	163 Ft.	40	78.4	80200		100	66.5	10000		
100	24.3	22200		50	74.8	58000		120	61.0	10000		
113 Ft.	25	81.0		140900	60	71.2	44700	140	55.2	9500		
	30	78.5		124900	80	63.5	29300	160	49.0	6700		
	40	73.3		81200	100	55.9	20700	180	42.0	4600		
	50	67.8	59200	120	46.1	15200	243 Ft.	50	79.8	12000		
	60	62.3	45900	140	35.0	11400		60	77.5	12000		
70	56.3	37000	160	18.9	8600	80		72.6	8000			
80	49.9	30500	173 Ft.	40	79.2	80000		100	67.5	8000		
90	42.7	25700		50	75.8	57800		120	62.4	8000		
100	34.2	21900		60	72.4	44400	140	56.9	8000			
110	23.1	18900		80	65.2	29100	160	51.0	6500			
123 Ft.	25	81.0		140900	100	57.7	20400	180	44.6	4300		
	30	78.5	124900	120	49.3	14900	253 Ft.	50	80.0	10000		
	40	73.3	81200	140	39.7	11100		60	77.7	10000		
	50	67.8	59200	160	27.4	8400		80	73.1	7000		
	60	62.3	45900	170	18.2	7300		100	68.1	7000		
	70	56.3	37000	183 Ft.	40	79.7		75800	120	53.3	7000	
	80	49.9	30500		50	76.5	57600	140	58.1	7000		
	90	42.7	25700		60	73.3	44200	160	52.6	6200		
	100	34.2	21900		80	66.6	28800	180	46.6	4100		
	110	23.1	18900		100	59.6	20100					

STANDARD COUNTERWEIGHT (24,100 LBS.)

Boom Length	Radius	Boom Angle	With Outriggers			Without Outriggers			Boom Length	Radius	Boom Angle	With Outriggers			Without Outriggers		
			Over Rear	Over And Side	Over Side	Over Rear	Over And Side	Over Side				Over Rear	Over And Side	Over Side	Over Rear	Over And Side	Over Side
33 Ft.	12	82.5	300000	122900	117700	123 Ft.	30	79.4	88200	33900	29400	CAPACITIES BELOW INCLUDE JIB (See Note 4a)					
	15	73.2	224500	90100	83600		40	74.6	56000	22500	19600						
	20	68.0	171300	61600	55500		50	69.8	39600	15900	13100						
	25	57.9	120600	46200	40900		60	64.8	29500	11700	9300						
	30	45.9	89600	36600	32000		70	59.3	23400	8800	6700						
43 Ft.	15	80.2	224000	89800	83400	133 Ft.	30	80.2	88000	33600	29100	193 Ft.	40	80.2	30000	20400	16900
	20	73.2	170800	61300	55300		40	77.2	30000	13900	11000						
	25	66.1	120500	45900	40600		50	74.2	28300	9600	7300						
	30	58.4	89500	36300	31700		60	67.8	17200	4500							
	40	39.6	57400	24900	21300		70	61.3	11100								
53 Ft.	15	82.0	223800	89500	83100	143 Ft.	30	80.2	88000	33600	29100	203 Ft.	45	79.1	30000	16400	13300
	20	76.5	170400	61000	55000		50	77.9	30000	13600	10800						
	25	70.8	120400	45600	40300		60	75.0	28100	9400	7000						
	30	64.9	89300	36000	31400		70	69.0	16900	4200							
	40	51.9	57200	24600	21000		80	62.9	10800								
63 Ft.	15	82.0	223800	89500	83100	153 Ft.	35	79.7	68600	26400	22500	213 Ft.	45	79.8	30000	16100	13100
	20	76.5	170400	61000	55000		40	76.9	55800	21900	18700						
	25	70.8	120400	45600	40300		50	72.7	39200	15400	12800						
	30	64.9	89300	36000	31400		60	68.3	29400	11100	8700						
	40	51.9	57200	24600	21000		70	64.0	23000	8200	6100						
73 Ft.	15	82.0	223800	89500	83100	163 Ft.	40	78.4	55300	21300	17800	223 Ft.	45	80.2	22000	15800	12800
	20	76.5	170400	61000	55000		50	74.9	38700	14800	11900						
	25	70.8	120400	45600	40300		60	71.2	29000	10500	8100						
	30	64.9	89300	36000	31400		70	67.5	17900	5400	3600						
	40	51.9	57200	24600	21000		80	63.5	11800								
83 Ft.	15	82.0	223800	89500	83100	173 Ft.	40	79.2	55100	21000	17500	233 Ft.	50	79.4	15000	12700	9900
	20	76.5	170400	61000	55000		50	75.8	38500	14500	11600						
	25	70.8	120400	45600	40300		60	72.4	28700	10200	7800						
	30	64.9	89300	36000	31400		70	68.2	17700	5100	3300						
	40	51.9	57200	24600	21000		80	64.3	11600								
93 Ft.	15	82.0	223800	89500	83100	183 Ft.	40	79.7	54900	20700	17200	243 Ft.	50	79.8	12000	12000	9600
	20	76.5	170400	61000	55000		50	76.6	38300	14200	11300						
	25	70.8	120400	45600	40300		60	73.3	28500	9900	7600						
	30	64.9	89300	36000	31400		70	69.6	17400	4800	3000						
	40	51.9	57200	24600	21000		80	65.6	11300								
103 Ft.	15	82.0	223800	89500	83100	193 Ft.	40	79.7	54900	20700	17200	253 Ft.	50	80.0	10000	10000	9300
	20	76.5	170400	61000	55000		50	77.7	10000	7900	5500						
	25	70.8	120400	45600	40300		60	73.1	7000								
	30	64.9	89300	36000	31400		70	68.1	7000								
	40	51.9	57200	24600	21000		80	63.3	5600								
113 Ft.	15	82.0	223800	89500	83100	203 Ft.	40	78.4	55300	21300	17800	263 Ft.	50	79.8	12000	12000	9600
	20	76.5	170400	61000	55000		50	75.8	38500	14500	11600						
	25	70.8	120400	45600	40300		60	72.4	28700	10200	7800						
	30	64.9	89300	36000	31400		70	68.2	17700	5100	3300						
	40	51.9	57200	24600	21000		80	64.3	11600								

See Notes
Page

NOTES

1. The rated loads as determined by boom length, radius and weight of load apply to this machine as originally manufactured and equipped and as mounted on a Lorain manufactured MC-8150, 10 x 4 carrier. **THEY ARE MAXIMUM lifting capacities and comply with standards of the Power Crane & Shovel Association as issued by the U.S. Department of Commerce Commercial Standard CS90-58 and the SAE Crane Load Stability Test Code J765.**
- 1a. Do not exceed the "over-the-rear" capacities when lifting over a corner.
- 1b. All lifting must be done with gantry erected.
- 1c. Maximum counterweight suitable for lifting crane service only. **OUTRIGGERS MUST BE FULLY EXTENDED.**
- 1d. Standard counterweight suitable for lifting crane, dragline and clamshell service.
- 1e. The total weight of bucket plus load must not exceed the rated "without outriggers" lifting capacities up to a maximum of 15,000 lbs. for dragline service and 18,000 lbs. for clamshell service.
2. Load-handling devices are part of the load. For jib, see notes 4, 4a and 4b.
3. Maximum length of main boom 183 ft.
4. Jibs may be used straight or goosenecked. 30 ft. jib is two-piece and may be extended to 70 ft. with center sections. The following data apply:

Jib Lgth.	Radius	Max. Lgth. of Boom Incl. Jib		Maximum Lifting Capacity (Lbs.)					Weight of Jib & Backstays
		Std. Cwt.	Max. Cwt.	Offset From Extended Centerline of Boom					
				0 Ft.	5 Ft.	12 Ft.	18 Ft.	24 Ft.	
30 Ft.	Up thru 70' Over 70'	213 ft.	213 ft.	30000	30000	30000			1980 lbs.
40 Ft.	Up thru 70' Over 70'	223 ft.	223 ft.	22000	22000	22000	16000		2350 lbs.
50 Ft.	Up thru 70' Over 70'	233 ft.	233 ft.	15000	15000	15000	14000	12000	2560 lbs.
60 Ft.	Up thru 70' Over 70'	243 ft.	243 ft.	12000	12000	11000	10000	9000	2900 lbs.
70 Ft.	Up thru 70' Over 70'	253 ft.	253 ft.	10000	9000	8000	7000	6000	3150 lbs.
				7000	6500	6000	5500	4500	

- 4a. Capacities for jibs are the same as for the boom length which is equal to the length of main boom plus jib, but in no case may they exceed the capacities shown in note 4.

- 4b. With jib installed, lifting capacities over main boom head must be reduced as follows:

2070 lbs. for 30 ft. jib	3200 lbs. for 60 ft. jib
2500 lbs. for 40 ft. jib	3500 lbs. for 70 ft. jib
2770 lbs. for 50 ft. jib	

5. With gantry erected (25 ft. 0 in. overall height), the following maximum lengths may be carried* over the rear:

Standard counterweight
103 ft. boom without jib
93 ft. boom and 30 ft. jib
83 ft. boom and 70 ft. jib
Speed restricted to 5 MPH max.
Maximum counterweight
153 ft. boom without jib
133 ft. boom and 40 ft. jib
123 ft. boom and 70 ft. jib

Speed restricted to low-low gear.
 *For straight back and forward movement. Remove 10 ft. of boom from that specified for conditions which require maneuverability.
 With gantry lowered (13 ft. 4 1/2 in. overall height without jib, 19 ft. 0 in. overall height with jib), the following maximum lengths may be carried over the rear:

- | |
|-----------------------------------|
| Standard counterweight |
| 93 ft. boom without jib |
| 93 ft. boom with 30 ft. jib |
| 83 ft. boom with 70 ft. jib |
| Speed restricted to 5 MPH max. |
| Maximum counterweight |
| 93 ft. boom without jib |
| 93 ft. boom with 70 ft. jib |
| Speed restricted to low-low gear. |

6. With outriggers set and gantry erected, the following maximum boom lengths may be raised unassisted, from horizontal over the rear:

Standard counterweight
183 ft. boom without jib
163 ft. boom and 40 ft. jib
153 ft. boom and 70 ft. jib
Maximum counterweight
183 ft. boom without jib
183 ft. boom and 70 ft. jib
- 6a. For boom and jib combinations longer than shown in Note 6 and up to 183 ft. boom and 70 ft. jib, rear auxiliary outriggers are required.
7. Minimum number of parts of hoist line to be determined by dividing the load to be lifted by 25,000 lbs. for 1 in. hoist cable with breaking strength of 44.9 tons.

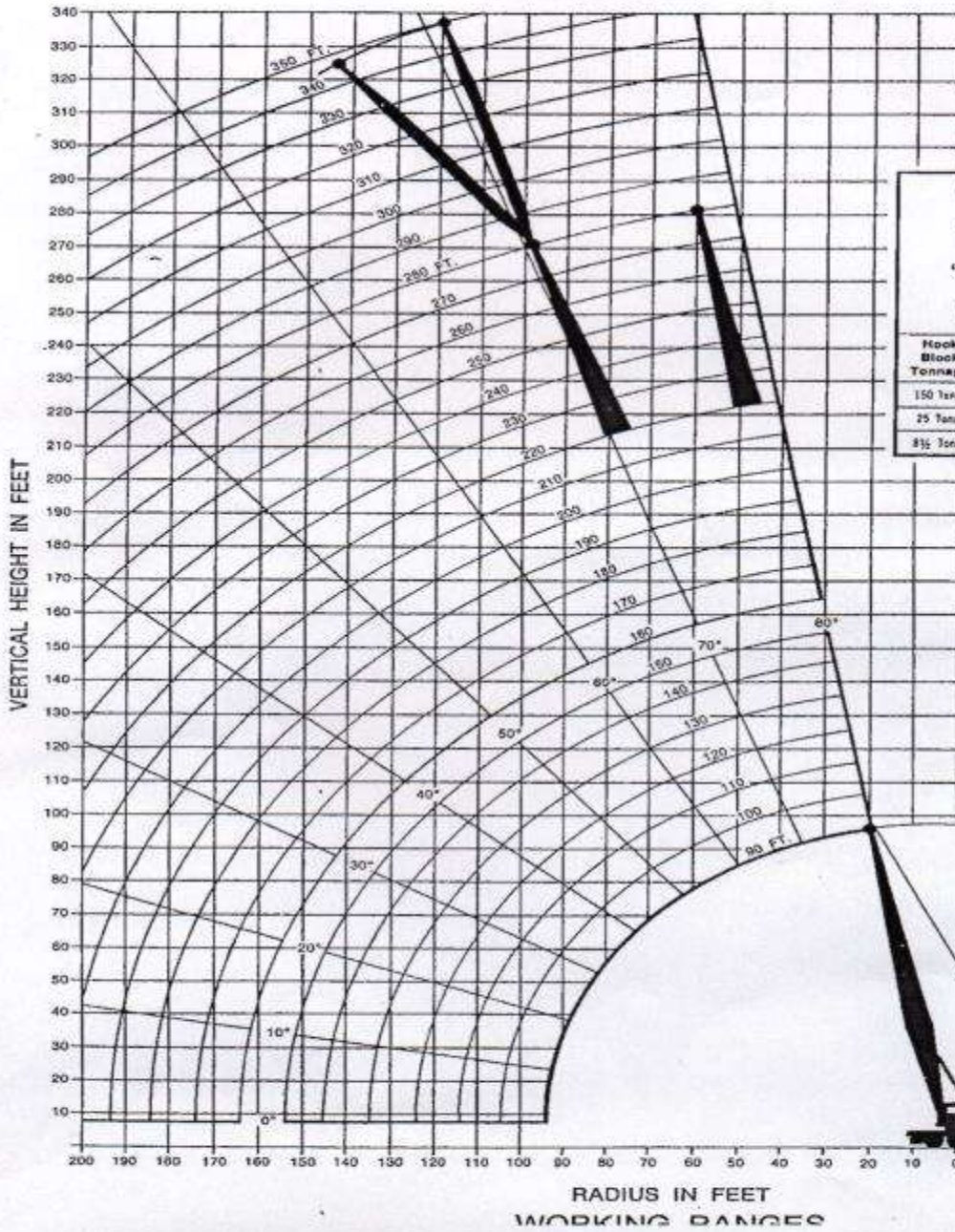


Koehring
Lorain Division
 Lorain, Ohio 44055

In accordance with our established policy of constant improvement, we reserve the right to amend these specifications at any time without notice. THE ONLY WARRANTY APPLICABLE IS OUR STANDARD WRITTEN WARRANTY.

LORAIN
strong on performance
MC-8150

MOTO-CRANE[®]
LOAD RATINGS



HOOK BLOCK CLEARANCES

Hook Block Tonnage	Number of Sheaves	Hook Block Weight	Dimension "A"
150 Tons	6	3000 Lbs.	10'-3"
25 Tons	1	1145 Lbs.	8'-0"
8 1/2 Tons	None	615 Lbs.	6'-0"

**LONG TAPERED
PEAK BOOM**

**MC-8150
10 X 4**

CRANE LOAD RATINGS - POUNDS
MAXIMUM COUNTERWEIGHT (50,600 LBS.)
 (Continued)

Boom Ref. Ft.	Boom Ang. Deg.	Boom Peak Height Ft.	With Outriggers	
			Over Rear	Over Side
280 Ft. Boom				
60	78.4	281.3	33800*	33800*
80	74.2	276.4	26100*	26100*
100	69.9	269.9	17800	17600
120	65.5	261.7	12300	12100
140	60.9	251.6	8500	8200
160	56.1	239.3	5700	5400
180	51.0	224.6	3500	3300
Load Ratings Below Include Jib				
290 Ft. Boom				
60	78.8	291.5	30000*	30000*
80	74.8	286.3	20000*	20000*
100	70.6	280.6	17000*	17000*
120	66.4	272.7	12000	11700
140	62.0	263.0	8100	7900
160	57.4	251.3	5300	5100
300 Ft. Boom				
60	79.2	301.7	30000*	30000*
80	75.3	297.1	20000*	20000*
100	71.3	291.1	15400*	15400*
120	67.2	283.6	11600*	11400
140	63.0	274.3	7800	7500
160	58.6	263.1	5000	4700
310 Ft. Boom				
60	79.5	311.9	28200*	28200*
80	75.8	307.5	19200*	19200*
100	71.9	301.7	14700*	14700*
120	68.0	294.4	10600*	10600*
140	63.9	285.5	7600*	7200
160	59.7	274.7	4800	4400
320 Ft. Boom				
60	79.9	322.0	22000*	22000*
80	76.2	317.8	14000*	14000*
100	72.5	312.2	13200*	13200*
120	68.7	305.1	9100*	9100*
140	64.8	296.5	6500*	6500*
160	60.8	286.3	4100*	4000
330 Ft. Boom				
60	80.2	332.2	15000*	15000*
80	76.6	328.1	10000*	10000*
100	73.0	322.7	10000*	10000*
120	69.4	315.8	8200*	8200*
140	65.6	307.6	5400*	5400*
160	61.7	297.7	3100*	3100*
340 Ft. Boom				
60	80.5	342.3	12000*	12000*
80	77.0	338.3	8000*	8000*
100	73.6	333.1	8000*	8000*
120	70.0	326.5	6900*	6900*
140	66.4	318.5	4000*	4000*
350 Ft. Boom				
60	80.8	352.5	10000*	10000*
80	77.4	348.6	7000*	7000*
100	74.0	343.5	7000*	7000*
110	72.3	340.5	7000*	7000*
120	70.6	337.1	5700*	5700*

CRANE LOAD RATINGS - POUNDS
STANDARD COUNTERWEIGHT (24,100 LBS.)

Boom Ref. Ft.	Boom Ang. Deg.	Boom Peak Height Ft.	With Outriggers		Without Outriggers	
			Over Rear	Over Side	Over Rear	Over Side
90 Ft. Boom						
20	79.6	95.5	170200*	170200*	61200	55300
25	76.3	94.5	121400	121400	45800	40500
30	73.0	93.1	90100	90100	36200	31700
40	66.2	89.4	58000	58000	24800	21700
50	59.1	84.2	41700	41700	18300	15400
60	51.3	77.3	32000	32000	14000	11600
70	42.6	67.9	25600	25600	11100	9000
80	32.1	54.8	21100	21100	8900	7000
90	16.6	32.7	17700	17700	7200	5500
100 Ft. Boom						
25	77.7	104.7	121200	121200	45400	40300
30	74.8	103.5	88900	88900	35800	31300
40	68.7	100.2	57800	57800	24400	20900
50	62.5	95.7	41400	41400	17900	15000
60	55.8	89.7	31700	31700	13700	11200
70	48.5	81.9	25300	25300	10700	8600
80	40.3	71.7	20800	20800	8500	6700
90	30.4	57.6	17400	17400	6900	5200
100	15.7	34.1	14700	14700	5500	4000
110 Ft. Boom						
25	78.9	114.9	121000	121000	45100	39900
30	76.2	113.8	89700	89700	35500	31000
40	70.8	110.9	57500	57500	24100	20500
50	65.1	106.8	41100	41100	17500	14700
60	59.2	101.5	31400	31400	13300	10900
70	53.0	94.8	25000	25000	10400	8300
80	46.1	86.3	20500	20500	8200	6300
90	38.4	75.3	17100	17100	6500	4800
100	29.0	60.3	14400	14400	5200	3700
110	15.0	35.5	12300	12300	4100	
120 Ft. Boom						
30	77.4	124.1	89400	89400	35100	30600
40	72.4	121.4	57300	57300	23700	20200
50	67.3	117.7	40800	40800	17200	14300
60	62.0	113.0	31100	31100	13000	10500
70	56.5	107.1	24700	24700	10000	7900
80	50.5	99.7	20100	20100	7800	6000
90	44.0	90.4	16700	16700	6100	4500
100	36.7	78.7	14100	14100	4800	3300
110	27.7	62.8	12000	12000	3700	
120	14.4	36.8	10300	10300		
130 Ft. Boom						
30	78.4	134.3	89200	89200	34700	30300
40	73.8	131.8	57000	57000	23400	19900
50	69.2	128.5	40600	40600	16800	14000
60	64.4	124.2	30800	30800	12500	10200
70	59.4	118.9	24400	24400	9700	7600
80	54.1	112.3	19800	19800	7500	5600
90	48.4	104.3	16400	16400	5800	4100
100	42.2	94.4	13800	13800	4500	3000
110	35.2	81.9	11700	11700	3400	
120	26.6	65.2	9900	9900		
130	13.8	38.0	8500	8500		
140 Ft. Boom						
35	77.1	143.5	69900	69900	27800	23900
40	75.0	142.2	56800	56800	23000	19500
50	70.7	139.1	40300	40300	16500	13600
60	66.3	135.2	30500	30500	12300	9900
70	61.8	130.3	24100	24100	9300	7200
80	57.0	124.4	19500	19500	7100	5300
90	52.0	117.3	16100	16100	5400	3800
100	46.6	108.7	13500	13500	4100	
110	40.6	98.2	11200	11200		
120	33.9	85.0	9600	9600		
130	25.6	67.5	8200	8200		
140	13.3	39.2	7000	7000		

NOTES

- Crane load ratings in pounds as determined by boom length, radius or boom angle apply to the MC-8150 Moto-Crane only as originally manufactured, equipped and mounted on a 10 x 4 Lorain MC-8150 carrier. **THEY ARE MAXIMUM CRANE LOAD RATINGS.**
- Operating radius is the horizontal distance from the axis of rotation before loading, to the center of the vertical hoist line or tackle with load applied. Crane load ratings are for machines with 24,100 lbs. of standard counterweight or 58,600 lbs. of maximum counterweight, and do not exceed 85% of tipping loads. Ratings identified with asterisk (*) are based on the machine's structural competence and not on the machine stability. Weight of hooks, hook blocks, slings and all other handling devices, except hoist rope shall be considered a part of the load. Crane load ratings with outriggers are based on outrigger fully extended and set to a distance of 11 ft. 0 in. from the longitudinal axis of the carrier to the outrigger float pivot connection and wheels within the boundary of the outriggers. Crane load ratings without outriggers depend on tire capacity and condition of tires inflated to 100 P.S.I.
- Crane load ratings are based on freely suspended loads with the machine leveled and standing on a firm, uniform supporting surface. Practical working loads depend on supporting surface, wind and other factors affecting stability, hazardous surroundings, experience of personnel and proper handling, all of which must be taken into account by the operator. Positioning or operation at radii and boom or jib lengths beyond the maximum and minimum shown, is not intended or approved.
- The operator and other personnel should fully read and acquaint themselves with Operator's Manual furnished by the manufacturer BEFORE operating this machine, and Rules for Safe Operation of equipment should be adhered to at all times.
- This crane and its load ratings are in accordance with Power Crane and Shovel Association Standards No. 1, SAE Crane Load Stability Test Code J-765a, SAE Method of Test for Crane Structure J-987 and Safety Code for Cranes, Derricks and Hoists, ANSI B30.5-1968.
- All ratings are with gantry in raised position.
- Do not exceed the "over-the-rear" capacities when lifting over a corner.
- Use blocking under front tires or front part of carrier frame if boom and/or load is to be moved forward of front outriggers.
- The crane, equipped with maximum counterweight, is suitable for lifting crane service only. **OUTRIGGERS MUST BE FULLY EXTENDED.**
- "Without Outriggers" crane load ratings are for over rear and over side as indicated. If loads are to be rotated over the corners of the vehicle, the outriggers should be extended to reduce tire and axle loadings.
- The crane, equipped with standard counterweight, is suitable for crane, dragline and clamshell service.
- The total weight of bucket plus load must not exceed the "Without Outriggers" crane load ratings up to a maximum of 15,000 lbs. for dragline service and 18,000 lbs. for clamshell service.
- Boom 190 ft. and over requires mast in addition to raised gantry. Mast with raised gantry may also be used with boom lengths under 190 ft.
- More than one part hoist line must be used on any boom when lifting radius is less than 20 ft.
- Intermediate suspension required for booms 240 ft. and over.
- Maximum length of boom (without jib).....280 ft.
- With gantry in raised position (25 ft. 0 in. overall height), the following maximum lengths may be carried * over rear without outriggers:

Standard Counterweight	Maximum Counterweight
120 ft. boom without jib	160 ft. boom without jib
100 ft. boom and 30 ft. jib	150 ft. boom and 30 ft. jib
90 ft. boom and 70 ft. jib	140 ft. boom and 50 ft. jib
	130 ft. boom and 70 ft. jib

Speed restricted to 5 MPH maximum Speed restricted to low-low gear
*For straight back and forward movement, remove 10 ft. of boom from that specified for conditions which require maneuverability.
- With gantry in lowered position or gantry lowered and mast pinned to the base section (13 ft. 4 1/2 in. overall height less jib) (19 ft. 0 in. with jib), the following maximum boom lengths may be carried over the rear without outriggers (Standard Counterweight or Maximum Counterweight):

120 ft. boom without jib
90 ft. boom and 70 ft. jib

Speed restricted to 5 MPH maximum (Standard Counterweight)
Speed restricted to low-low gear (Maximum Counterweight)

- With outriggers set and mast and gantry in raised position, the following maximum boom lengths may be raised unassisted, from the horizontal over the rear:

Standard Counterweight	Maximum Counterweight
190 ft. boom without jib	240 ft. boom without jib
170 ft. boom and 50 ft. jib	220 ft. boom and 30 ft. jib
160 ft. boom and 70 ft. jib	210 ft. boom and 60 ft. jib
	200 ft. boom and 70 ft. jib

- Rear auxiliary outriggers are required for boom and jib combinations longer than those shown in note 19.

Standard Counterweight	Maximum Counterweight
250 ft. boom without jib	280 ft. boom without jib
230 ft. boom and 30 ft. jib	270 ft. boom and 60 ft. jib
220 ft. boom and 50 ft. jib	260 ft. boom and 70 ft. jib
210 ft. boom and 70 ft. jib	

- Rear auxiliary outriggers and 16,000 lbs. bumper counterweight are required for boom and jib combinations longer than those shown in note 20.

Maximum Counterweight
280 ft. boom and 70 ft. jib
280 ft. boom and 60 ft. jib
270 ft. boom and 70 ft. jib

- When working with boom lengths that require auxiliary outriggers for erection, do not exceed the radii as shown on crane load rating chart.

- The rear hinged auxiliary outrigger beams are to be used only when raising or lowering long booms. They are never to be used or placed under load during hoisting operations.

- Hoist Cable Reeving:

Number of Parts of Hoist Lines	1	2	3	4	5	6	7	8
Maximum Loads (Lbs.)	15000	30000	75000	100000	125000	150000	175000	191000

Use 1 in. diameter hoist cable (6 x 25, IWRC) of 44.9 tons breaking strength.

- Crane load ratings are based on the use of dual pairs of 1 1/4 in. diameter swaged pendants (6 x 25, IWRC) of 87 tons breaking strength and 16 parts of 3/4 in. diameter derricking cable (6 x 30B, IWRC) of 28.1 tons breaking strength.

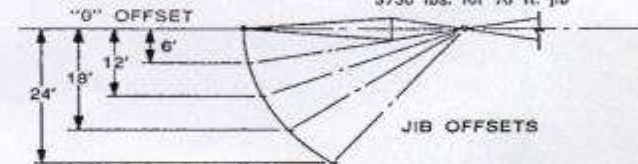
NOTES FOR JIB APPLICATION

- Jibs may be used straight or offset. 30 ft. jib is of two-piece design and may be extended to 70 ft. with center sections. The following data apply:

Jib Lgh.	Hoist	Max. Lgh. of Main Mast Jib		Jib Offset and Max. Load Ratings (Lbs.)						Weight of Jib and Reactions
		30' Off.	Max. Off.	0 Ft.	6 Ft.	12 Ft.	18 Ft.	24 Ft.		
30 Ft.	Up thru 70' Over 70'	250 Ft.	310 Ft.	30000	30000	30000				2230 Lbs.
40 Ft.	Up thru 70' Over 70'	160 Ft.	320 Ft.	22000	22000	22000	16000			2600 Lbs.
50 Ft.	Up thru 70' Over 70'	270 Ft.	330 Ft.	15000	15000	15000	14000	12000		2810 Lbs.
60 Ft.	Up thru 70' Over 70'	270 Ft.	340 Ft.	10000	10000	10000	9000	8500		3150 Lbs.
70 Ft.	Up thru 70' Over 70'	280 Ft.	350 Ft.	10000	9000	8000	7000	6500		3400 Lbs.
				7000	6500	6000	5500	5000		

- Load ratings for jibs are the same as for the boom length which is equal to the length of main boom plus jib but in no case may they exceed the capacities shown above.
- With jib installed, load ratings over main boom head must be reduced as follows:

2320 lbs. for 30 ft. jib	3020 lbs. for 50 ft. jib
2750 lbs. for 40 ft. jib	3450 lbs. for 60 ft. jib
	3750 lbs. for 70 ft. jib



CRANE LOAD RATINGS - POUNDS

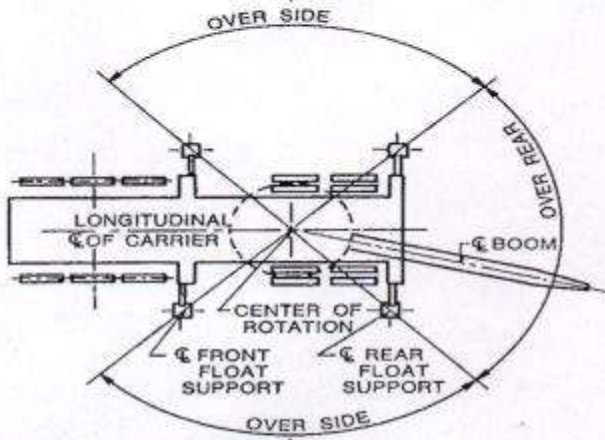
STANDARD COUNTERWEIGHT (24,100 LBS.)

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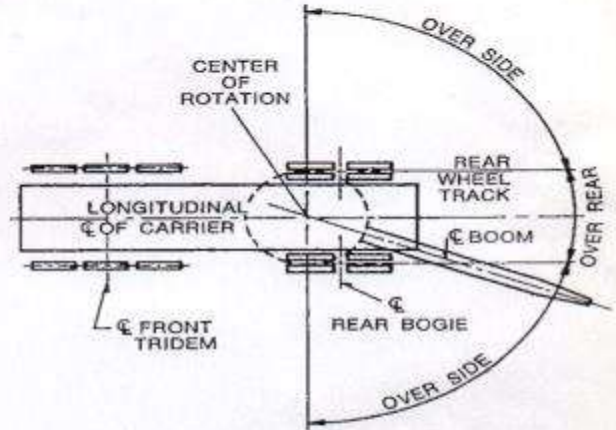
Boom Rad. Ft.	Boom Ang. Deg.	Boom Peak Height Ft.	With Outriggers		Without Outriggers	
			Over Rear	Over Side	Over Rear	Over Side
150 Ft. Boom						
35	78.0	153.7	69700	69700	27400	23500
40	76.0	152.6	56500	56500	22700	19200
50	72.0	149.7	40000	40000	16100	13300
60	68.0	146.1	30300	30300	11900	9500
70	63.8	141.6	23800	23800	9000	6900
80	59.4	136.2	19200	19200	6800	4900
90	54.9	129.7	15800	15800	5100	3500
100	50.1	122.0	13200	13200	3800	
110	44.9	112.9	11000	11000		
120	39.2	101.8	9300	9300		
130	32.7	88.0	7900	7900		
140	24.7	69.7	6700	6700		
150	12.8	40.3	5600	5600		
160 Ft. Boom						
40	76.9	162.8	56300	56300	22300	18800
50	73.2	160.2	39700	39700	15800	12900
60	69.4	156.8	30000	30000	11600	9200
80	61.5	147.7	18900	18900	6400	4600
100	53.0	134.8	12800	12800	3400	
120	43.4	116.9	9000	9000		
140	31.6	90.9	6300	6300		
160	12.4	41.4	4400	4400		
170 Ft. Boom						
40	77.7	173.1	56000	56000	21900	18500
50	74.2	170.6	39500	39500	15400	12600
60	70.7	167.4	29700	29700	11200	8800
80	63.4	158.9	18600	18600	6100	4200
100	55.5	147.1	12500	12500	3100	
120	46.9	131.0	8700	8700		
140	36.7	108.7	6000	6000		
160	23.2	74.0	4100	4100		
170	12.1	42.5	3300	3300		
180 Ft. Boom						
40	78.4	183.3	55800	55800	21600	18100
50	75.1	181.0	39200	39200	15100	12200
60	71.8	178.0	29400	29400	10900	8500
80	64.9	170.1	18300	18300	5700	3900
100	57.7	159.1	12200	12200		
120	49.8	144.4	8300	8300		
140	40.8	124.6	5700	5700		
160	29.8	96.4	3700	3700		
190 Ft. Boom						
40	79.0	193.5	55500	55500	12100	17800
50	75.9	191.3	38900	38900	14700	11900
60	72.8	188.5	29100	29100	10500	8100
80	66.3	181.0	18000	18000	5400	3600
100	59.6	170.8	11900	11900		
120	52.3	157.3	8000	8000		
140	44.2	139.4	5300	5300		
160	34.7	115.1	3400	3400		
200 Ft. Boom						
45	78.1	202.7	45700	45700	17200	14100
50	76.6	201.6	38600	38600	14400	11600
60	73.7	198.9	28800	28800	10200	7800
80	67.6	191.9	17700	17700	5000	3200
100	61.2	182.3	11600	11600		
120	54.5	169.7	7700	7700		
140	47.1	153.4	5000	5000		

Boom Rad. Ft.	Boom Ang. Deg.	Boom Peak Height Ft.	With Outriggers		Without Outriggers	
			Over Rear	Over Side	Over Rear	Over Side
210 Ft. Boom						
45	78.7	212.9	45500	45500	16900	13800
50	77.3	211.8	38400	38400	14000	11200
60	74.5	209.3	28500	28500	9800	7400
80	68.7	202.7	17400	17400	4700	
100	62.7	193.6	11200	11200		
120	56.4	181.9	7400	7400		
140	49.5	166.8	4700	4700		
220 Ft. Boom						
50	77.9	222.1	38100	38100	13700	10900
60	75.2	219.7	28200	28200	9500	7100
80	69.7	213.4	17100	17100	4300	
100	64.1	204.8	10900	10900		
120	58.1	193.8	7000	7000		
140	51.7	179.7	4400	4400		
230 Ft. Boom						
50	78.4	232.3	37700	37700	13100	10300
60	75.8	230.0	27800	27800	8900	6600
80	70.6	224.0	16700	16700	3800	
100	65.3	215.9	10600	10600		
120	59.6	205.5	6700	6700		
140	53.7	192.3	4000	4000		
240 Ft. Boom						
50	78.9	242.5	37400	37400	12700	9900
60	76.4	240.3	27500	27500	8500	6200
80	71.5	234.6	16400	16400	3500	
100	66.4	226.9	10200	10200		
120	61.0	217.0	6400	6400		
140	55.4	204.6	3700	3700		
250 Ft. Boom						
55	78.2	251.7	31600	31600	10100	7500
60	77.0	250.6	27300	27300	8200	5900
80	72.2	245.1	16100	16100	3100	
100	67.4	237.7	9900	9900		
120	62.3	228.3	6000	6000		
140	57.0	216.6	3300	3300		
Load Ratings Below Include Jib						
260 Ft. Boom						
55	78.6	261.9	30000*	30000*	9700	7200
60	77.5	260.8	27000	27000	7800	5500
80	72.9	255.6	15800	15800		
100	68.3	248.5	9600	9600		
120	63.4	239.6	5700	5700		
270 Ft. Boom						
55	79.1	272.1	15000*	15000*	9400	6900
60	78.0	271.1	15000*	15000*	7500	5200
80	73.6	266.0	10000*	10000*		
100	69.1	259.3	9300	9300		
120	64.5	250.7	5400	5400		
280 Ft. Boom						
60	78.4	281.3	10000*	10000*	7100	4800
80	74.2	276.4	7000*	7000*		
100	69.9	269.9	7000*	7000*		
120	65.5	261.7	5100	5100		

CRANE WORKING AREAS



Carrier With Outriggers



Carrier Without Outriggers

We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty. We Make No Other Warranty, Expressed Or Implied.

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