

**Manitowoc**<sup>®</sup>

# MLC250

**Product Guide**

*ASME B30.5 Imperial*



**275 US t**  
**(250 t)**



**80 ft**  
**(24,4 m)**



**149 + B10**  
**240 ft**  
**(73,2 m)**



**290 ft**  
**(88,4 m)**





# MANITOWOC MLC250

## FEATURES

The Manitowoc MLC250 builds on the field-proven 999 to remain unmatched in the 250-ton crawler class. The crawler is updated with the latest Manitowoc Crane Control System (CCS), open loop hydraulics for more responsiveness improved efficiency, and easier service access. The MLC250 shares common components with legacy and current production Manitowoc models that make this a cost-effective investment in your fleet.



## Efficient Self-Assembly

The gantry-raised counterweight reduces components and maintenance. Button style wire rope terminations for easy reeving. Steel straps for assembly and storage of boom suspension. FACT connectors on boom allow for quick boom assembly without the need to install top boom connector pins.

## Superior Serviceability

The CCS (Crane Control System) provides individual function hour tracking for timing maintenance intervals and provides on board diagnostics to easily troubleshoot machines without specialized equipment.



## Comfortable Cab Design

A newly designed console provides 10% more legroom while the left side console rotates for improved egress. A 6-way electric seat riser/slider with headrest and storage shelving in the rear of the cab enhance operator comfort. Tilt cab and Vision cab are available.



Search by options

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Search by Chart ID

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Please make your selection from the options below

Choose a model

Choose a configur...

- Any -

SEARCH

## Lattice Boom Crane Library

Technical documents and diagrams for all Maniowoc lattice boom crawler cranes are available online.

Visit [manitowoc.com/support/lattice-boom-crane-library](https://manitowoc.com/support/lattice-boom-crane-library) or scan the QR code



## Versatile Performance

- 24.4 m (80 ft) No. 134 Fixed Jib available, common with other Maniowoc Cranes
- 73.2 m (240 ft) No. 149 Luffing Jib available, common with other Maniowoc Cranes
- Cummins QSL9 Tier 4F/Stage V engine, rated at 253 kW (340 hp) @ 2200 RPM
- Free Fall hoists available for drums 1 and 2
- 26 mm rotation-resistant rope, standard
- 13,430 kg (29,600 lb) rated linepull on drums 1 and 2





# The world's most advanced crane service and support network

## WORLDWIDE SUPPORT NETWORK

Manitowoc's customer service extends beyond any borders. Our locations span the globe, covering five continents. No matter where the job takes you, you have a business partner nearby.





## PARTS

Locating the correct part quickly is vital to managing your operations. With Manitowoc Customer Support, the parts you need are just a phone call or click away.

## LIFT SOLUTIONS

The Manitowoc Crane Lift Solutions Team is dedicated to helping customers with unique and customized applications for their Manitowoc cranes, regardless of product line.

## TRAINING

Manitowoc Training Centers offer courses for operators and technicians across the globe to provide in-depth instruction on crane operation, maintenance, and troubleshooting procedures.

## EnCORE

Manitowoc's EnCORE program maximizes your investment by rebuilding or repairing your crane to extend its life significantly. EnCORE also includes remanufactured parts.



# MANITOWOC FINANCE

Manitowoc Finance gets you in the field with the right equipment by giving you access to flexible, affordable financing. With Manitowoc Finance, equipment can be acquired with virtually no cash outlay, and unlike traditional lending, our financial products don't affect bank lines of credit. Your capital resources remain intact for times when you need ready access to cash.

Competitive rates with flexible financing options and payment schedules put you in control.

**Did you know?** Manitowoc Finance can finance **used** Manitowoc cranes. You can also **trade-in** your used fleet for upgrade and get financed by Manitowoc Finance.









# CONTENTS

**8**

Dimensions

**9**

Transportation and Performance Data

**12**

Boom Combinations

**14**

Main Boom - Range Diagram

**15**

Main Boom - Load Chart

**16**

Fixed Jib - Range Diagram

**17**

Fixed Jib - Load Chart

**19**

Luffing Jib - Range Diagram

**20**

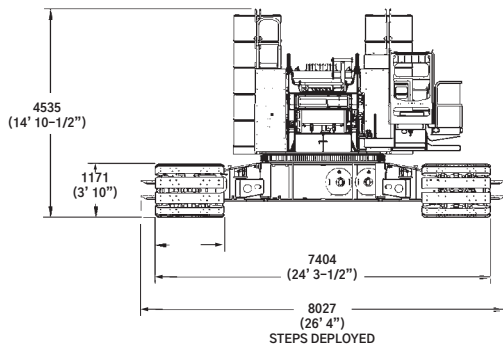
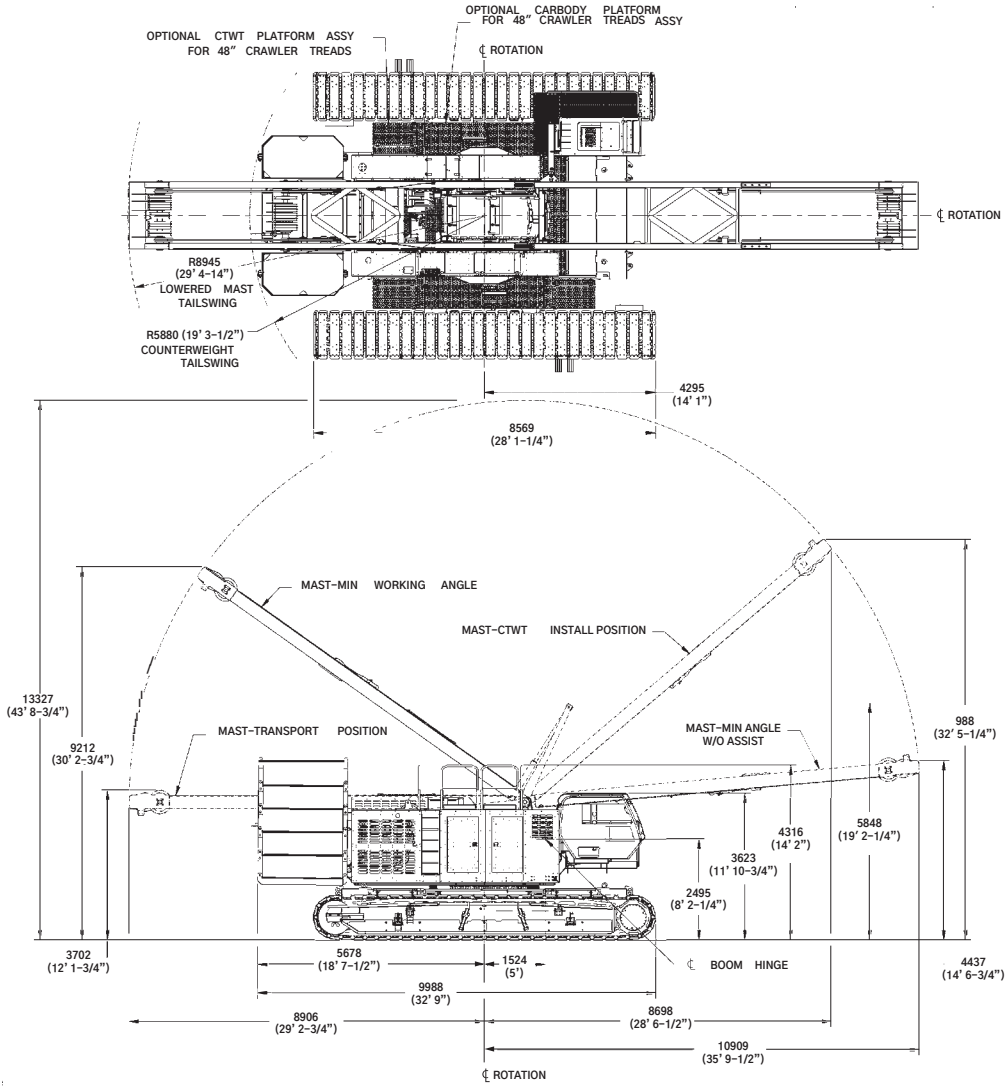
Luffing Jib - Load Chart

**21**

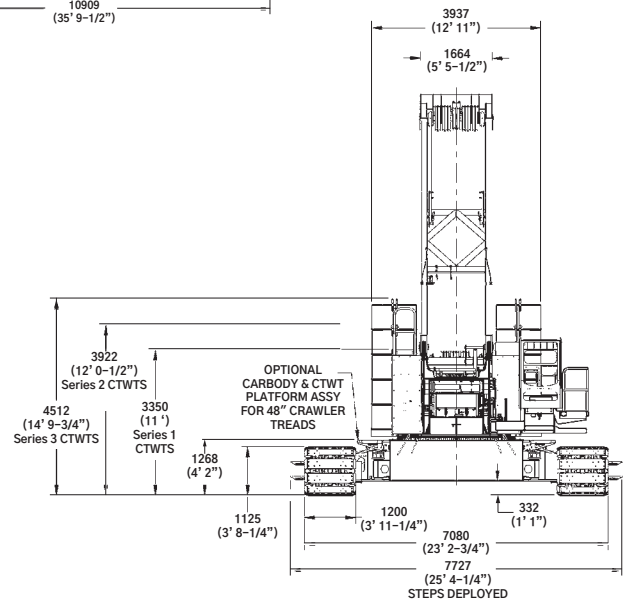
Specifications



# DIMENSIONS



CRANE WITH 60" CRAWLER TREADS



CRANE WITH 48" CRAWLER TREADS



# TRANSPORTATION DATA

Load summary															
Item	290 ft B10:82A Boom and 80 ft No.134 Fixed Jib														
	Qty	lb	1	2	3	4	5	6	7	8	9	10	11	12	13
MLC250 Basic crane	1	95,500	1												
Crawler assembly	2	43,260		1	1										
Counterweight tray	1	21,050						1							
Upper center counterweight	1	23,500						1							
Upper side counterweight	10	17,500				1	1		2	2	2	1	1		
Inner carbody counterweight	2	22,000												1	1
Outer carbody counterweight	2	18,000												1	1
9,1 m (30') No. 82A Boom butt	1	10,825				1									
12,2 m (40') No. 82A Boom top	1	12,365					1								
3,0 m (10') No. 82 Boom insert	1	2,140												1	
6,1 m (20') No. 82 Boom insert	1	3,080													1
12,2 m (40') No. 82 Boom Insert	5	5,360							1	1	1	1	1		
10,0 m (30') No. 134 Jib & strut	1	2,620												1	
3,0 m (10') No. 134 Jib insert	1	480		1											
6,1 m (20') No. 134 Jib Insert	2	750		1	1										
200 mton (220 ton) Hook block	1	5,300											1		
41 mton (45 ton) Self-assembly block	1	2,650											1		
13,6 mton (15 ton) Weight ball	1	1,310											1		
Detachable Upper Boom Point	1	700											1		
Miscellaneous	2	4,000				1	1								
<b>Load weight per trailer (lb)</b>			95,500	44,490	44,010	32,325	33,865	44,550	40,360	40,360	40,360	22,860	32,820	44,760	43,080

# PERFORMANCE DATA

Front and Rear Drum Linespeed					
Single linepull (lb)	Single Line Speed Layer				
	1	2	3	4	5
0	374	400	427	453	480
5,000	364	388	413	438	463
10,000	353	377	400	423	437
15,000	295	297	298	300	302
20,000	227	229	230	232	234
25,000	186	188	190	191	193
29,600	161	163	164	166	168

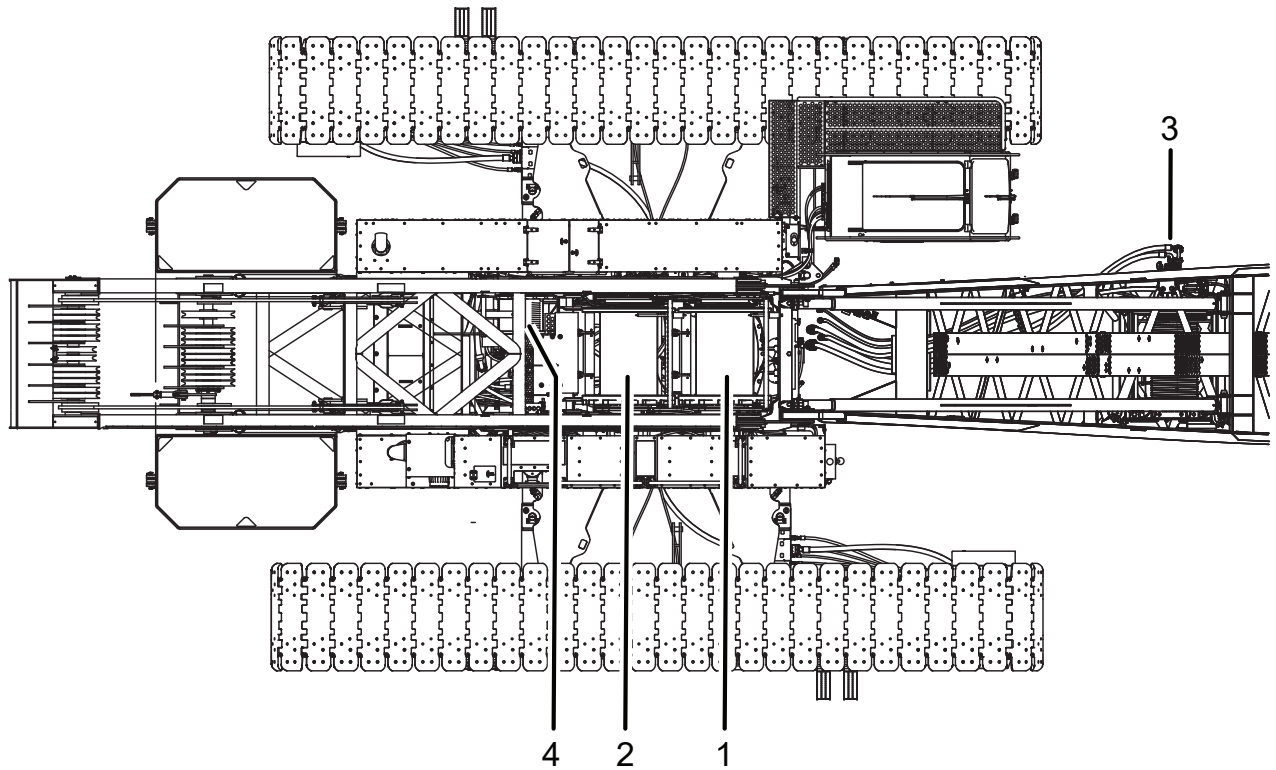
Third Drum Linespeed				
Single linepull (lb)	Single Line Speed Layer			
	1	2	3	4
0	307	341	374	407
5,000	298	329	360	391
8,000	293	323	352	382
11,000	287	305	308	311
14,000	243	246	249	252
17,000	205	208	211	213
20,000	178	181	184	187

Front and Rear Drum Hoist Reeving	
Parts of line	Max load (lb)
1	29,500
2	59,000
3	88,500
4	118,000
5	147,500
6	177,000
7	206,500
8	236,000
9	265,500
10	295,000
11	324,500
12	354,000
13	383,500
14	413,000
15	442,500
16	500,000

Third Drum Hoist Reeving	
Parts of line	Max load (lb)
1	20,000
2	40,000



# PERFORMANCE DATA

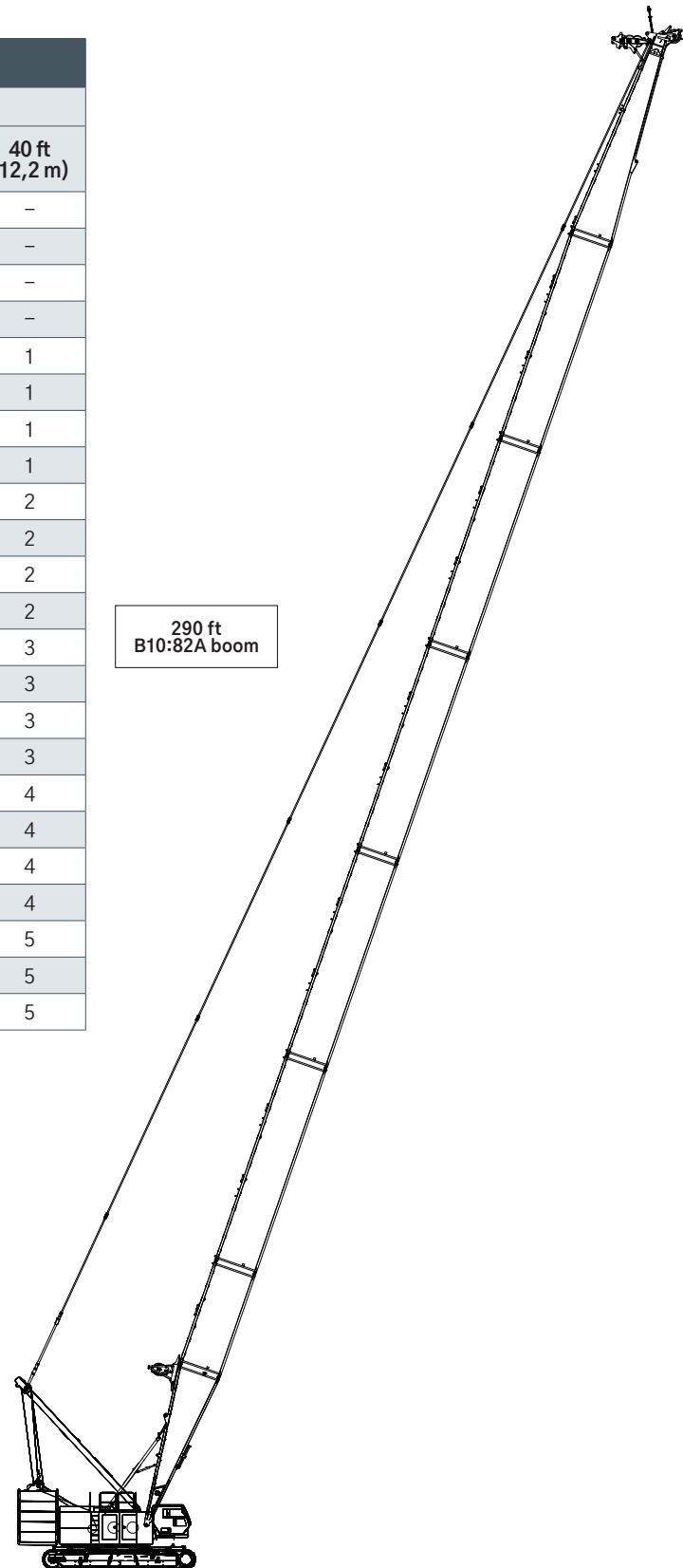


Drum Identification		
Drum	Application and Drum Function	
	Boom / Boom + Fixed Jib"	Boom + Luffing Jib
1	Whip Hoist	Whip Hoist
2	Main Hoist	Luffing Hoist
3*	Aux Hoist	Aux Hoist
4	Boom Hoist	Boom Hoist

\* Optional

# BOOM COMBINATIONS

B10:82A boom combinations				
Boom length		Boom inserts		
ft	m	10 ft (3,0 m)	20 ft (6,1 m)	40 ft (12,2 m)
70	21,3	-	-	-
80	24,4	1	-	-
90	27,4	-	1	-
100	30,5	1	1	-
110	33,5	-	-	1
120	36,6	1	-	1
130	39,6	-	1	1
140	42,7	1	1	1
150	45,7	-	-	2
160	48,8	1	-	2
170	51,8	-	1	2
180	54,9	1	1	2
190	57,9	-	-	3
200	61,0	1	-	3
210	64,0	-	1	3
220	67,1	1	1	3
230	70,1	-	-	4
240	73,2	1	-	4
250	76,2	-	1	4
260	79,2	1	1	4
270	82,3	-	-	5
280	85,3	1	-	5
290	88,4	-	1	5





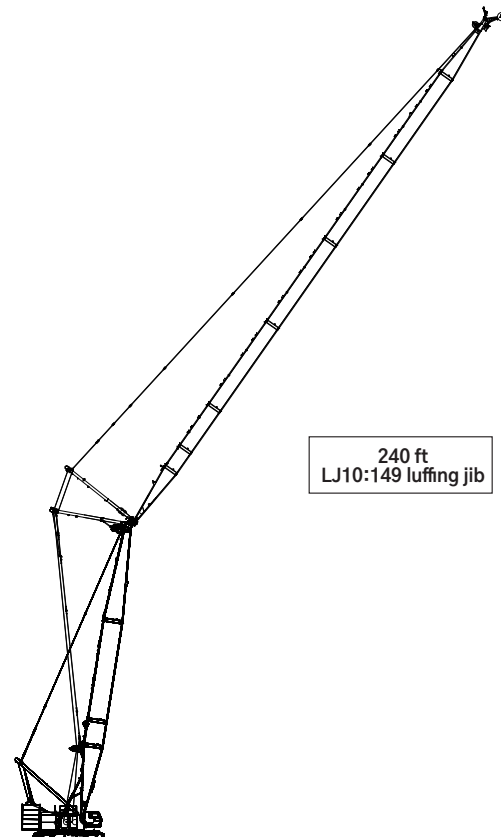
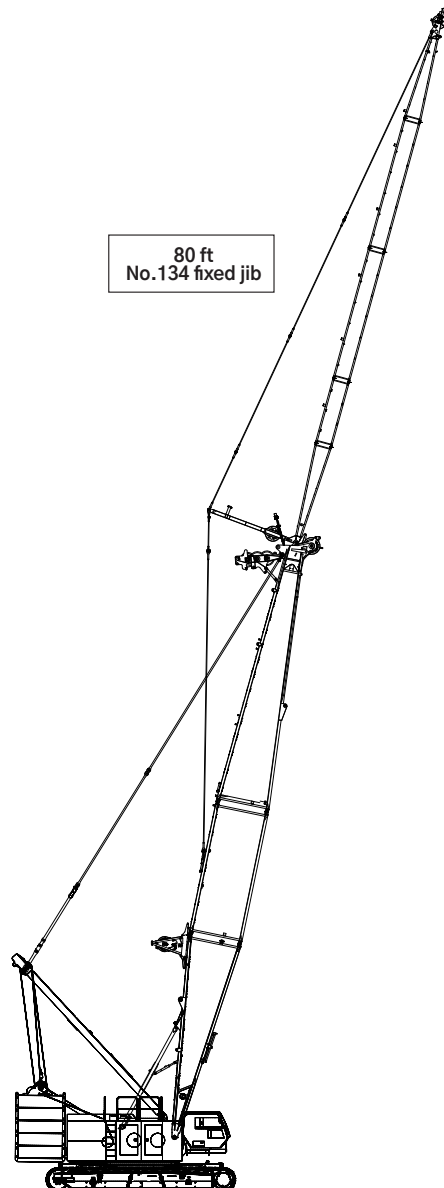
# BOOM COMBINATIONS

## No. 134 fixed jib combinations

Jib length		Fixed jib inserts	
ft	m	10 ft (3,0 m)	20 ft (6,1 m)
30	9,1	-	-
40	12,2	1	-
50	15,2	-	1
60	18,3	1	1
70	21,3	-	2
80	24,4	1	2

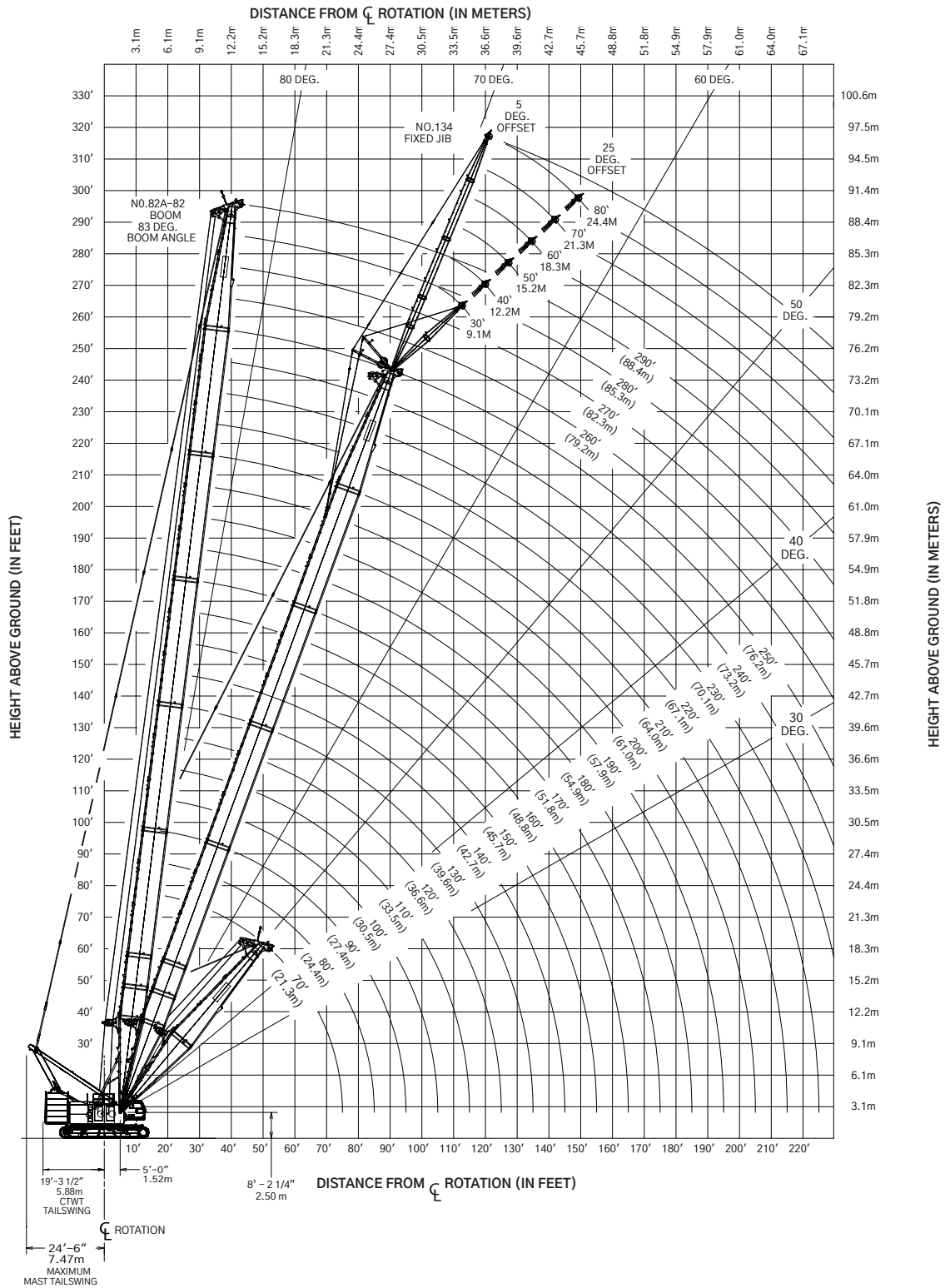
## LJ10:149 luffing jib combinations

Boom length		Luffing jib inserts		
ft	m	10 ft 3,0 m	20 ft 6,1 m	40 ft 12,2 m
70	21,3	-	1	-
80	24,4	1	1	-
90	27,4	-	-	1
100	30,5	1	-	1
110	33,5	-	1	1
120	36,6	1	1	1
130	39,6	-	-	2
140	42,7	1	-	2
150	45,7	-	1	2
160	48,8	1	1	2
170	51,8	-	-	3
180	54,9	1	-	3
190	57,9	-	1	3
200	61,0	1	1	3
210	64,0	-	-	4
220	67,1	1	-	4
230	70,1	-	1	4
240	73,2	1	1	4



# MAIN BOOM RANGE

## B10:82A Boom



THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane



# MAIN BOOM - LOAD CHART

## B10:82A Boom

219,600 lb upper counterweight + 80,000 lb lower counterweight

360°	lb x 1000											
Radius (ft)	Boom length (ft)											
	70	90	110	130	150	170	190	210	230	250	270	290
16	500.0	-	-	-	-	-	-	-	-	-	-	-
17	462.5	-	-	-	-	-	-	-	-	-	-	-
18	438.6	-	-	-	-	-	-	-	-	-	-	-
19	417.1	402.5	-	-	-	-	-	-	-	-	-	-
20	397.5	396.0	-	-	-	-	-	-	-	-	-	-
22	363.2	361.8	351.1	-	-	-	-	-	-	-	-	-
24	334.2	332.8	332.0	295.0	-	-	-	-	-	-	-	-
26	309.3	307.9	307.1	295.0	264.9	-	-	-	-	-	-	-
28	287.7	286.4	285.6	284.9	258.9	231.7	-	-	-	-	-	-
30	268.8	267.5	266.8	266.1	253.2	227.2	-	-	-	-	-	-
32	252.2	250.9	250.2	249.5	247.6	222.7	196.9	-	-	-	-	-
34	237.4	236.1	235.4	234.7	233.7	218.4	193.5	171.7	-	-	-	-
36	224.1	222.9	222.2	221.5	220.5	214.2	190.1	170.6	140.2	-	-	-
38	207.8	207.8	207.8	207.7	207.4	207.0	186.9	168.0	139.7	116.2	-	-
40	193.0	192.9	192.9	192.8	192.4	192.0	183.6	165.4	139.2	115.3	96.3	-
42	180.0	179.9	179.8	179.7	179.3	178.9	178.4	162.8	138.6	114.2	95.3	-
46	158.4	158.2	158.1	157.9	157.5	157.0	156.5	155.9	136.1	112.0	93.4	77.7
50	141.0	140.8	140.7	140.5	140.0	139.5	138.9	138.3	134.0	109.9	91.5	76.1
60	109.7	109.5	109.3	109.1	108.5	108.0	107.3	106.7	105.9	105.0	87.2	72.2
70	84.7	88.6	88.4	88.1	87.5	87.0	86.2	85.5	84.7	84.7	83.2	68.7
80	-	73.5	73.4	73.2	72.5	71.9	71.2	70.5	69.6	69.5	68.6	65.5
90	-	59.2	62.1	61.9	61.3	60.7	59.9	59.1	58.2	58.2	57.3	56.4
100	-	-	53.3	53.1	52.5	51.9	51.1	50.3	49.4	49.3	48.4	47.5
110	-	-	43.3	46.0	45.4	44.8	44.0	43.3	42.3	42.2	41.3	40.4
120	-	-	-	40.2	39.6	39.0	38.2	37.5	36.6	36.5	35.5	34.6
130	-	-	-	32.2	34.8	34.2	33.4	32.6	31.7	31.6	30.7	29.7
140	-	-	-	-	30.6	30.1	29.3	28.6	27.6	27.5	26.5	25.6
150	-	-	-	-	23.4	26.6	25.8	25.0	24.1	24.0	23.0	22.1
160	-	-	-	-	-	22.3	22.7	22.0	21.1	21.0	20.0	19.1
170	-	-	-	-	-	-	20.0	19.3	18.4	18.3	17.3	16.4
180	-	-	-	-	-	-	-	15.7	16.9	16.0	15.9	14.9
190	-	-	-	-	-	-	-	-	13.6	13.9	13.8	12.8
200	-	-	-	-	-	-	-	-	10.1	11.0	11.9	10.9
210	-	-	-	-	-	-	-	-	-	8.1	9.5	9.2
220	-	-	-	-	-	-	-	-	-	5.1	6.9	6.8
230	-	-	-	-	-	-	-	-	-	-	4.4	4.5

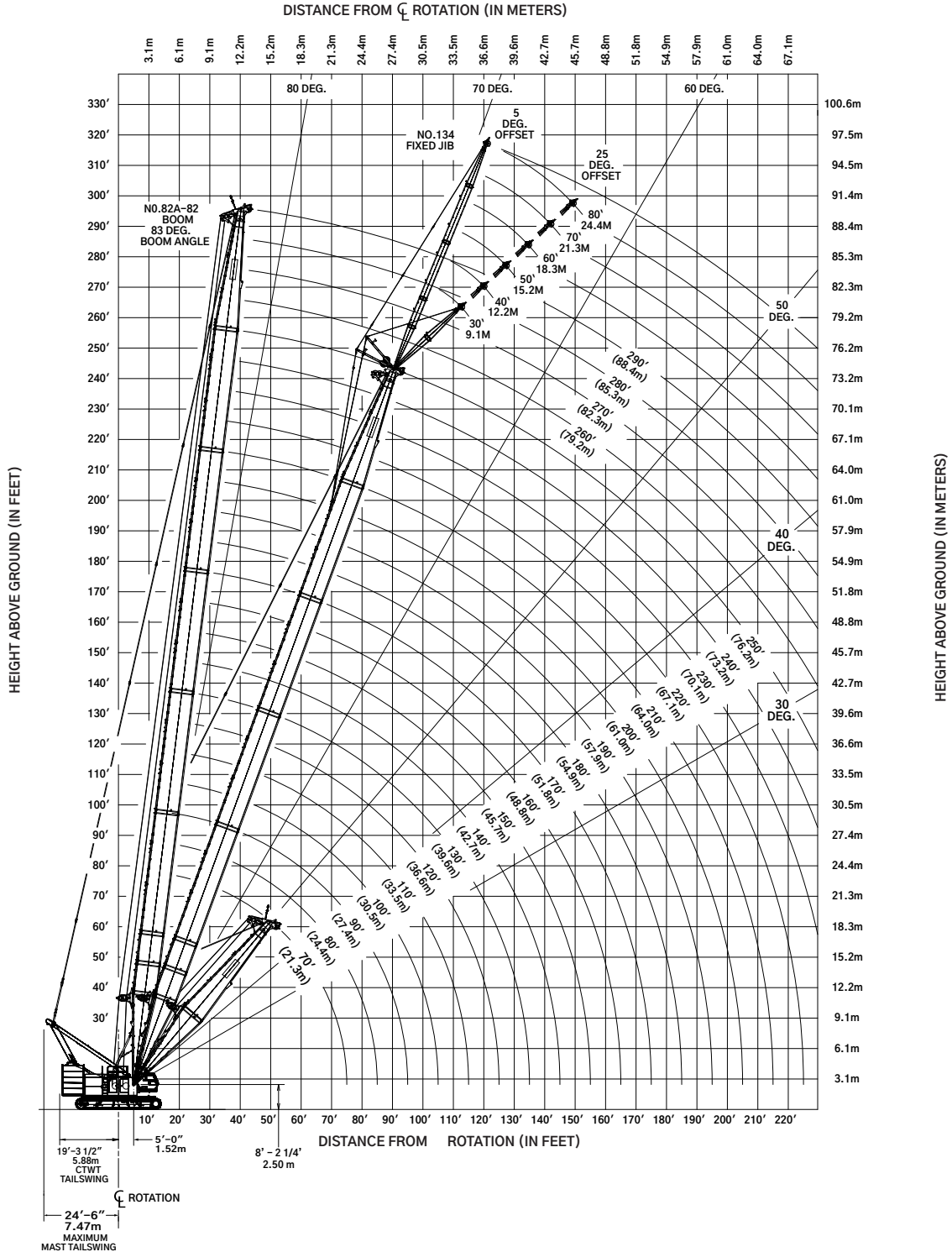
For complete chart, refer to [www.cranelibrary.com](http://www.cranelibrary.com).

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane

# FIXED JIB - RANGE DIAGRAM

## No. 134 Fixed Jib on B10:82A



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# FIXED JIB - LOAD CHART

## No. 134 Fixed Jib on B10:82A Boom Series 3

219,600 lb upper counterweight + 80,000 lb lower counterweight

360°	lb x 1000				
30 ft Jib at 5° Offset					
Radius (ft)	Boom length (ft)				
	90	120	150	180	210
30	59.0	-	-	-	-
35	59.0	59.0	-	-	-
40	59.0	59.0	59.0	-	-
45	59.0	59.0	59.0	59.0	59.0
50	59.0	59.0	59.0	59.0	59.0
55	58.7	59.0	59.0	59.0	59.0
60	57.5	59.0	59.0	59.0	59.0
65	56.3	58.6	59.0	59.0	59.0
70	55.3	57.6	59.0	59.0	59.0
75	54.4	56.7	58.2	58.9	58.9
80	53.5	55.9	57.4	58.1	58.2
85	52.8	55.0	56.6	57.4	57.6
90	51.5	54.2	55.9	56.8	57.0
95	48.8	53.6	55.1	56.1	55.6
100	46.3	53.0	54.1	52.8	51.4
110	42.2	48.3	47.0	45.8	44.3
120	-	42.6	41.2	40.0	38.5
130	-	37.7	36.4	35.2	33.7
140	-	33.6	32.3	31.1	29.6
150	-	-	28.8	27.6	26.1
160	-	-	25.7	24.5	23.0
170	-	-	22.0	21.9	20.4
180	-	-	-	19.5	18.0
190	-	-	-	16.7	15.9
200	-	-	-	13.2	14.0
210	-	-	-	-	11.5
220	-	-	-	-	8.8
230	-	-	-	-	6.0

360°	lb x 1000				
40 ft Jib at 5° Offset					
Radius (ft)	Boom length (ft)				
	90	120	150	180	210
30	55.3	-	-	-	-
35	53.6	54.6	-	-	-
40	52.2	53.3	53.7	-	-
45	50.8	52.2	52.8	52.7	-
50	49.5	51.0	51.8	51.9	51.4
55	48.4	50.0	50.9	51.1	50.8
60	47.3	49.0	50.0	50.4	50.1
65	46.1	48.1	49.2	49.7	49.6
70	45.2	47.2	48.4	49.0	48.9
75	44.3	46.3	47.6	48.3	48.4
80	43.5	45.5	47.0	47.7	47.8
85	42.8	44.9	46.2	47.1	47.2
90	41.0	44.2	45.6	46.5	46.7
95	38.9	43.5	45.0	45.9	46.2
100	37.0	42.9	44.4	45.3	45.8
110	33.8	40.6	43.3	44.4	44.9
120	31.1	37.4	41.9	40.7	39.2
130	-	34.7	37.1	35.8	34.3
140	-	32.4	33.0	31.7	30.2
150	-	30.4	29.4	28.2	26.7
160	-	-	26.4	25.1	23.6
170	-	-	23.7	22.4	20.9
180	-	-	20.1	20.1	18.6
190	-	-	-	17.9	16.4
200	-	-	-	15.2	14.5
210	-	-	-	12.0	12.8
220	-	-	-	-	10.3
230	-	-	-	-	7.8

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The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane



# FIXED JIB - LOAD CHART

## No. 134 Fixed Jib on B10:82A Boom Series 3

219,600 lb upper counterweight + 80,000 lb lower counterweight

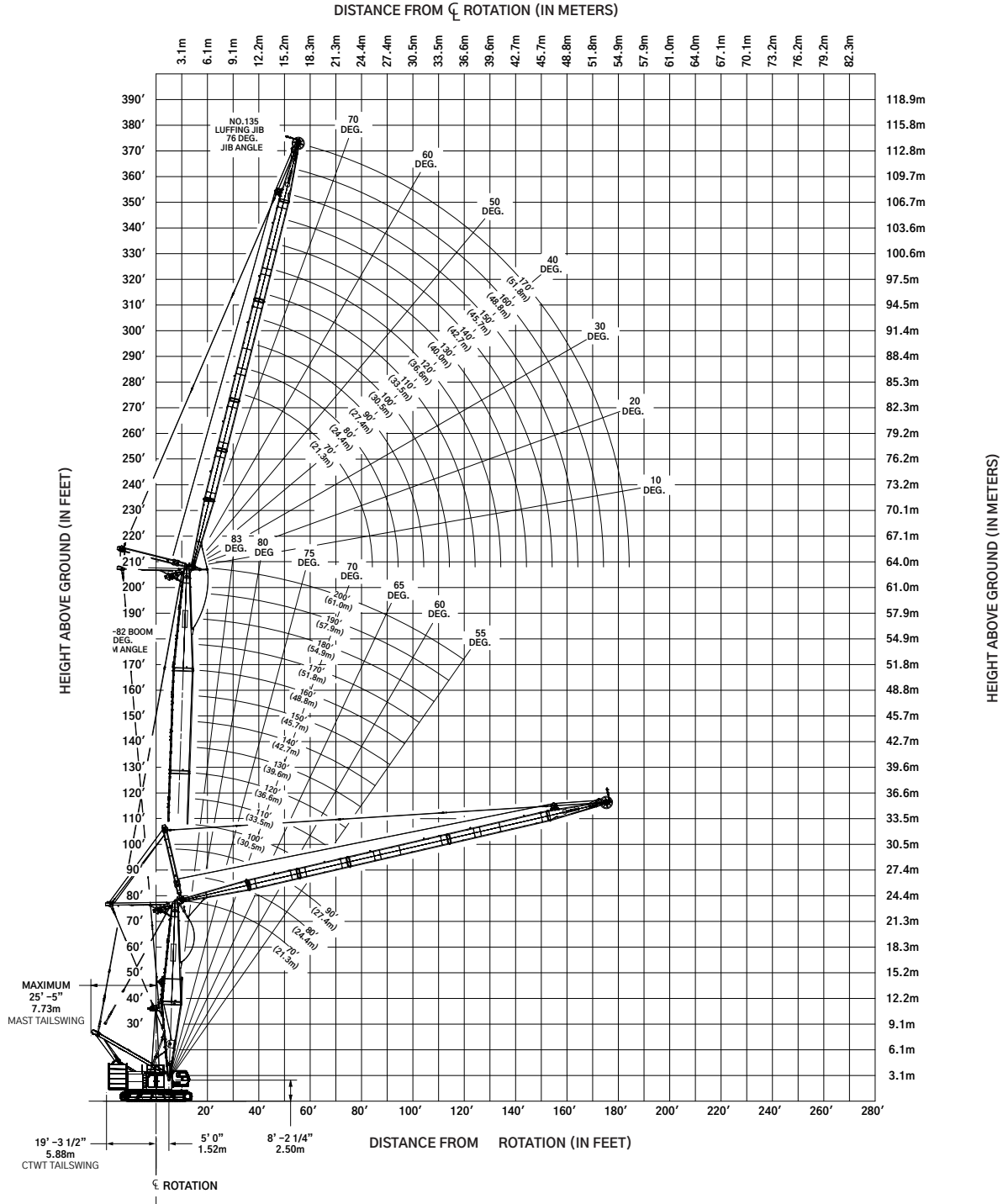
360°	lb x 1000				
50 ft Jib at 5° Offset					
Radius (ft)	Boom length (ft)				
	90	120	150	180	210
35	45.4	-	-	-	-
40	44.1	45.0	-	-	-
45	42.9	43.9	44.4	-	-
50	41.7	42.9	43.5	43.6	-
55	40.7	42.0	42.7	42.9	42.7
60	39.7	41.1	42.0	42.2	42.1
65	38.7	40.3	41.2	41.6	41.5
70	37.7	39.5	40.5	41.0	41.0
75	36.7	38.8	39.8	40.4	40.4
80	35.8	37.9	39.1	39.8	39.9
85	34.9	37.1	38.5	39.2	39.4
90	34.1	36.3	37.9	38.7	39.0
95	33.3	35.5	37.3	38.2	38.5
100	31.6	34.9	36.6	37.7	38.0
110	28.7	33.6	35.3	36.6	37.2
120	26.3	31.4	34.2	35.6	36.4
130	24.3	29.0	33.2	34.5	34.8
140	-	27.1	31.4	32.2	30.7
150	-	25.3	29.3	28.7	27.2
160	-	23.8	26.9	25.6	24.1
170	-	-	24.2	22.9	21.4
180	-	-	21.8	20.5	19.0
190	-	-	18.4	18.4	16.9
200	-	-	-	16.5	15.0
210	-	-	-	13.8	13.3
220	-	-	-	10.8	11.6
230	-	-	-	-	9.1
240	-	-	-	-	6.8

360°	lb x 1000				
60 ft Jib at 5° Offset					
Radius (ft)	Boom length (ft)				
	90	120	150	180	210
35	39.1	-	-	-	-
40	38.0	38.6	-	-	-
45	36.9	37.7	38.0	-	-
50	35.9	36.9	37.3	37.3	-
55	34.8	36.0	36.6	36.7	36.5
60	33.8	35.2	35.9	36.1	36.0
65	32.7	34.3	35.2	35.5	35.5
70	31.9	33.4	34.5	34.9	34.9
75	31.0	32.6	33.8	34.4	34.5
80	30.2	31.9	33.1	33.8	34.0
85	29.4	31.2	32.5	33.3	33.5
90	28.7	30.5	31.8	32.7	33.1
95	28.0	29.9	31.2	32.1	32.7
100	27.3	29.2	30.6	31.6	32.2
110	25.1	28.1	29.5	30.5	31.2
120	22.9	27.0	28.5	29.6	30.3
130	21.1	25.1	27.6	28.7	29.5
140	19.5	23.3	26.7	27.8	28.7
150	-	21.7	25.1	27.1	27.5
160	-	20.3	23.5	26.0	24.4
170	-	19.1	22.1	23.3	21.7
180	-	-	20.9	20.9	19.4
190	-	-	19.8	18.8	17.2
200	-	-	16.7	16.9	15.3
210	-	-	-	15.1	13.6
220	-	-	-	12.4	12.1
230	-	-	-	9.7	10.2
240	-	-	-	-	8.0
250	-	-	-	-	5.8

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

# LUFFING JIB - LOAD CHART

## No. 149 Luffing Jib on B10:82A Boom



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# LUFFING JIB - LOAD CHART

## LJ10:149 Luffing Jib on B10:82A Boom Series 3

219,600 lb upper counterweight + 80,000 lb lower counterweight

360°	lb x 1000				
70 ft Luffing Jib Length					
Radius (ft)	Boom length (ft)				
	80	120	140	180	200
30	160.0	-	-	-	-
32	160.0	150.7	142.6	-	-
34	160.0	145.4	140.3	98.0	-
36	160.0	140.3	136.2	96.6	81.1
38	157.8	135.5	132.0	95.3	79.9
40	151.5	131.0	128.1	93.9	78.7
45	137.6	120.7	118.9	90.5	75.8
50	125.9	111.8	110.8	87.3	73.1
55	114.6	104.0	103.6	84.5	70.7
60	101.8	97.3	97.3	81.5	68.6
65	91.4	91.4	90.8	75.2	66.1
70	82.8	86.4	83.1	69.8	61.7
75	72.9	82.1	77.3	65.5	58.0
80	50.0	67.4	68.1	62.9	55.6

360°	lb x 1000				
120 ft Luffing Jib Length					
Radius (ft)	Boom length (ft)				
	80	120	140	180	200
41	126.8	-	-	-	-
45	120.0	96.7	84.0	63.3	54.4
50	111.6	94.6	83.0	61.6	53.2
55	103.6	90.4	79.9	60.7	51.9
60	96.5	85.1	78.8	58.1	50.4
65	90.2	80.3	76.0	57.4	49.0
70	81.7	75.9	70.9	55.9	48.3
75	74.3	71.9	65.6	53.8	47.1
80	68.0	67.4	60.8	50.2	44.6
90	57.8	57.2	52.0	44.0	39.4
100	49.9	49.0	44.9	38.5	34.7
110	43.6	42.6	39.3	34.1	30.9
120	38.5	37.8	35.1	30.8	28.0
130	25.1	34.8	33.3	29.2	26.5

170 ft Luffing Jib Length				
Radius (ft)	Boom length (ft)			
	80	120	140	180
53	71.9	-	-	-
55	71.6	59.8	53.7	-
60	71.1	59.0	52.9	41.9
65	70.5	57.9	52.1	41.3
70	69.9	57.4	50.8	40.5
75	69.2	56.3	50.4	39.6
80	67.2	55.5	49.6	38.8
90	56.7	51.0	46.2	37.3
100	48.5	45.4	41.2	33.8
110	42.1	40.2	36.6	30.3
120	36.9	35.5	32.6	27.2
130	32.5	31.6	28.9	24.5
140	28.8	28.2	25.9	22.0
150	25.7	25.3	23.4	20.0
160	23.0	23.1	21.3	18.4
170	20.6	21.4	19.9	17.2
180	12.7	18.9	19.0	16.7

240 ft Luffing Jib Length				
Radius (ft)	Boom length (ft)			
	80	120	140	180
70	34.8	-	-	-
75	34.3	30.5	27.9	23.6
80	33.9	30.2	27.7	23.4
90	33.0	29.6	27.2	22.8
100	32.2	29.0	26.6	22.1
110	31.4	28.4	25.9	21.4
120	30.7	27.9	25.3	20.7
130	29.7	26.5	24.3	19.8
140	25.9	24.4	22.4	18.3
150	22.7	22.5	20.7	16.8
160	20.0	20.7	18.9	15.4
170	17.6	19.0	17.3	14.2
180	15.5	17.5	16.0	13.0
190	13.6	16.1	14.7	12.0
200	11.9	14.4	13.6	11.1
210	10.4	12.8	12.6	10.3
220	9.0	11.3	11.8	9.6
230	7.8	10.0	10.8	9.0
240	6.7	8.7	9.3	7.9
250	-	5.9	6.3	6.8

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The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane



# SPECIFICATIONS

## Upperworks



### Engine

Cummins Model QSL9 Tier 4 Final (Stage V), 6 cylinder diesel, 340 hp (240 kW). High sulfur fuel compatible kit available in some regions on request.

Includes exhaust aftertreatment system (Tier 4 Final / Stage V) or muffler, air cleaner, 110 amp alternator, radiator and fan. Also includes 150 gallon (567 liter) capacity diesel fuel tank, and a 30 gallon (114 liter) capacity diesel exhaust fluid (DEF) tank.



### Crane Control System (CCS)

The Crane Control System (CCS) offers a user-friendly interface, full graphic display mounted vertically for better visibility, a jog dial for easier data input and ergonomic joysticks. Block-up limit control is standard for hoist and whip lines. Travel and swing alarms are standard. RCL/RCI (Rated Capacity Limiter/Rated Capacity Indicator) system is standard.



### Hydraulic System

Three high-pressure pumps are driven by the engine. Two pumps provide "open loop" hydraulic power enabling simultaneous multi-function capability. One pump provides independent "closed loop" hydraulic power for the swing system. An additional pump provides hydraulic power for the cooler fan and an additional pump is included with free fall.

Hydraulic reservoir capacity is 145 gallon (550 liter) and is equipped with breather, sight and electrical level indicator, clean out access, and internal diffuser. Replaceable, full flow tank filters are furnished in the hydraulic circuit. All oil is filtered prior to return to the hydraulic reservoir. Hydraulic system also includes hydraulic oil cooler.



### Drums

Two 37 inch (940 mm) width drums are driven by independent variable displacement axial piston hydraulic motors through planetary reduction. Drums are grooved for 26 mm rope and mounted in rotating bed. Powered hoisting/lowering operation is standard with automatic (spring applied, hydraulically released) multi-disc brakes, and drum rotation indicators.

- Optional: free-fall operation for front and/or rear drums.
- Optional: auxiliary (third) hydraulic powered drum mounted in rotating bed. Drum is grooved for 26 mm rope. All hydraulic and electrical components to equip drum come along with the drum.



### Boom Hoist

Independent boom hoist consists of a single drum grooved for 22 mm diameter wire rope. Includes 22 mm diameter wire rope for boom hoist reeving. Drum is powered by a fixed displacement hydraulic motor coupled to an internal brake and planetary gearbox equipped with ratchet and pawl.



### Mast and Gantry

The 20 part boom hoist reeving is reeved between the 10 sheave gantry and 11 sheave 9,1 m (30 ft) long live mast with the dead end on the gantry. When used with rigging block sheaves in the live mast the machine is capable of installing carbody counterweights, stacking the upperworks counterweights and assembling the boom and jib. The gantry is also utilized to lift the entire upperworks counterweight assembly into place.



### Counterweight

The upperworks counterweight is attached to rotating bed with remote controlled hydraulically actuated pins. The upperworks counterweight consists of a one-piece tray, one center counterweight adapter, and ten upper counterweight boxes. Carbody counterweight boxes are attached to carbody.

**Series 1:** Upper counterweight (6 pieces+tray) – 149,600 lb (67,860 kg)

**Series 2:** Upper counterweight (8 pieces+tray) – 184,600 lb (83,736 kg)

Carbody counterweight (2 pieces) – 44,000 lb (19,960 kg)

Total counterweight – 228,600 lb (103,696 kg)

**Series 3:** Upper counterweight (10 pieces+tray) – 219,600 lb (99,582 kg)

Carbody counterweight (4 pieces) – 80,000 lb (36,287 kg)

Total counterweight – 299,600 lb (135,896 kg)



### Swing System

Independent single swing drive mounted in rotating bed is powered by a hydraulic motor driving a spur gear through a planetary reduction with internal brake. Maximum swing speed: 1.8 rpm.



### Operator's Cab

New wider cab provides 10% increased operator legroom. Fully enclosed and galvanealed steel insulated module is equipped with sliding door, large safety glass windows on all sides and roof. Signal horn, cab space heater, front and roof windshield wipers, air conditioning, dome light, sun visor and shade, fire extinguisher and air circulating fan are standard.

- Optional: External RCI light, electronic level indicator, radio and camera system.

# SPECIFICATIONS

## Lowerworks



### Carbody

Special 4-axle chassis, all-welded torsion-resistant box type construction in high strength steel.



### Crawlers

4 hydraulically telescoping beams with vertical cylinders and outrigger pads. Independent horizontal and vertical movement control on each side of carrier and from the crane operator's cab. Electronic level indicator with automatic levelling system.

## Attachments



### No. 82A Boom

The liftcrane is equipped with a 70' (21,3 m) basic No. 82A angular chord boom consisting of a 30' (9,1 m) butt and 40' (12,2 m) top with eight 30" diameter roller bearing sheaves. No. 82A boom utilizes steel boom suspension straps.

Spring cushioned boom stop and electronic automatic boom stop standard.

- Optional: No. 82A boom lengths are increased using 10' (3.0 m), 20' (6.1 m) and 40' (12.2 m) No. 82 inserts with steel boom suspension straps.



### No. 134 Fixed Jib

30' (9.1 m) basic No. 134 tubular chord fixed jib consisting of 15' (4.6 m) jib butt and 15' (4.6 m) jib top with 12' (3.7 m) jib strut, and wire rope, pendants. Includes RCL/RCI hardware.

- Optional: No. 134 fixed jib lengths are increased using 10' (3 m) inserts with wire rope pendants. Max fixed jib length is 60' (18.3 m).



### No. 135 Luffing Jib

70' (21.3 m) basic No. 135 tubular chord luffing jib assembly consisting of 27' (8.2 m) butt, 20' (6.1 m) insert and 23' (7 m) top with two 27" (68.6 cm) straight roller bearing sheave, pin connected jib sections, pendants, main strut, jib strut and backstay pendants.

- Optional: No.135 luffing jib lengths are increase using 10' (3 m), 20' (6.1 m) and 40' (12.2 m) No. 135 inserts with pendants.



### No. 149 Luffing Jib

70' (21.3 m) basic No. 149 tubular chord luffing jib assembly consisting of 25' (7.6 m) butt, 20' (6.1 m) insert and 25' (7.6 m) top with three 27" (68.6 cm) straight roller bearing sheave, pin connected jib sections, jib suspension straps, main strut, jib strut and backstay straps.

- Optional: No.149 luffing jib lengths are increase using 10' (3 m), 20' (6.1 m) and 40' (12.2 m) No. 149 inserts with steel jib suspension straps.



# NOTES

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