

Manitowoc MLC165



Features

- 182 USt capacity
- 5510 ft-kips maximum load moment
- 275 ft main boom
- Max boom + fixed jib combination: 226 ft + 80 ft
- Max boom + luffing jib combination: 167 ft + 170 ft
- 320 hp Tier IVi engine
- 300 hp Tier III engine



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Specifications

Upperworks



Engine

Cummins Model QSL9-300 Tier III, 6 cylinder, 300 hp at 2100 governed RPM.

Cummins Model QSL9-320 Tier IVi, 6 cylinder, 320 hp at 2100 governed RPM.

Includes engine block heater (120 V), air heater starting aid (24 V), oil heater starting aid (120 V), high silencing muffler (Tier III) or diesel particulate filter (Tier IVi), radiator and fan.

24 volt starting and 70 amp alternator.

One 150 gallon capacity diesel fuel tank, mounted on right side of upperworks with sight and electrical level indicator.



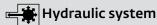
Controls

Hydraulic pilot controls provide infinite speed response directly proportional to control lever movement. Controls include Manitowoc's CANBUS operating system providing microprocessor driven control logic, pump control, on-board diagnostics and service information.

Block-up limit control is standard for hoist and whip lines.

RCL/RCI (Rated Capacity Limiter/Rated Capacity Indicator) system is standard for main boom and upper boom point. "Function cut-out" or "warning only" operation is available via programmable configuration.

Travel and swing alarms are standard.



Three high-pressure pumps are driven by the engine. Two pumps provide hydraulic power enabling simultaneous multi-function capability. One pump provides independent "closed loop" hydraulic power for the swing system. An additional fourth pump is required for free fall.

Hydraulic reservoir capacity is 158 gallon and is equipped with breather, sight and electrical level indicator, clean out access, and internal diffuser.

Each function is equipped with relief valves to protect the hydraulic circuit from overload or shock. Replaceable, ten micron (absolute) full flow tank filter is 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 equal width winches are driven by independent variable displacement axial piston hydraulic motors through planetary reduction. Drums are grooved for 26 mm rope.

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 boom butt. Includes third drum control system. Auxiliary drum may be used as the luffing hoist when machine is equipped with a luffing jib.
- Optional: auxiliary drum preparation includes electric wiring, controls, hydraulic selector valve and plumbing.



Boom hoist

Independent boom hoist consists of a single drum grooved for 22 mm diameter wire rope. Includes 22 mm diameter wire rope for 20 part line reeving.

Drum is powered by a fixed displacement hydraulic motor coupled to an internal brake and planetary gearbox equipped with ratchet and pawl.



Mast

Moving mast is 23' 7" long and connects the boom hoist reeving to the steel boom suspension pendant rigging. When used with optional self-erect package, the mast is utilized for crane assembly and disassembly. The mast is capable of lifting and positioning the crawler assemblies, stacking the counterweights and assembling the boom and jib, utilizing the self assembly cylinder.

Rotating bed includes counterweight raising cylinders capable of lifting the entire upperworks counterweight for removal and installation. The upperworks counterweight is attached to rotating bed with power-actuated pins.

Specifications

Counterweight

Counterweight raising cylinders are mounted in the rotating bed with links mounted to top of the cylinder and connected to the counterweight tray. The upper counterweight is secured to the rotating bed with hydraulically actuated pins.

Upper counterweight consists of a one-piece tray and eight upper counterweight boxes. Series 2 carbody counterweight boxes are attached to carbody (each side) and weigh 8 t each.

Series 1

Upper counterweight (6 pieces+tray)......99,430 lb

Series 2

Upper counterweight (8 pieces+tra	ay)121,4/) ID
Carbody counterweight (2 pieces). Total counterweight	156,750 lb



Swing system

Independent single swing drive mounted in rotating bed is powered by a hydraulic piston type motor driving a spur gear through a planetary reduction. Internal brake and four position manual swing lock is provided.

Maximum swing speed: 2.5 rpm.



Operator's cab

Fully enclosed and galvaneeled 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: tilt cab.
- Optional: nylon protective window covers.

Lowerworks



Carbody

High strength fabricated steel assembly utilizing Manitowoc's FACT $^{\text{\tiny TM}}$ connection system incorporating two hydraulically powered pins for fast installation and removal of crawlers.

Crawlers

Crawler assemblies are 26' 3" long, high strength steel fabrications with 3' 7" wide cast steel crawler pads. Each crawler is powered independently by a variable displacement hydraulic motor driving a planetary reduction. Crawlers provide ample tractive effort that allows counter rotation with full rated load. Maximum ground speed of 1.1 mph.

Attachments



No. 74 boom

The liftcrane is equipped with a 49' 2" basic No. 74 tubular chord boom consisting of a 19' 8" butt and 29' 6" top with six 25.6" diameter roller bearing sheaves. No. 74 boom utilizes wire rope pendants.

Hydraulically powered boom hinge pin system consists of cylinder, piping, operating controls and locking device.

Spring cushioned boom stop and electronic automatic boom stop standard.

Luffing jib preparation included as standard.

- No. 74 boom length is increased using 9' 10", 19' 8", and 39' 4" boom inserts with wire rope suspension pendants. Max boom length is 275'.
- 15 USt swivel hook and weight ball standard.



No. 134 fixed jib

- 30' basic No. 134 tubular chord fixed jib consisting of 15' jib butt and 15' jib top with 12' 6" jib strut, wire rope, pendants and backstay. Includes RCL/RCI hardware.
- No. 134 fixed jib length is increased using 10' and 20' inserts with wire rope pendants. Max fixed jib length is 80'.



No. 135 luffing jib

- 70' basic No. 135 tubular chord luffing jib assembly consisting of 27' butt, 20' insert, and 23' top with two 27" straight roller bearing sheaves. Also included are RCL/RCI hardware, pin connected jib sections, pendants, fixed strut, jib strut, backstay pendants, boom point wheel and 26 mm luffing jib hoist line.
- No. 135 luffing jib is lengthened using 10', 20' and 40' inserts with wire rope pendants. Maximum luffing jib length is 170'.

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Manitowoc MLC165 luffing jib length is 170'.

Specifications

Optional equipment

- Self-erect system includes: carbody jacking cylinders with pads, controls, self assembly cylinder, boom-butt installation support, counterweight cylinders and crawler handling chain.
- Detachable upper boom point with one 30" diameter tapered roller bearing sheave for No. 74 boom top (this is same upper boom point used on 555, 777, 999, 2250,16000 and 18000).
- Blocks and hooks -

30 USt hook block with one 30" sheave for 26 mm wire rope with swivel hook, hook latch and swivel lock.

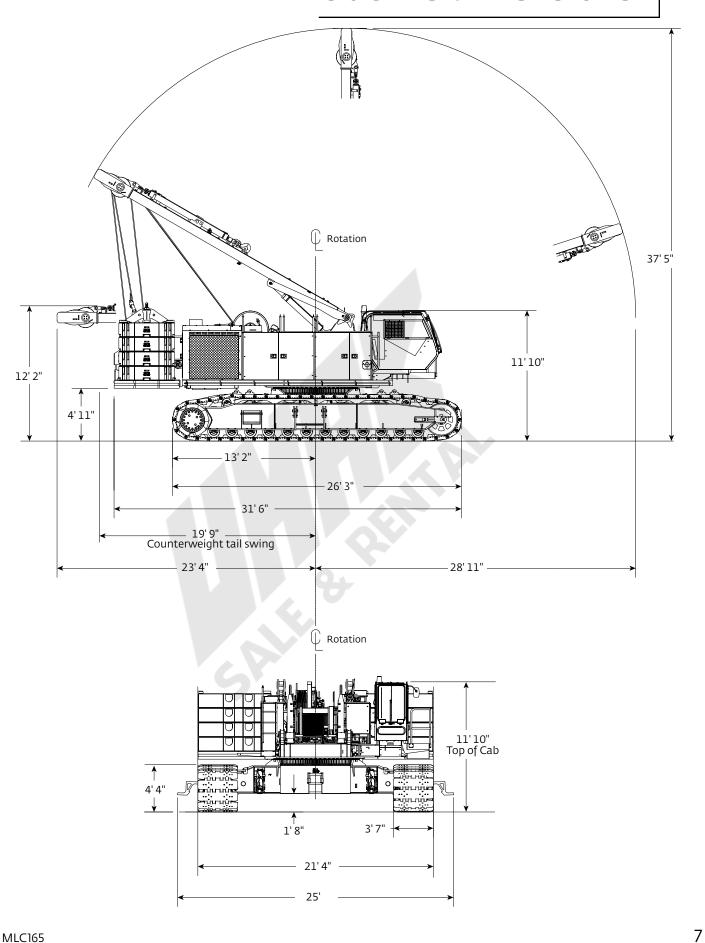
60 USt hook block with two 30" sheaves for 26 mm wire rope with swivel hook, hook latch and swivel lock.

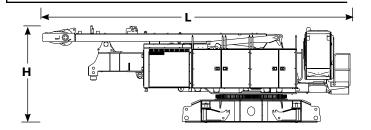
100 USt hook block with three 30" sheaves for 26 mm wire rope with swivel hook, hook latch, and swivel lock.

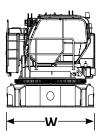
165 USt hook block with five 30" sheaves for 26 mm wire rope with single barb swivel hook, hook latch, and swivel lock.

165 USt hook block with five 30" sheaves for 26 mm wire rope with duplex swivel hook, hook latch, and swivel lock.

- Hydraulic Test Kit.
- Service Interval Kits.
- Special Paint Color (other than Manitowoc standard red and black.)
- Zinc rich primer (marine applications) for corrosion resistance.
- Special Customer Decals: custom vinyl decal(s) of name and/or logo from artwork supplied by customer.
- Export Packaging: basic crane, boom and jib sections.

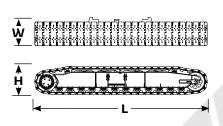




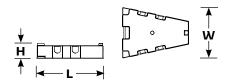


Basic crane	
Length	34' 7"
Width	9'10"
Height	10' 10"
Weight	79,270 lb

Note: Weight includes carbody, upperworks, operator's cab, mast, boom-hoist wire rope, maximum hoist and whip lines on drums, optional self-assembly jacks, full hydraulic fluid reservoir, and half tank of fuel.



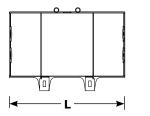
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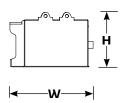


Crawlers	
Length	26' 3"
Width	4' 4"
Height	6' 3"
Weight	34,550 lb

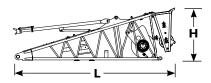
Counterweight tray	
Length	21' 4"
Width	6' 5"
Height	1' 1"
Weight	32,500 lb

Upper side counterweight	
Series 1	x 6
Series 2	x 8
Length	6' 8"
Width	5' 1"
Height	1' 7"
Weight	11,025 lb

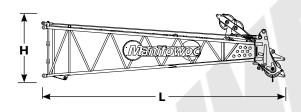




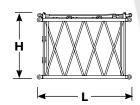
Lower carbody counterweight	
Series 2	x 2
Length	6' 4"
Width	4' 4"
Height	3' 0"
Weight	17,640 lb



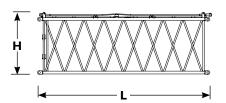
19.7' No. 74 boom butt and wire rope guide and boom stop	
Length	22' 6"
Width	6' 11"
Height	7' 5"
Weight	9,210 lb



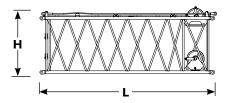
29.5' No. 74 boom top and w guide and pendants	ire rope
Length	31' 5"
Width	6' 8"
Height	8' 4"
Weight	8,446 lb



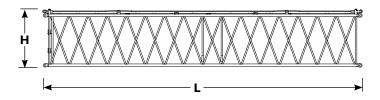
9.8' No. 74 boom insert and pendants	
Length	10' 4"
Width	6' 8"
Height	7' 3"
Weight	1,284 lb



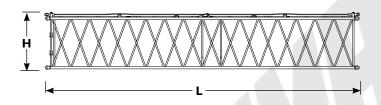
19.7' No. 74 boom insert and pendants	
Length	20' 5"
Width	6' 8"
Height	7' 3"
Weight	2,038 lb



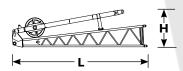
19.7' No. 74 boom insert w and pendants	ith sheaves
Length	20' 5"
Width	6' 8"
Height	7' 10"
Weight	3,036 lb



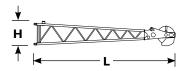
39.4' No. 74 boom insert and pendants		
Length	40'0"	
Width	6' 8"	
Height	7' 3"	
Weight	3,720 lb	



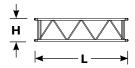
39.4' No. 74 boom insert with backstay and pendants	
Length	40'0"
Width	6' 8"
Height	7' 3"
Weight	3,774 lb



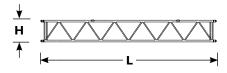
15' No. 134 jib butt, strut and stop	
Length	15' 4"
Width	2' 10"
Height	4' 3"
Weight	1,400 lb



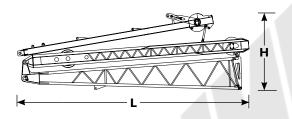
15' No. 134 jib top and pendants	
Length	16' 3"
Width	2'8"
Height	2'8"
Weight	1,220 lb



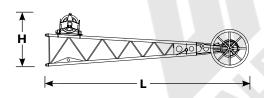
10' No. 134 jib insert and pendants	
Length	10' 3"
Width	2' 8"
Height	2' 8"
Weight	482 lb



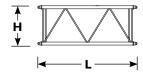
20' No. 134 jib insert and pendants	
20' 3"	
2' 8"	
2' 8"	
750 lb	



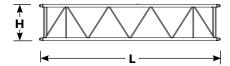
27' No. 135 luffing jib	butt and struts
Length	28'11"
Width	5' 2"
Height	9'11"
Weight	9,870 lb



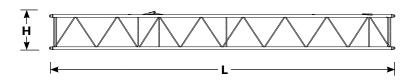
23' No. 135 luffing jib top, ro pendants	oller and
Length	25' 7"
Width	5' 0"
Height	6' 8"
Weight	4,374 lb
Note: Includes wire rope guide	



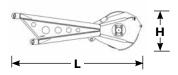
10' No. 135 luffing jib insert and pendants	
Length	10' 4"
Width	5' 0"
Height	4' 4"
Weight	840 lb



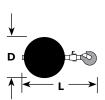
20' No. 135 luffing jib insert and pendants	
Length	20' 4"
Width	5' 0"
Height	4' 4"
Weight	1,350 lb



40' No. 135 luffing jib insert with	
backstays and pendants	
Length	40' 4"
Width	5' 0"
Height	4' 4"
Weight	2,315 lb



No. 74 upper boom point	
Length	8' 8"
Width	1' 5"
Height	2' 8"
Weight	926 lb



Weight ball			
Capacity/Swivel	15 USt	Diameter	3' 9"
Weight	1,310 lb	Length	1' 9"

Transport data

Load summary										
	276 ft No. 74 boom + 80 ft No. 134 fixed jib Series 2 counterweight Quantity on trailer load # (Does not include blocking, strapping, etc.)									
Item	lb	1	2	3	4	5	6	7	8	9
Basic crane	79,267	1								
Crawlers	34,551								1	
Crawlers	34,551									1
29.5' No. 74 boom top, wire rope guide, pendants	8,446							1		
19.7' No. 74 boom butt, wire rope guide, boom stop	9,289								1	
Upper side counterweight	11,025		2	2	1	1		2		
39.4' No. 74 boom insert, pendants	3,719		1	1	1	1				
39.4' No. 74 boom insert with backstay, pendants	3,772	4					1			
19.7' No. 74 boom insert, pendants	3,036							1		
9.8' No. 74 boom insert, pendants	1,283		1							1
Counterweight tray	32,498						1			
No. 74 upper boom point	926		1							
15' No. 134 jib butt, strut, stop, 15' No. 134 jib top, pendants	2,619			1						
10' No. 134 jib insert, pendants	481	Q.			1					
20' No. 134 jib insert, pendants	750	C	2							
Lower carbody counterweight	17,637				1	1				
Weight ball	1,310							1		
Miscellaneous	6,202		1							
Payload for each trailer (lb)		79,267	34,396	28,389	32,862	32,381	36,270	34,842	43,760	35,834

Main and whip drum - 27,560 lb							
	Single line pull/single line speed ft/min						
	Layer						
Single line pull lb	1	2	3	4	5	6	
0	315	338	364	390	417	443	
27,560	220	236	256	272	292	312	

Lu	Luffing hoist auxiliary drum - 20,000 lb								
Single line pull/single line speed ft/min									
		Layer							
9	Single line pull lb	1	2	3	4	5	6	7	8
	20,000	135	144	157	167	180	190	203	213

Hoist reeving for main load block 26 mm wire rope

NO. 74 DOUIT	
	Maximum Load
No. Parts of Line	lb
1	27,560
2	55,120
3	82,680
4	110,240
5	137,800
6	165,360
7	192,920
8	220,480
9	248,040
10	275,600
11	303,160
12	330,720
13	358,280
14	363,762

Wire rope lengths No. 74 boom - or -

Fixed jib No. 134 on No. 74 boom

Boom or boom and jib	Whip line (front or auxiliary drum)			oist line ar drum)
length	1 part	2 part		Total parts
ft	ft	ft	ft	of line
49.2	148	213	820	14
59.1	180	246	902	13
68.9	197	279	968	12
78.7	213	295	1017	11
88.6	230	328	1050	10
98.4	246	361	1148	10
108.3	279	394	1148	9
118.3	295	427	1148	8
128.0	312	443	1214	8
137.8	328	476	1214	7
147.6	344	509	1214	6
157.5	377	541	1214	6
167.3	394	574	1230	6
177.2	410	591	1230	5
187.0	427	623	1230	5
196.9	443	656	1230	4
206.7	476	689	1230	4
216.5	492	722	1230	3
226.4	509	738	1230	3
236.2	525	771	1230	3
246.1	541	804	1230	3
255.9	574	837	1230	3
265.7	591	853	1230	3
275.6	607	886	1230	2
285.4	525	738	_	-
295.3	535	751	_	_
305.1	545	761	_	_

NOTE: Hoist and whip line lengths given in table will allow hook to touch ground. When block travel below ground is required, add additional rope equal to parts of line times added travel distance. Hoisting distance or line pull may be limited when block travel below ground is required.

Maximum wire rope length on auxiliary drum when used as Whip Line is 623'. When auxiliary drum is used as Luffing Jib Hoist, wire rope length required on drum is 689'. If auxiliary drum is used as Whip Line while equipped with 689' rope length, hoisting distance and line pull will be limited. Consult factory for further information.

Wire rope lengths No. 135 luffing jib on No. 74 boom

	Luffing jib hoist line			
Boom length* ft	Hoist line ft	Maximum required parts of line		
68.9	850	4		
78.7	899	4		
88.6	951	4		
98.4	1001	4		
108.3	1001	4		
118.3	1050	4		
128.0	1050	4		
137.8	1099	4		
147.6	1099	3		
157.5	1099	3		
167.3	1152	3		

*Hoist line lengths given in table include all luffing jib lengths.

NOTE: Hoist line lengths given in table will allow hook to touch ground. When block travel below ground is required, add additional rope equal to parts of line multiply by added travel distance. Hoisting distance or line pull may be limited when block travel below ground is required.

Wire rope specifications 5:1 Safety Factor No. 74 boom - or - No. 134 fixed jib on No. 74 boom							
		resistant rope	Rotation resistant Wire rope				
Function	Hoist line	Whip line	Auxiliary line				
Size wire rope	26 mm	26 mm	26 mm				
Maximum load per line	27,560 lb	27,560 lb	20,000 lb				
Approximate weight	2.28 lb/ft	2.28 lb/ft	2.28 lb/ft				

Drum capacities - wire rope					
	Maximum length				
	Operational	Storage			
Front or rear grooved drum 26 mm wire rope	1227 ft 6 layers	1499 ft 7 layers			
Auxiliary drum 26 mm wire rope	538 ft 7 layers	764 ft 9 layers			
Boom hoist drum 22 mm wire rope	558 ft 7 layers	_			

Maximu	ım lonath					
Maximum length Maximum boom and luffing jib raising raising						
	No. 13		No. 74 boom Se unterweight	eries 2		
	In-line r	nethod	Jack-knife	e method		
Boom length ft	Over end of blocked crawlers ft	Over side of crawlers ft	Over end of blocked crawlers ft	Over side of crawlers ft		
68.9	70-170	70-170				
78.7	70-170	70-170				
88.6	70-160	70-160	170	170		
98.4	70-150	70-140	160-170	150-170		
108.3	70-130	70-120	140-170	130-170		
118.3	70-110	70-90	120-170	100-170		
128.0	70-90	70	100-170	80-170		
137.8	70	_	80-170	70-170		
147.6	-	_	70-170	70-130		
157.5	_	_	70-170	-		
167.3	-	_	70-170	+		

For specific configurations refer to www.cranelibrary.com.

Maximum length Maximum boom and fixed jib raising

	No. 134 fixed jib on No. 74 boom Series 2				
	Main boom ft	Fixed jib ft			
	275.6	ı			
	265.7	_			
Over front of blocked	255.9	_			
crawlers ft	246.1	40			
	236.2	60			
7	226.4	80			

For specific configurations refer to www.cranelibrary.com.

Maximum length Maximum boom and fixed jib raising

	No. 134 fixed jib on No. 74 boom Series 2				
	Main boom ft	Fixed jib ft			
	255.9	-			
	236.2	-			
Over side of crawlers ft	226.4	40			
	216.5	60			
	206.7	80			

For specific configurations refer to www.cranelibrary.com.

Maximum length Maximum boom and fixed jib raising

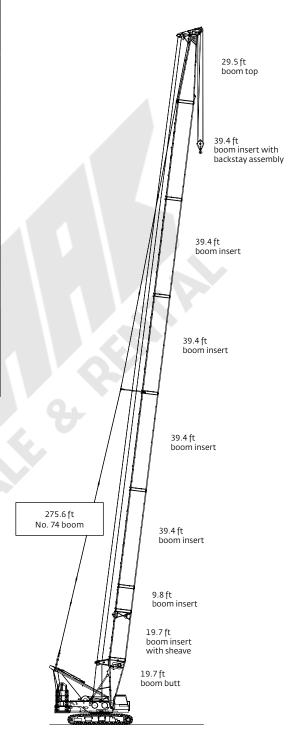
	No. 134 fixed jib on No. 74 boom Series 2				
	Main boom ft	Fixed jib ft			
	275.6	_			
Over rear	255.9	_			
of blocked crawlers ft	246.1	30			
	236.2	50			
	226.4	80			

For specific configurations refer to www.cranelibrary.com.

Boom combinations

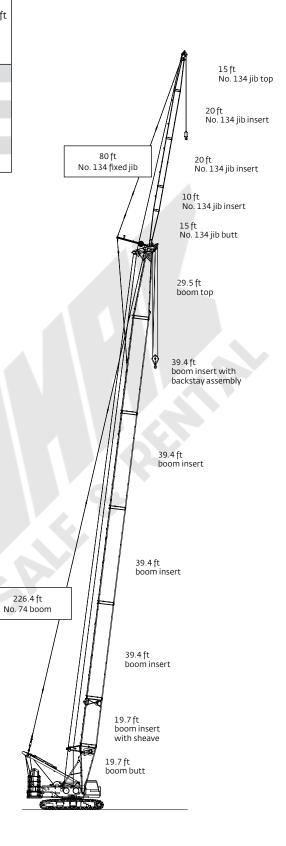
No. 74 boom combinations							
	Boom inserts length ft						
Boom length ft	9.8	19.7	39.4	39.4*			
49.2	0	0	0	0			
59.1	1	0	0	0			
68.9	0	1	0	0			
78.7	1	1	0	0			
88.6	0	0	0	1			
98.4	1	0	0	1			
108.3	0	1	0	1			
118.3	1	1	0	1			
128.0	0	0	1	1			
137.8	1	0	1	1			
147.6	0	1	1	1			
157.5	1	1	0	1			
167.3	0	0	2	1			
177.2	1	0	2	1			
187.0	0	1	2	1			
196.9	1	1	2	1			
206.7	0	0	3	1			
216.5	1	0	3	1			
226.4	0	1	3	1			
236.2	1	1	3	1			
246.1	0	0	4	1			
255.9	1	0	4	1			
265.7	0	1	4	1			
275.6	1	1	4	1			

^{*} with fixed jib backstay assembly.

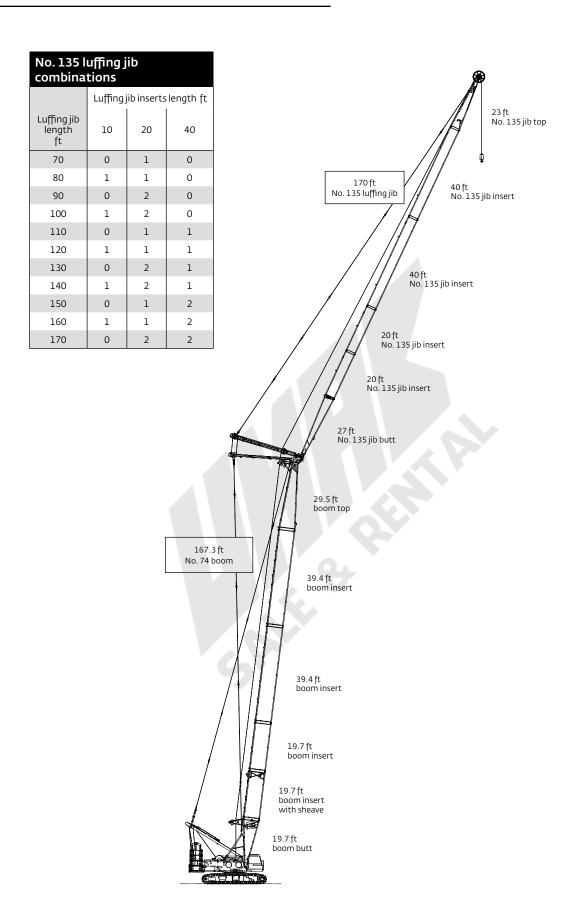


Boom combinations

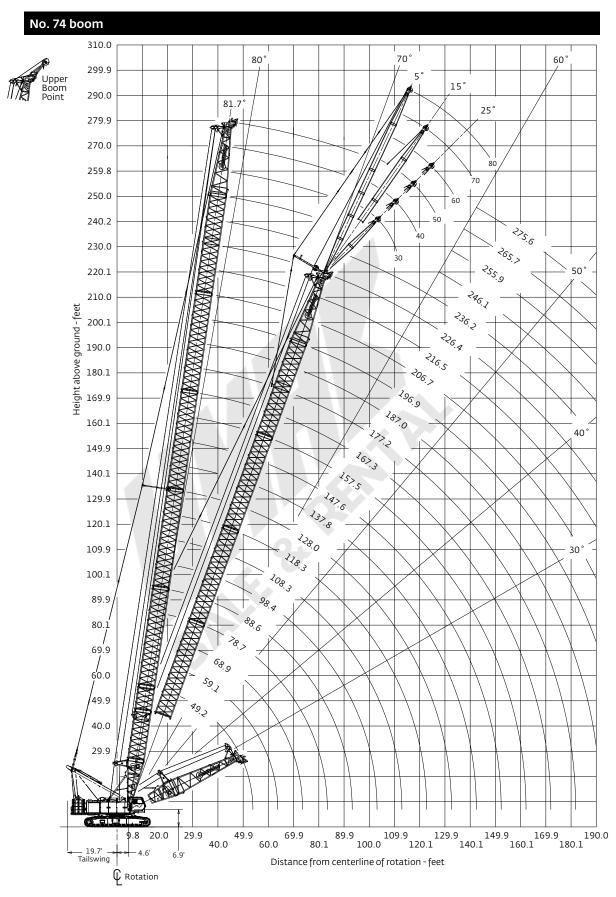
No. 134 fixed jib combinations						
	Fixed jib inserts length ft					
Fixed jib length ft	10	20				
30	0	0				
40	1	0				
50	2	0				
60	3	1				
70	0	2				
80	1	2				



Boom combinations



Main boom range diagram



Main boom load charts

No. 74 boom

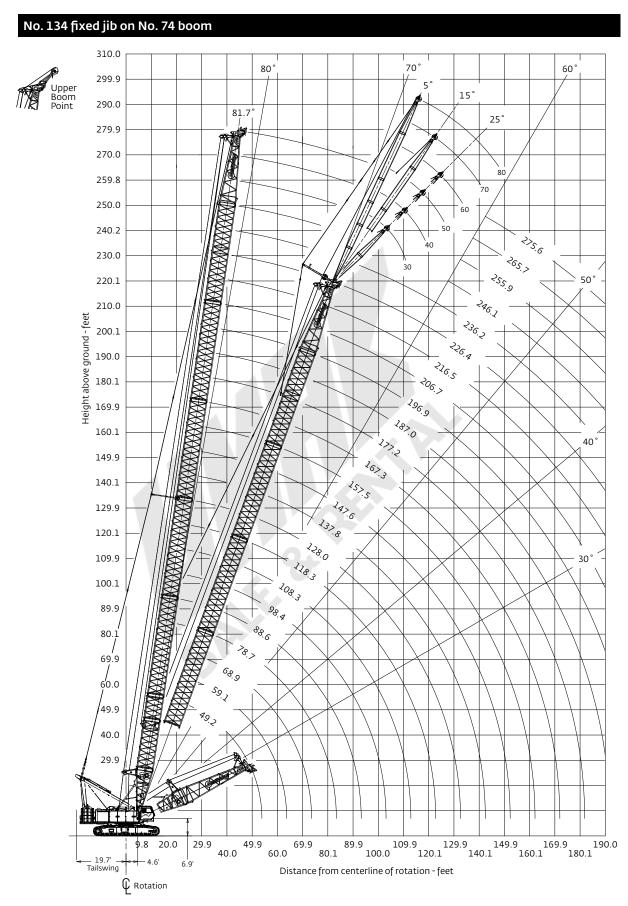
121,500 lb upper counterweight, 35,300 lb carbody counterweight

360° Rating Ib x 1000

						Boon	n lengtl	ı ft					
	49	59	79	98	118	138	157	177	197	217	236	256	276
Radius ft													
14	363.8												
16	342.1	337.8											
18	305.1	305.0											
22	250.5	250.4	249.5	248.9									
26	212.0	212.0	211.1	210.6	207.1				A =				
30	170.0	170.5	170.6	170.7	170.6	170.4	156.6						
34	141.0	141.5	141.5	141.5	141.4	141.1	141.2	132.4					
40	111.6	112.1	112.1	112.0	111.8	111.5	111.5	111.1	108.2	86.5			
46	91.7	92.2	92.2	92.1	91.9	91.5	91.5	91.1	90.6	83.3	73.6	65.9	
50	81.5	82.2	82.2	82.1	81.9	81.4	81.5	81.0	80.5	80.0	72.0	64.9	54.5
55		72.0	72.1	72.0	71.8	71.3	71.4	70.8	70.3	69.8	69.1	63.8	53.6
70			51.7	51.7	51.5	51.0	51.0	50.4	49.9	49.3	48.6	48.0	47.3
85				39.3	39.1	38.7	38.7	38.1	37.6	36.9	36.2	35.5	34.9
100				30.7	30.8	30.4	30.4	29.8	29.3	28.6	27.8	27.2	26.5
115					24.7	24.4	24.4	23.8	23.3	22.7	21.9	21.2	20.5
130						19.8	19.9	19.3	18.8	18.2	17.4	16.7	16.0
145						4	16.4	15.8	15.3	14.7	13.9	13.2	12.5
160								13.0	12.5	11.8	11.0	10.3	9.7
175							0.	10.5	10.1	9.5	8.7	8.0	7.4
190									8.1	7.5	6.8	6.1	5.4
205										5.8	5.1	4.4	3.8
225											3.2		

For complete chart, refer to www.cranelibrary.com.

Fixed jib range diagram



Fixed jib load charts

No. 134 fixed jib on No. 74 boom

121,500 lb upper counterweight, 35,300 lb carbody counterweight

360° Rating | lb x 1000

5° offset

3 0 366							
30.0 ft fixed jib length							
		Boom	ı lengt	h ft			
	89	128	167	207	246		
Radius ft							
30	55.1						
45	55.1	55.1	55.1				
60	55.1	55.1	55.1	55.1	48.0		
80	44.1	42.7	41.7	40.4	39.0		
100	32.2	30.8	29.9	28.5	27.0		
120		23.2	22.3	20.9	19.3		
140		17.8	17.0	15.6	14.0		
160			13.0	11.7	10.1		
180			10.0	8.7	7.1		
200				6.3	4.7		
220				4.3			

5° offset

o oliser							
50.0 ft fixed jib length							
	Вс	om lei	ngth ft				
	89	128	167	207			
Radius ft							
35	44.5						
50	41.1	42.0	41.6				
65	38.1	39.7	39.8	38.7			
85	34.5	36.9	37.7	37.0			
105	29.7	29.4	28.3	27.0			
125	23.9	22.4	21.4	20.0			
145		17.5	16.4	15.0			
165		13.7	12.7	11.4			
185			9.9	8.5			
205			7.5	6.2			
225				4.3			

 $For \ complete \ chart, \ refer \ to \ www.cranelibrary.com.$

25° offset

30.0 ft fixed jib length					
		Boom	lengt	h ft	
	89	128	167	207	246
Radius ft					
40	46.4				
55	39.7	43.5	46.3		
70	34.9	39.0	42.1	44.4	46.3
90	30.7	34.6	36.3	35.2	33.9
110		27.3	26.5	25.4	24.1
130			20.0	18.8	17.4
150			15.3	14.1	12.7
170				10.5	9.1
190					6.3
210					4.0

25° offset

25 Offset								
50.0 ft fixed jib length								
	Вс	Boom length ft						
	89	89 128 167 207						
Radius ft								
55	29.6							
70	25.6	28.0	29.8					
85	22.6	25.2	27.1	28.6				
105	19.8	22.3	24.3	25.9				
125		20.2	22.1	21.4				
145		18.0	17.3	16.2				
165			13.4	12.2				
185				9.2				
200				7.2				

Fixed jib load charts

No. 134 fixed jib on No. 74 boom

121,500 lb upper counterweight, 35,300 lb carbody counterweight

360° Rating | lb x 1000

5° offset

2 211200								
60.0 ft fixed jib length								
	Вс	om le	ngth ft					
	89	89 128 167 207						
Radius ft								
40	37.2							
55	34.0	35.1	34.9					
70	31.2	32.8	33.3	32.6				
90	28.2	30.2	31.2	31.0				
110	24.8	27.6	26.5	25.1				
130	20.7	21.2	20.1	18.7				
150		16.7	15.6	14.2				
170		13.2	12.1	10.7				
190			9.4	8.0				
210			7.2	5.8				
230				4.0				

5° offset

80.0 ft fixed jib length							
	Вс	om lei	ngth ft				
	89	128	167	207			
Radius ft							
40	23.7						
55	22.0	21.9	21.5				
70	20.4	20.5	20.3	19.7			
90	18.5	18.7	18.7	18.4			
110	17.0	17.2	17.3	17.2			
130	15.9	16.1	16.1	16.0			
150	14.5	15.1	15.2	14.4			
170		13.6	12.4	11.0			
190		10.9	9.8	8.3			
210			7.6	6.1			
230			5.8	4.3			

For complete chart, refer to www.cranelibrary.com.

25° offset

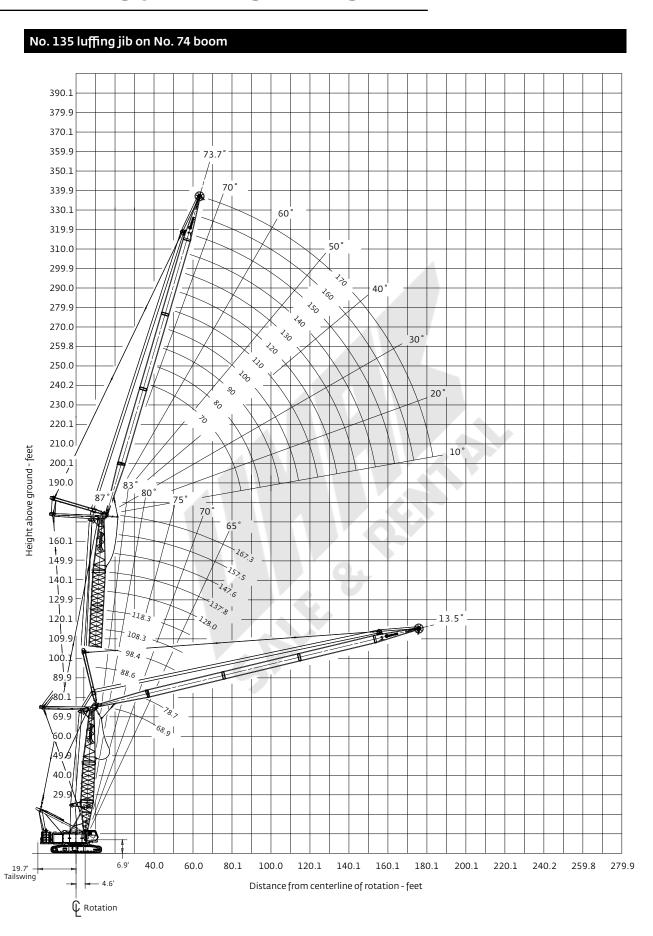
60.0 ft fixed jib length							
	Во	Boom length ft					
	89	128	167	207			
Radius ft							
60	25.7						
75	22.1	24.2	25.7				
90	19.4	21.6	23.3	24.6			
110	16.8	19.0	20.7	22.2			
130		17.0	18.7	20.2			
150		15.6	16.7	15.6			
170			13.0	11.9			
190				8.9			
210				6.5			
215				6.0			

25° offset

== ollass										
80.0 ft fixed jib length										
	Вс	Boom length ft								
	89	128	167	207						
Radius ft										
70	19.1									
85	16.4	17.9	19.1							
100	14.3	15.9	17.2	18.3						
120	12.3	13.9	15.2	16.3						
140	10.8	12.4	13.7	14.8						
160		11.2	12.4	13.5						
180		10.3	11.4	10.9						
200			9.4	8.2						
220				6.0						
240				4.2						

Manitowoc MLC165 25

Luffing jib range diagram



Luffing jib load charts

No. 135 luffing jib on No. 74 boom

121,500 lb upper counterweight, 35,300 lb carbody counterweight

360° Rating | lb x 1000

87° boom angle

70 ft luffing jib length									
			Boom	ı lengt	h ft				
		68.9	88.6	108.3	137.8	167.3			
Rad	ius ft								
	30	110.2	105.8						
	36	110.2	105.8	97.9	85.9	74.0			
	40	102.5	102.7	97.9	85.7	72.7			
	50	86.1	83.2	80.9	75.3	64.9			
	60	71.2	69.5	68.1	64.1	57.0			
	75	49.3	51.8	53.3	53.2	46.4			
	95								
	115								
	135								
	155								
	175								

100 ft luffing jib length								
			Boom length ft					
		68.9	88.6	108.3	137.8	167.3		
Radii	us ft							
	30							
	36							
	40	80.7	79.2	74.3	66.4			
	50	73.2	72.8	72.0	65.6	52.4		
	60	66.8	66.7	66.4	59.2	47.8		
	75	53.2	53.1	52.9	49.3	40.5		
	95	38.7	39.3	39.1	37.6	32.0		
	115					25.4		
	135							
	155							
	175							

14	140 ft luffing jib length							
		Boon	ı lengt	h ft				
	68.9	88.6	108.3	137.8	167.3			
Radius ft								
30								
36								
40								
50	47.7	46.3	44.7					
60	45.9	44.6	43.2	40.6	34.6			
75	40.9	40.9	40.7	37.6	31.5			
95	34.5	34.7	34.8	31.9	26.8			
115	29.1	29.4	29.7	26.2	22.3			
135	21.6	22.4	22.7	21.4	18.5			
155					14.3			
175								

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170 ft luffing jib length								
		Boon	lengt	h ft				
	68.9	88.6	108.3	137.8	167.3			
Radius ft								
30								
36								
40								
50								
60	36.3	35.9	34.9	31.0				
75	31.7	31.6	31.4	29.2	25.0			
95	26.0	26.2	26.3	26.1	22.5			
115	21.1	21.4	21.6	21.9	19.7			
135	17.0	17.3	17.6	18.0	17.0			
155	13.7	13.9	14.2	14.6	14.1			
175	10.2	10.4	10.6	11.0	10.8			

Luffing jib load charts

No. 135 luffing jib on No. 74 boom

121,500 lb upper counterweight, 35,300 lb carbody counterweight

75° boom angle

70 ft luffing jib length									
		Boon	ı lengt	h ft					
	68.9	88.6	108.3	137.8	167.3				
Radius ft									
60	65.4								
70	53.8	52.3	50.5						
80	45.4	44.1	42.6	40.1					
95		35.3	34.2	32.2	30.1				
110				26.4	24.8				
125									
140									
150									
165									
175					4				
190				1					

100 ft luffing jib length								
		Boom length ft						
	68.9	88.6	108.3	137.8	167.3			
Radius ft								
60								
70	4							
80	44.7	43.2						
95	35.8	34.7	33.4	31.2				
110	29.6	28.6	27.5	25.7	23.8			
125		24	23.1	21.5	19.9			
140				18.2	16.9			
150					15.1			
165								
175								
190								

140 ft luffing jib length							
		Boon	ı lengt	h ft			
	68.9	88.6	108.3	137.8	167.3		
Radius ft							
80							
95	34.9	33.7					
110	28.8	27.7	26.5	24.6			
125	24.2	23.2	22.2	20.5	18.9		
140	20.6	19.8	18.9	17.4	15.9		
150	18.6	17.9	17.1	15.7	14.3		
165		15.4	14.7	13.5	12.3		
175				12.2	11.1		
190					9.4		
205							
220							

For	complet	e chart,	refer to	www.cranei	library.com.
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170 ft luffing jib length									
		Boom	lengt	h ft					
	68.9	88.6	108.3	137.8	167.3				
Radius ft									
80									
95									
110	25.7	26.7							
125	22.2	22.6	21.5	19.8					
140	19.0	19.2	18.2	16.7	15.2				
150	17.1	17.3	16.4	15.0	13.6				
165	14.6	14.9	14.1	12.8	11.6				
175	12.7	13.5	12.8	11.6	10.5				
190	10.2	11.0	11.1	10.0	9.0				
205				8.6	7.7				
220					6.5				

Luffing jib load charts

No. 135 luffing jib on No. 74 boom

121,500 lb upper counterweight, 35,300 lb carbody counterweight

360° Rating | Ib x 1000

65° boom angle

70 ft luffing jib length									
			Boom	n lengt	h ft				
		68.9	88.6	108.3	137.8	167.3			
Radi	us ft								
	80	42.2							
	95	33.8	31.9	29.8					
	110		26.2	24.5	21.6				
	125				18	15.5			
	140					13			
	150								
	165								
	175								
	190								
	205				Λ				
	220								

100 ft luffing jib length					
	Boom length ft				
	68.9	88.6	108.3	137.8	167.3
Radius ft					
80					
95					
110	27.2	25.4			
125	22.8	21.3	19.7		
140		18.1	16.7	14.3	11.9
150			15	12.8	10.7
165					9
175					8
190					
205					
220					

140 ft luffing jib length					
	Boom length ft				
	68.9	88.6	108.3	137.8	167.3
Radius ft					
80					
95					
110					
125	21.9	1			
140	18.6	17.2	15.7		
150	16.8	15.5	14.1	11.7	
165	14.5	13.3	12.1	9.9	7.9
175	13.1	12.1	10.9	8.9	7
190			9.3	7.6	5.8
205					4.8
220					

For complete chart,	refer to wu	vw.cranelibrary.com.
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170 ft luffing jib length					
	Boom length ft				
	68.9	88.6	108.3	137.8	167.3
Radius ft					
80					
95					
110					
125					
140	18				
150	16.2	14.8			
165	13.9	12.7	11.4		
175	12.6	11.5	10.2	8.2	
190	10.9	9.9	8.8	6.9	5.1
205	9.4	8.5	7.5	5.8	4.1
220			6.4	4.8	

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