



MLC165-1

Product Guide

ASME B30.5
Imperial

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
- 310 hp Tier 4 Final engine
- 325 hp Tier 3 engine

MANITOWOC MLC165-1

The MLC165-1 provides a broad range of features that will undoubtedly be translated into jobsite benefits that increase productivity and save money.

Features

> Crawler Connection

Each crawler is FACT™ aligned and securely fastened to the carbody with hydraulic powered pins for fast, easy assembly. Hydraulic connections utilize screw style quick disconnect couplers.



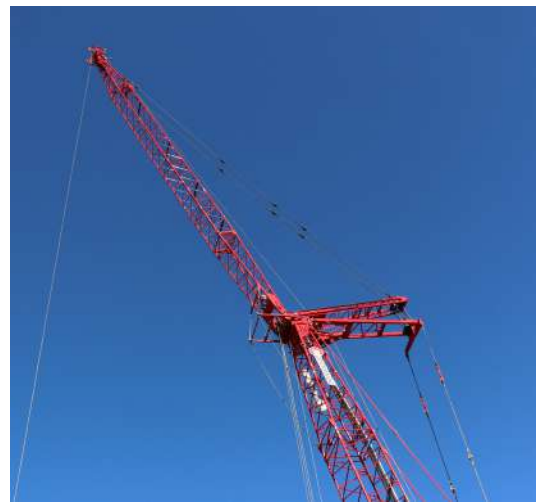
> Counterweight

Single part number for upperworks counterweight can be stacked in any order, and raised into position using optional self-assembly counterweight raising cylinders. Counterweight tray is retained in position using hydraulic powered pins with incorporated locking system for quick and hassle-free installation.



> Asset Utilization

The MLC165-1 is able to be equipped with attachments that are already in common in the field. The No. 134 fixed jib has been used on the 777, 888, 999, 14000 and MLC165. In addition the No. 135 luffing jib has been used on the 888, 999, 14000 and MLC165.



Job site benefits

Increased productivity

The MLC165-1 delivers superior performance to finish the job quicker.

- 27,560 lb single line pull and 443 ft/min maximum line speed
- 2.5 rpm swing speed
- Travel, swing and counter-rotate with full rated capacity



Rugged durability and ease of service

The MLC165-1 comes equipped with a numerous upgrades to spend less time performing maintenance.

- Individual function hour tracking to optimize service intervals
- Remote mounted filters for easy access inside enclosures
- Sealed intermediate rollers eliminating the need for greasing

Easy and quick assembly

The MLC165-1 helps you spend less time on the truck and more time on the job.

- Raise full boom and luffing jib combinations without assist
- Self-erect mast cylinder eliminates need to reeve self assembly block
- Ability to completely self assemble machine without an assist crane



What you need, when you need it.

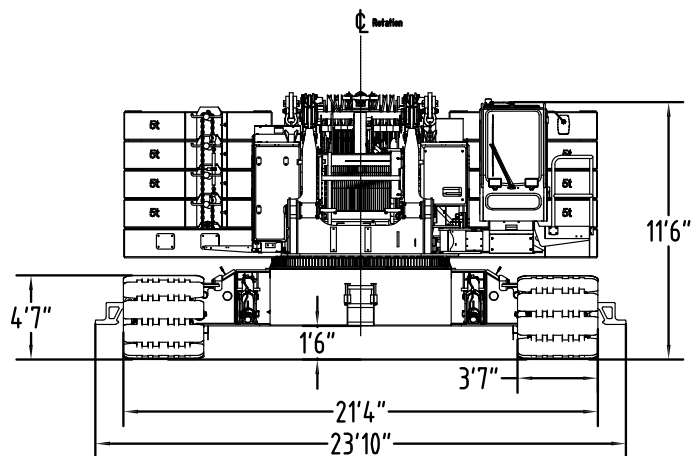
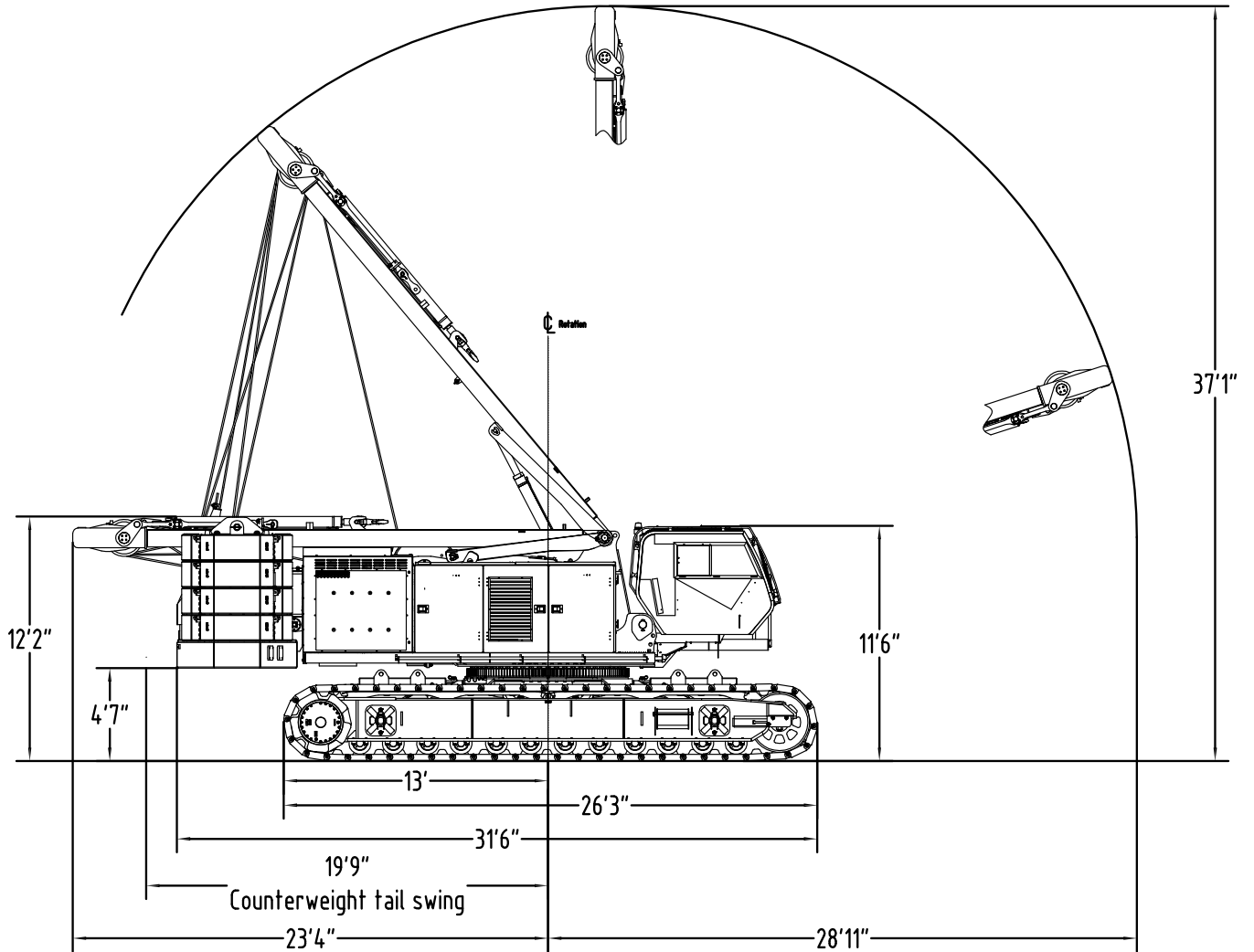
Get right to work with the right equipment — Manitowoc Finance gives you access to flexible, affordable financing you can use to seize profitable new opportunities as they arise.

Feel confident in your investment — rest easy with the assurance of the world's most advanced crane service and support network.

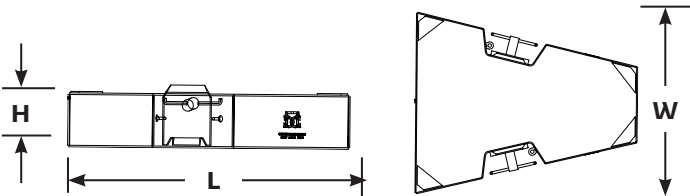
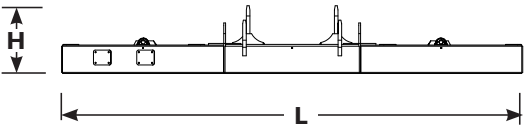
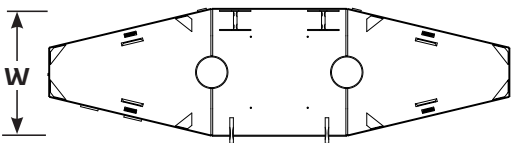
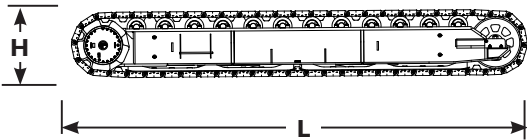
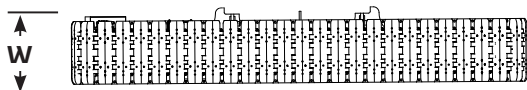
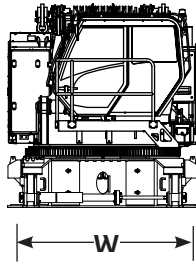
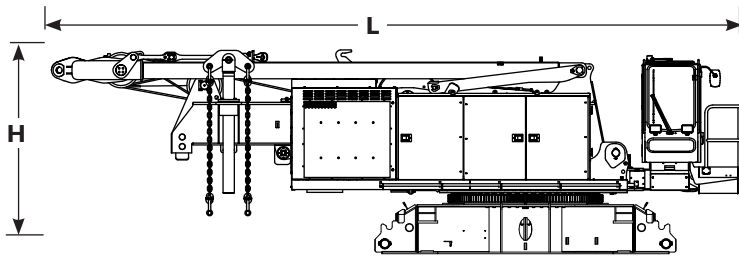
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Outline dimensions



Outline dimensions



Basic crane

| | |
|--------|-----------|
| Length | 34' 7" |
| Width | 9' 10" |
| Height | 10' 6" |
| Weight | 84,000 lb |

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

Crawlers

| | |
|--------|-----------|
| Length | 26' 3" |
| Width | 4' 4" |
| Height | 3' 9" |
| Weight | 32,400 lb |

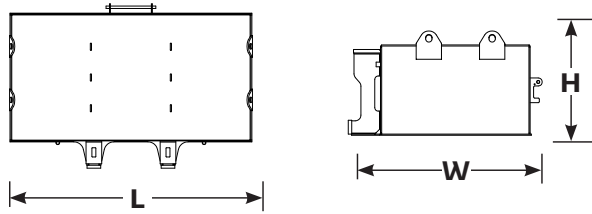
Counterweight tray

| | |
|--------|-----------|
| Length | 21' 3" |
| Width | 6' 3" |
| Height | 3' 1" |
| Weight | 35,300 lb |

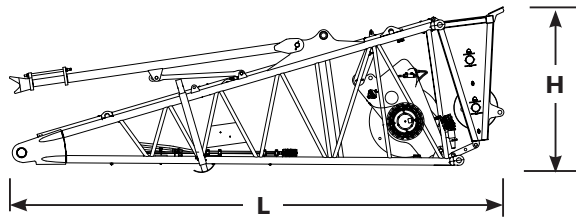
Upper side counterweight

| | |
|----------|-----------|
| Series 1 | x 6 |
| Series 2 | x 8 |
| Length | 6' 8" |
| Width | 5' 5" |
| Height | 1' 4" |
| Weight | 11,025 lb |

Outline dimensions

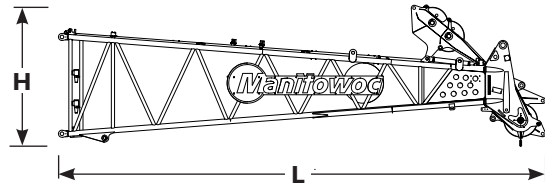


| Lower carbody counterweight Series 2 | |
|--------------------------------------|-----------|
| | x 2 |
| Length | 8' 2" |
| Width | 5' 6" |
| Height | 3' 0" |
| Weight | 22,500 lb |

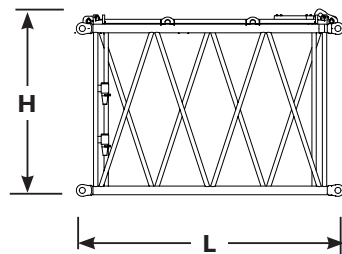


| 19.7' No. 74A boom butt, wire rope guide and boom stop | |
|--|-----------|
| Length | 22' 6" |
| Width | 6' 11" |
| Height | 7' 5" |
| Weight | 11,200 lb |

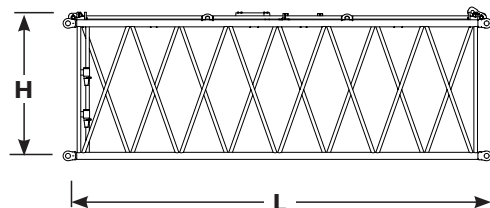
Note: without aux drum -6,200 lb



| 29.5' No. 74A boom top, wire rope guide and straps | |
|--|----------|
| Length | 31' 4" |
| Width | 6' 8" |
| Height | 8' 6" |
| Weight | 7,600 lb |

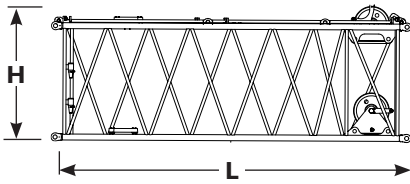


| 9.8' No. 74A boom insert and straps | |
|-------------------------------------|----------|
| Length | 10' 4" |
| Width | 6' 8" |
| Height | 7' 3" |
| Weight | 1,250 lb |



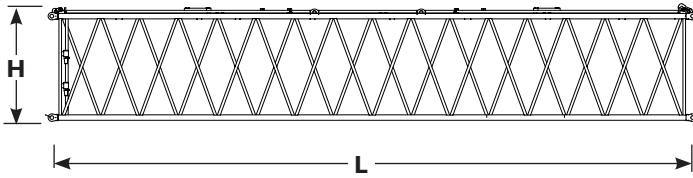
| 19.7' No. 74A boom insert and straps | |
|--------------------------------------|----------|
| Length | 20' 5" |
| Width | 6' 8" |
| Height | 7' 3" |
| Weight | 1,800 lb |

Outline dimensions



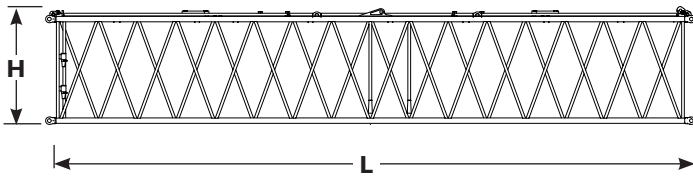
19.7' No. 74A boom insert with sheaves and straps

| | |
|--------|----------|
| Length | 20' 5" |
| Width | 6' 8" |
| Height | 7' 10" |
| Weight | 2,800 lb |



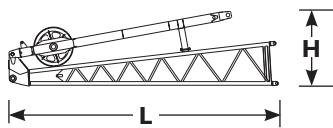
39.4' No. 74A boom insert and straps

| | |
|--------|----------|
| Length | 40' 0" |
| Width | 6' 8" |
| Height | 7' 3" |
| Weight | 3,200 lb |



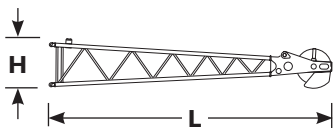
39.4' No. 74A boom insert with backstay lugs and straps

| | |
|--------|----------|
| Length | 40' 0" |
| Width | 6' 8" |
| Height | 7' 3" |
| Weight | 3,300 lb |



15' No. 134 jib butt, strut and stop

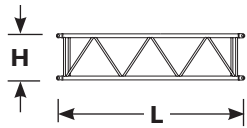
| | |
|--------|----------|
| Length | 15' 4" |
| Width | 2' 10" |
| Height | 4' 3" |
| Weight | 1,400 lb |



15' No. 134 jib top and pendants

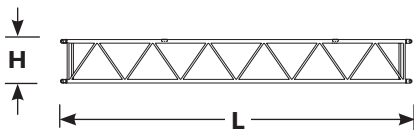
| | |
|--------|----------|
| Length | 16' 3" |
| Width | 2' 8" |
| Height | 2' 8" |
| Weight | 1,220 lb |

Outline dimensions



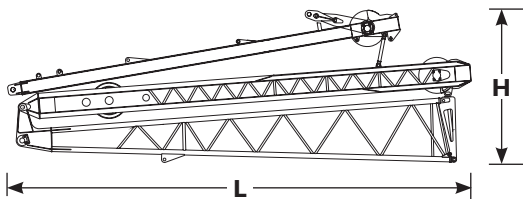
10' No. 134 jib insert and pendants

| | |
|--------|--------|
| Length | 10' 3" |
| Width | 2' 8" |
| Height | 2' 8" |
| Weight | 482 lb |



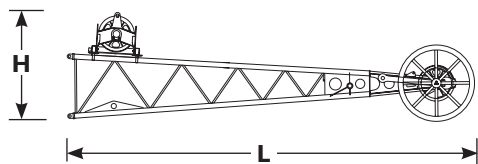
20' No. 134 jib insert and pendants

| | |
|--------|--------|
| Length | 20' 3" |
| Width | 2' 8" |
| Height | 2' 8" |
| Weight | 750 lb |



27' No. 135 luffing jib butt and struts

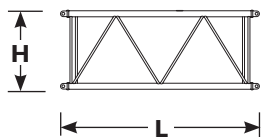
| | |
|--------|----------|
| Length | 28' 11" |
| Width | 5' 2" |
| Height | 9' 11" |
| Weight | 9,870 lb |



23' No. 135 luffing jib top, roller and pendants

| | |
|--------|----------|
| Length | 25' 7" |
| Width | 5' 0" |
| Height | 6' 8" |
| Weight | 4,374 lb |

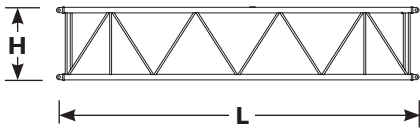
Note: Includes wire rope guide.



10' No. 135 luffing jib insert and pendants

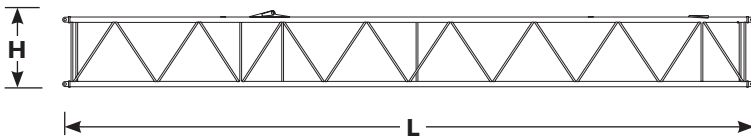
| | |
|--------|--------|
| Length | 10' 4" |
| Width | 5' 0" |
| Height | 4' 4" |
| Weight | 840 lb |

Outline dimensions



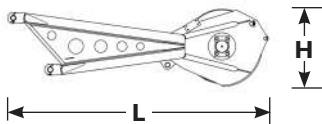
20' No. 135 luffing jib insert and pendants

| | |
|--------|----------|
| Length | 20' 4" |
| Width | 5' 0" |
| Height | 4' 4" |
| Weight | 1,350 lb |



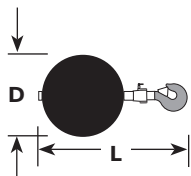
40' No. 135 luffing jib insert with backstays and pendants

| | |
|--------|----------|
| Length | 40' 4" |
| Width | 5' 0" |
| Height | 4' 4" |
| Weight | 2,315 lb |



No. 74A A 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 | | | | | | | | | | |
|--|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Item | 276 ft No. 74A boom + 80 ft No. 134 fixed jib Series 2 counterweight Quantity on trailer load # (Does not include blocking, strapping, etc.) | | | | | | | | | |
| | lb | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Basic Crane | 84,000 | 1 | | | | | | | | |
| Crawler | 32,400 | | 1 | 1 | | | | | | |
| Counterweight Tray | 35,300 | | | | | | | | 1 | 1 |
| Side Counterweight | 11,025 | | | | 1 | 1 | 3 | 3 | | |
| Carbody Counterweight | 22,500 | | | | 1 | 1 | | | | |
| 19.7' No. 74A Boom Butt with aux drum | 11,198 | | | | | 1 | | | | |
| 29.5' No. 74A Boom Top | 7,600 | | | | 1 | | | | | |
| 9.8' No. 74A Boom Insert | 1,250 | | | | | | | | 1 | |
| 19.7' No. 74A Boom Insert | 1,800 | | 1 | | | | | | | |
| 19.7' No. 74A Boom Insert with Sheaves | 2,800 | | | 1 | | | | | | 1 |
| 39.4' No. 74A Boom Insert | 3,200 | | | | | | 1 | 1 | | |
| Miscellaneous | 5,000 | | | | | 1 | | | | |
| Payload for each trailer (lb) | | 84,000 | 34,200 | 35,200 | 41,125 | 49,723 | 36,275 | 36,275 | 36,550 | 35,834 |

Performance data

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

| Luffing hoist auxiliary drum - 20,000 lb | | | | | | | | |
|--|---|-----|-----|-----|-----|-----|-----|-----|
| Single line pull lb | Single line pull/single line speed ft/min | | | | | | | |
| | Layer | | | | | | | |
| | 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. 74A boom

| No. Parts of Line | Maximum Load 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 | 385,840 |

Wire rope lengths No. 74A boom - or - Fixed jib No. 134 on No. 74A boom

| Boom or boom and jib length ft | Whip line (front or auxiliary drum) | | Hoist line (rear drum) | |
|--------------------------------|-------------------------------------|-----------|------------------------|---------------------|
| | 1 part ft | 2 part ft | ft | Total parts 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.

Performance data

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

| Boom length* ft | Luffing jib hoist line | |
|--------------------|------------------------|--------------------------------|
| | 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.

Maximum length Maximum boom and luffing jib raising

| Boom length ft | No. 135 luffing jib on No. 74A boom Series 2 Series 2 counterweight | | | |
|-------------------|--|-----------------------------|------------------------------------|-----------------------------|
| | In-line method | | Jack-knife method | |
| | 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 | — |

Wire rope specifications 5:1 Safety Factor No. 74A boom

- or -

No. 134 fixed jib on No. 74A boom

| | Rotation resistant Wire 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 | — |

Maximum length Maximum boom and fixed jib raising

| | No. 134 fixed jib on No. 74A boom Series 2 | |
|--------------------------------------|--|-----------------|
| | Main boom ft | Fixed jib ft |
| Over front of blocked crawlers ft | 275.6 | — |
| | 265.7 | — |
| | 255.9 | — |
| | 246.1 | 40 |
| | 236.2 | 60 |
| | 226.4 | 80 |

Maximum length Maximum boom and fixed jib raising

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

Maximum length Maximum boom and fixed jib raising

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

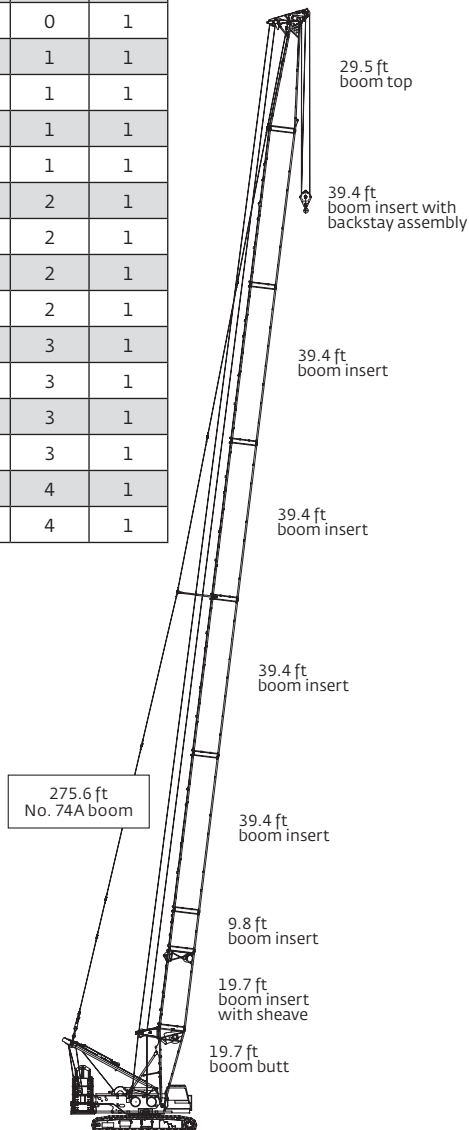
For specific configurations refer to www.cranelibrary.com.

Boom combinations

No. 74A boom combinations

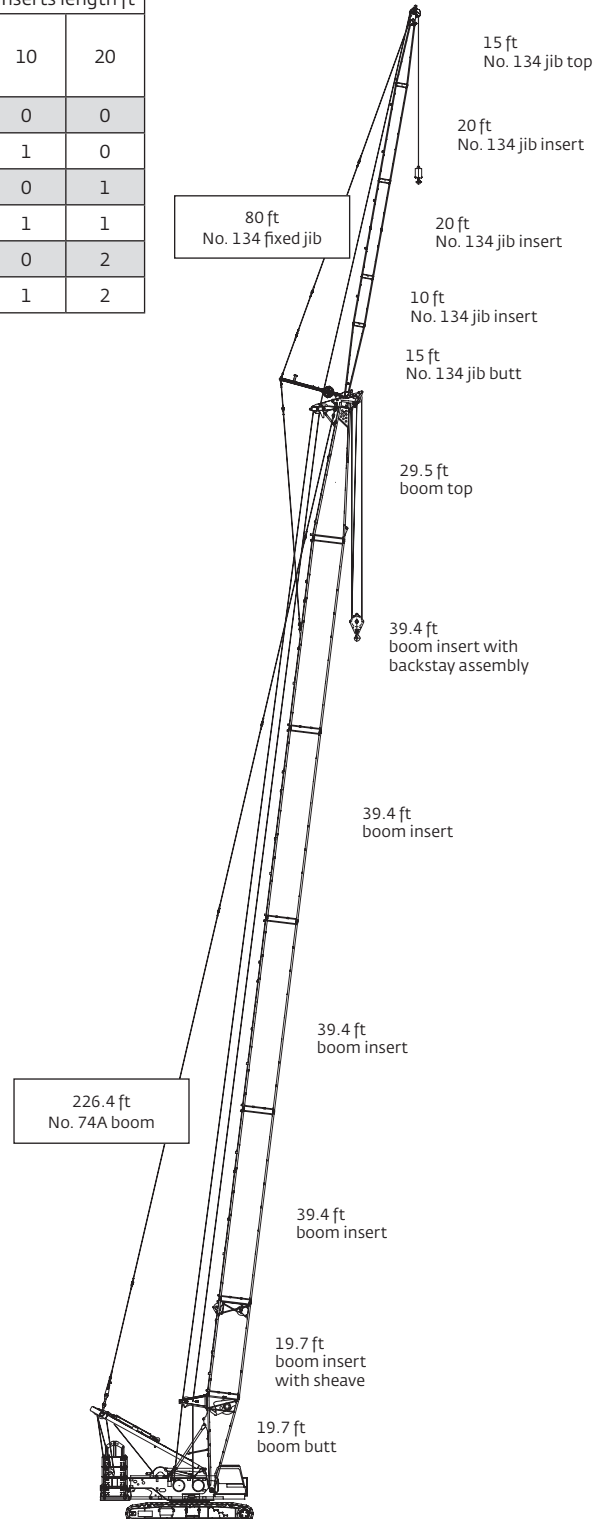
| Boom length ft | Boom inserts length ft | | | |
|----------------|------------------------|------|------|-------|
| | 9.8 | 19.7 | 39.4 | 39.4* |
| 49.2 | 0 | 0 | 0 | 0 |
| 59.1 | 1 | 0 | 0 | 0 |
| 68.9 | 0 | 1 | 0 | 0 |
| 78.7 | 1 | 1 | 0 | 0 |
| 88.6 | 0 | 2 | 0 | 0 |
| 98.4 | 1 | 2 | 0 | 0 |
| 108.3 | 0 | 1 | 0 | 1 |
| 118.3 | 1 | 1 | 0 | 1 |
| 128.0 | 0 | 2 | 0 | 1 |
| 137.8 | 1 | 2 | 0 | 1 |
| 147.6 | 0 | 1 | 1 | 1 |
| 157.5 | 1 | 1 | 1 | 1 |
| 167.3 | 0 | 2 | 1 | 1 |
| 177.2 | 1 | 2 | 1 | 1 |
| 187.0 | 0 | 1 | 2 | 1 |
| 196.9 | 1 | 1 | 2 | 1 |
| 206.7 | 0 | 2 | 2 | 1 |
| 216.5 | 1 | 2 | 2 | 1 |
| 226.4 | 0 | 1 | 3 | 1 |
| 236.2 | 1 | 1 | 3 | 1 |
| 246.1 | 0 | 2 | 3 | 1 |
| 255.9 | 1 | 2 | 3 | 1 |
| 265.7 | 0 | 1 | 4 | 1 |
| 275.6 | 1 | 1 | 4 | 1 |

* with fixed jib backstay assembly.



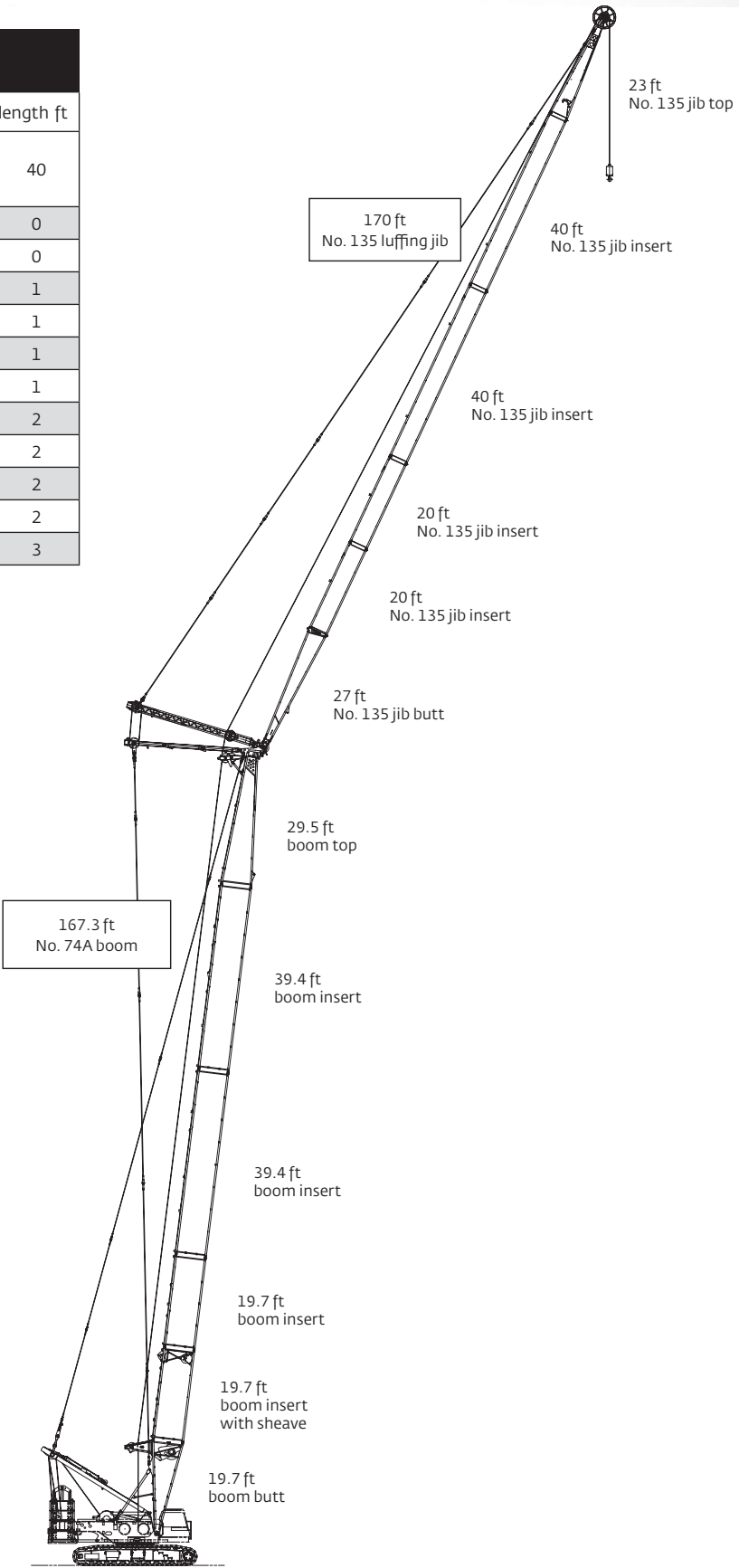
No. 134 fixed jib combinations

| Fixed jib length ft | Fixed jib inserts length ft | |
|---------------------|-----------------------------|----|
| | 10 | 20 |
| 30 | 0 | 0 |
| 40 | 1 | 0 |
| 50 | 0 | 1 |
| 60 | 1 | 1 |
| 70 | 0 | 2 |
| 80 | 1 | 2 |



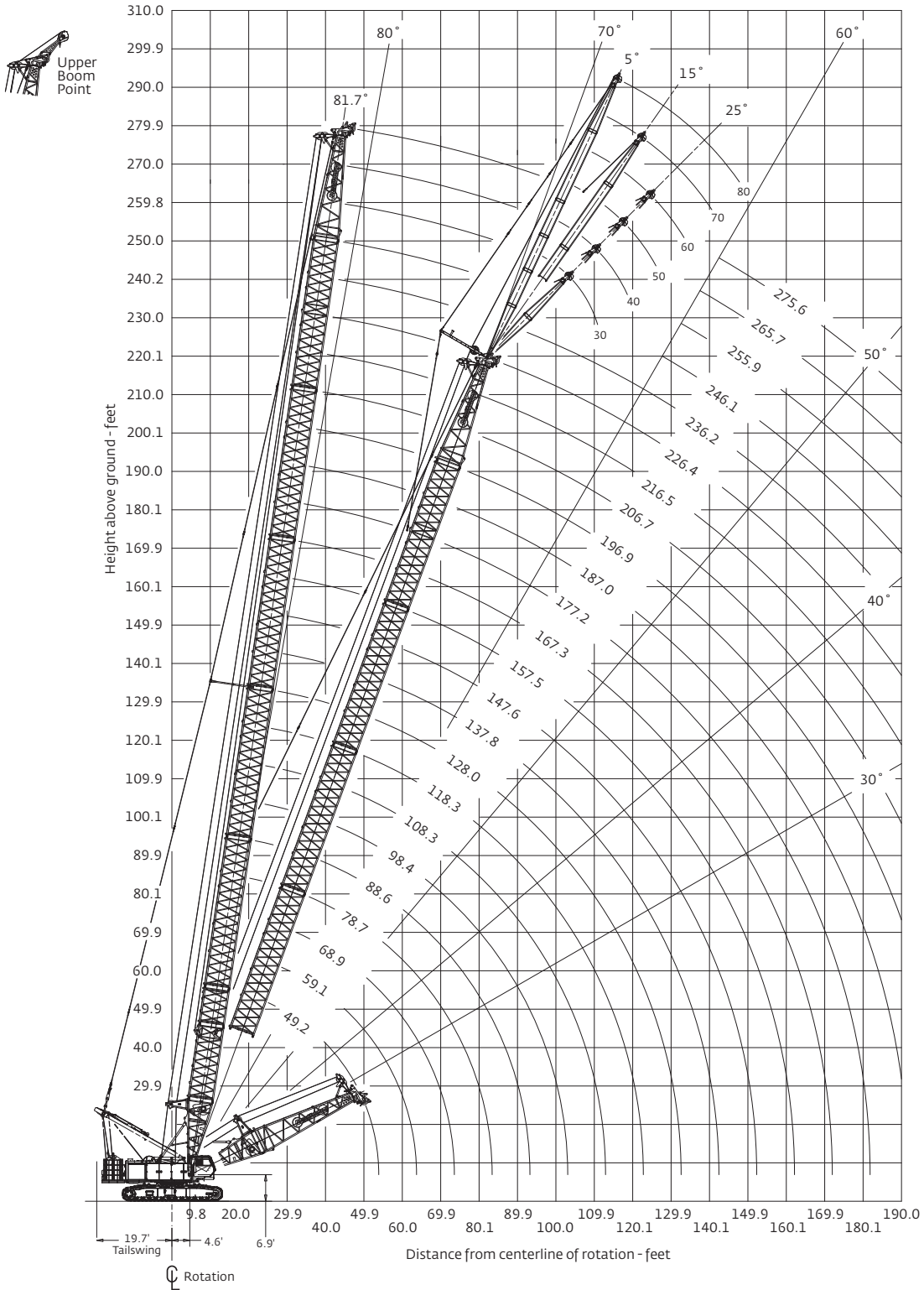
Boom combinations

| No. 135 luffing jib combinations | | | |
|----------------------------------|-------------------------------|----|----|
| Luffing jib length ft | Luffing jib inserts length ft | | |
| | 10 | 20 | 40 |
| 70 | 0 | 1 | 0 |
| 80 | 1 | 1 | 0 |
| 90 | 0 | 0 | 1 |
| 100 | 1 | 0 | 1 |
| 110 | 0 | 1 | 1 |
| 120 | 1 | 1 | 1 |
| 130 | 0 | 0 | 2 |
| 140 | 1 | 0 | 2 |
| 150 | 0 | 1 | 2 |
| 160 | 1 | 1 | 2 |
| 170 | 0 | 0 | 3 |



Main boom range diagram

No. 74A boom



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

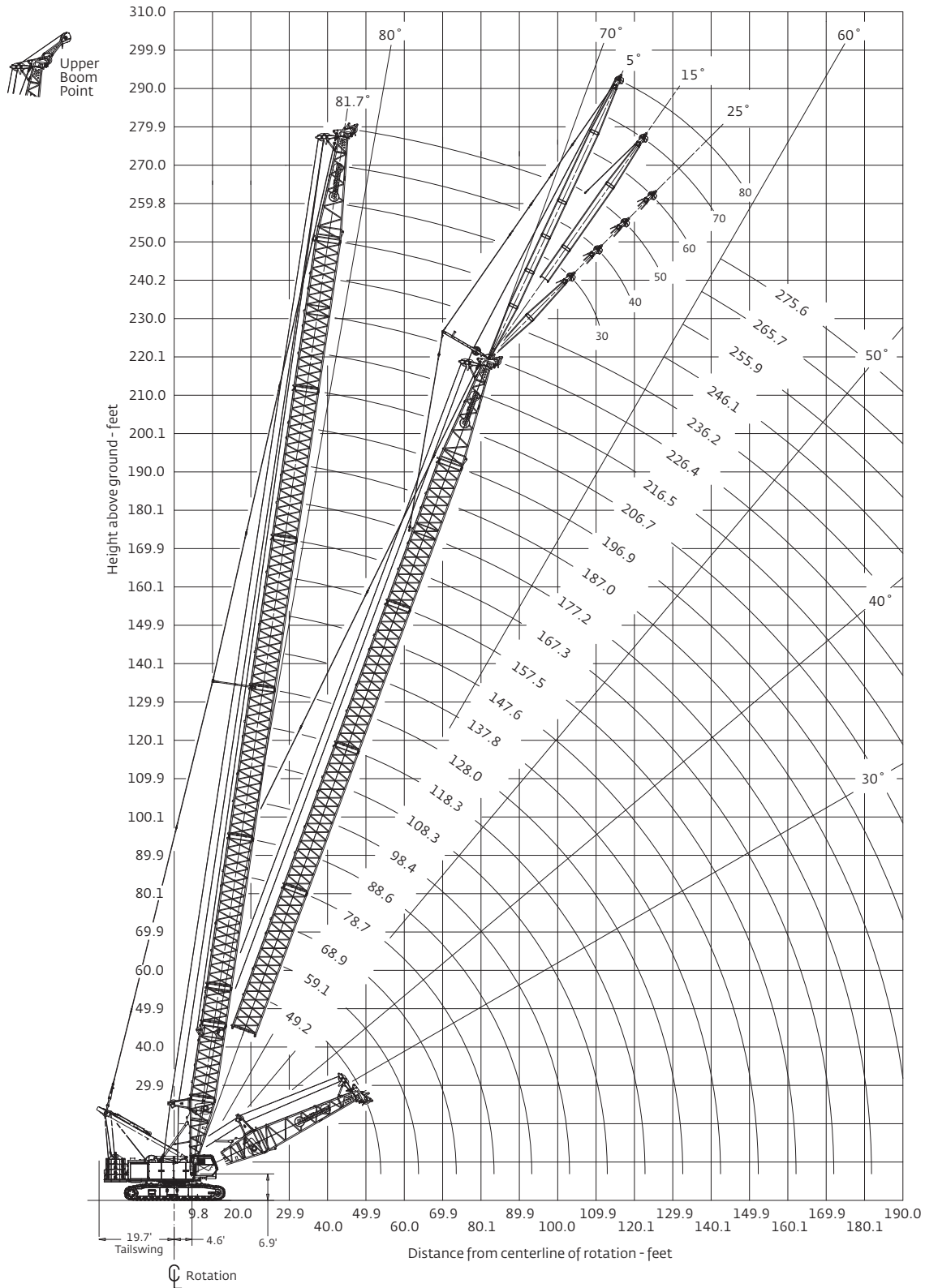
| No. 74A boom | | | | | | | | | | | | | |
|---|----------------|-------|-------|-------|-------|-------|-----------|-------|-------|------|------|------|------|
| 123,500 lb upper counterweight, 45,000 lb carbody counterweight | | | | | | | | | | | | | |
| 360° Rating | | | | | | | lb x 1000 | | | | | | |
| Radius ft | Boom length ft | | | | | | | | | | | | |
| | 49 | 59 | 79 | 98 | 118 | 138 | 157 | 177 | 197 | 217 | 236 | 256 | 276 |
| 14 | 363.8 | | | | | | | | | | | | |
| 16 | 337.6 | 334.8 | | | | | | | | | | | |
| 18 | 302.3 | 302.1 | | | | | | | | | | | |
| 20 | 273.5 | 273.3 | 272.3 | | | | | | | | | | |
| 22 | 249.6 | 249.4 | 248.4 | 247.8 | | | | | | | | | |
| 26 | 211.9 | 211.9 | 211.0 | 210.4 | 209.5 | | | | | | | | |
| 30 | 169.3 | 169.7 | 169.4 | 169.5 | 169.5 | 169.3 | 158.3 | | | | | | |
| 34 | 140.5 | 140.8 | 140.5 | 140.5 | 140.5 | 140.2 | 140.4 | 134.1 | | | | | |
| 38 | 119.6 | 120.0 | 119.7 | 119.6 | 119.5 | 119.2 | 119.4 | 119.0 | 113.3 | | | | |
| 42 | 103.8 | 104.2 | 103.9 | 103.8 | 103.7 | 103.3 | 103.5 | 103.0 | 102.6 | 88.7 | 79.2 | | |
| 46 | 91.4 | 91.8 | 91.5 | 91.4 | 91.3 | 90.9 | 91.0 | 90.6 | 90.1 | 86.7 | 78.9 | 65.4 | |
| 50 | 81.3 | 81.8 | 81.5 | 81.5 | 81.3 | 80.9 | 81.0 | 80.5 | 80.1 | 79.6 | 78.6 | 65.0 | 54.8 |
| 60 | | 63.5 | 63.5 | 63.4 | 63.2 | 62.8 | 62.9 | 62.4 | 61.9 | 61.3 | 60.4 | 59.8 | 54.1 |
| 70 | | | 51.3 | 51.3 | 51.1 | 50.7 | 50.7 | 50.2 | 49.7 | 49.1 | 48.1 | 47.5 | 46.9 |
| 80 | | | 42.3 | 42.5 | 42.4 | 41.9 | 42.0 | 41.4 | 40.9 | 40.3 | 39.3 | 38.7 | 38.0 |
| 90 | | | | 35.9 | 35.8 | 35.3 | 35.4 | 34.9 | 34.3 | 33.7 | 32.7 | 32.0 | 31.4 |
| 100 | | | | 30.6 | 30.6 | 30.2 | 30.3 | 29.7 | 29.2 | 28.5 | 27.5 | 26.9 | 26.2 |
| 110 | | | | | 26.4 | 26.0 | 26.2 | 25.6 | 25.0 | 24.4 | 23.4 | 22.7 | 22.0 |
| 120 | | | | | | 22.6 | 22.8 | 22.2 | 21.7 | 21.0 | 20.0 | 19.3 | 18.6 |
| 130 | | | | | | 19.7 | 19.9 | 19.3 | 18.8 | 18.2 | 17.1 | 16.4 | 15.8 |
| 140 | | | | | | | 17.5 | 16.9 | 16.4 | 15.8 | 14.7 | 14.0 | 13.4 |
| 150 | | | | | | | 15.4 | 14.8 | 14.3 | 13.7 | 12.7 | 12.0 | 11.3 |
| 160 | | | | | | | | 13.0 | 12.5 | 11.9 | 10.9 | 10.2 | 9.5 |
| 170 | | | | | | | | 11.4 | 10.9 | 10.3 | 9.3 | 8.6 | 7.8 |
| 180 | | | | | | | | | 9.5 | 8.9 | 7.9 | 7.2 | 6.2 |
| 190 | | | | | | | | | 8.2 | 7.6 | 6.6 | 5.7 | 4.7 |
| 200 | | | | | | | | | | 6.5 | 5.4 | 4.4 | 3.4 |
| 210 | | | | | | | | | | | 5.5 | 4.2 | 3.2 |
| 220 | | | | | | | | | | | | 3.1 | |

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

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Fixed jib range diagram

No. 134 fixed jib on No. 74A boom



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Fixed jib load charts

No. 134 fixed jib on No. 74A boom

123,500 lb upper counterweight, 45,000 lb carbody counterweight

360° Rating

lb x 1000

5° offset

| 30.0 ft fixed jib length | | | | | |
|--------------------------|----------------|------|------|------|------|
| | Boom length ft | | | | |
| | 89 | 128 | 167 | 207 | 246 |
| Radius ft | | | | | |
| 30 | 55.1 | | | | |
| 40 | 55.1 | 55.1 | | | |
| 50 | 55.1 | 55.1 | 55.1 | 55.1 | |
| 60 | 55.1 | 55.1 | 55.1 | 55.1 | 48.0 |
| 80 | 43.5 | 42.4 | 41.5 | 40.3 | 38.6 |
| 100 | 31.7 | 30.6 | 29.7 | 28.4 | 26.7 |
| 120 | | 23.0 | 22.2 | 20.9 | 19.1 |
| 140 | | 17.7 | 16.9 | 15.6 | 13.8 |
| 160 | | | 13.0 | 11.7 | 9.9 |
| 180 | | | 10.0 | 8.7 | 6.9 |
| 200 | | | | 6.3 | 4.6 |
| 220 | | | | 4.4 | |

25° offset

| 30.0 ft fixed jib length | | | | | |
|--------------------------|----------------|------|------|------|------|
| | Boom length ft | | | | |
| | 89 | 128 | 167 | 207 | 246 |
| Radius ft | | | | | |
| 40 | 46.4 | | | | |
| 50 | 41.6 | 45.4 | | | |
| 60 | 37.9 | 41.9 | 44.8 | | |
| 80 | 32.6 | 36.6 | 39.7 | 41.9 | 40.6 |
| 100 | | 31.4 | 30.7 | 29.6 | 28.2 |
| 120 | | 23.5 | 22.9 | 21.8 | 20.2 |
| 140 | | | 17.4 | 16.3 | 14.7 |
| 160 | | | | 12.2 | 10.6 |
| 180 | | | | 9.1 | 7.4 |
| 200 | | | | | 4.9 |
| 205 | | | | | 4.4 |

5° offset

| 50.0 ft fixed jib length | | | | |
|--------------------------|----------------|------|------|------|
| | Boom length ft | | | |
| | 89 | 128 | 167 | 207 |
| Radius ft | | | | |
| 36 | 44.2 | | | |
| 40 | 43.8 | | | |
| 50 | 41.0 | 41.9 | 41.5 | |
| 60 | 39.1 | 40.3 | 40.3 | 39.0 |
| 80 | 35.2 | 37.5 | 38.0 | 37.2 |
| 100 | 31.2 | 31.3 | 30.4 | 29.1 |
| 120 | 25.0 | 23.7 | 22.8 | 21.4 |
| 140 | | 18.4 | 17.5 | 16.1 |
| 160 | | 14.5 | 13.6 | 12.2 |
| 180 | | | 10.5 | 9.2 |
| 200 | | | 8.1 | 6.8 |
| 220 | | | | 4.8 |
| 230 | | | | 4.0 |

25° offset

| 50.0 ft fixed jib length | | | | |
|--------------------------|----------------|------|------|------|
| | Boom length ft | | | |
| | 89 | 128 | 167 | 207 |
| Radius ft | | | | |
| 55 | 29.6 | | | |
| 60 | 28.1 | 30.4 | | |
| 70 | 25.6 | 28.0 | 29.8 | |
| 80 | 23.5 | 26.0 | 27.9 | 29.4 |
| 90 | 21.8 | 24.4 | 26.3 | 27.9 |
| 100 | 20.4 | 22.9 | 24.9 | 26.5 |
| 120 | | 20.6 | 22.6 | 23.0 |
| 140 | | 19.0 | 18.4 | 17.3 |
| 160 | | | 14.2 | 13.1 |
| 180 | | | | 9.9 |
| 200 | | | | 7.3 |

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Fixed jib load charts

No. 134 fixed jib on No. 74A boom

123,500 lb upper counterweight, 45,000 lb carbody counterweight

360° Rating

lb x 1000

5° offset

| 60.0 ft fixed jib length | | | | |
|--------------------------|----------------|------|------|------|
| | Boom length ft | | | |
| | 89 | 128 | 167 | 207 |
| Radius ft | | | | |
| 40 | 37.2 | | | |
| 50 | 35.1 | 35.9 | | |
| 60 | 33.1 | 34.4 | 34.3 | 33.3 |
| 80 | 29.7 | 31.5 | 32.3 | 31.7 |
| 100 | 26.9 | 29.0 | 30.1 | 29.2 |
| 120 | 22.6 | 24.0 | 22.9 | 21.6 |
| 140 | 19.2 | 18.6 | 17.6 | 16.2 |
| 160 | | 14.7 | 13.7 | 12.3 |
| 180 | | 11.6 | 10.7 | 9.3 |
| 200 | | | 8.3 | 6.9 |
| 220 | | | | 5.0 |
| 230 | | | | 4.1 |

25° offset

| 60.0 ft fixed jib length | | | | |
|--------------------------|----------------|------|------|------|
| | Boom length ft | | | |
| | 89 | 128 | 167 | 207 |
| Radius ft | | | | |
| 60 | 25.7 | | | |
| 70 | 23.2 | 25.2 | | |
| 80 | 21.1 | 23.2 | 24.9 | 26.1 |
| 90 | 19.4 | 21.6 | 23.3 | 24.6 |
| 100 | 18.0 | 20.2 | 21.9 | 23.3 |
| 120 | 15.9 | 17.9 | 19.7 | 21.1 |
| 140 | | 16.3 | 17.9 | 17.8 |
| 160 | | | 14.7 | 13.6 |
| 180 | | | 11.4 | 10.3 |
| 200 | | | | 7.7 |
| 215 | | | | 6.0 |

5° offset

| 80.0 ft fixed jib length | | | | |
|--------------------------|----------------|------|------|------|
| | Boom length ft | | | |
| | 89 | 128 | 167 | 207 |
| Radius ft | | | | |
| 40 | 24.0 | | | |
| 50 | 22.9 | 22.7 | | |
| 60 | 21.8 | 21.8 | 21.4 | |
| 80 | 19.8 | 20.0 | 19.9 | 19.4 |
| 100 | 18.2 | 18.4 | 18.5 | 18.2 |
| 120 | 16.8 | 17.1 | 17.2 | 17.1 |
| 140 | 15.2 | 16.0 | 16.1 | 16.1 |
| 160 | 13.7 | 15.0 | 14.0 | 12.6 |
| 180 | | 12.1 | 11.0 | 9.6 |
| 200 | | 9.7 | 8.6 | 7.2 |
| 220 | | | 6.7 | 5.2 |
| 240 | | | 5.0 | |

25° offset

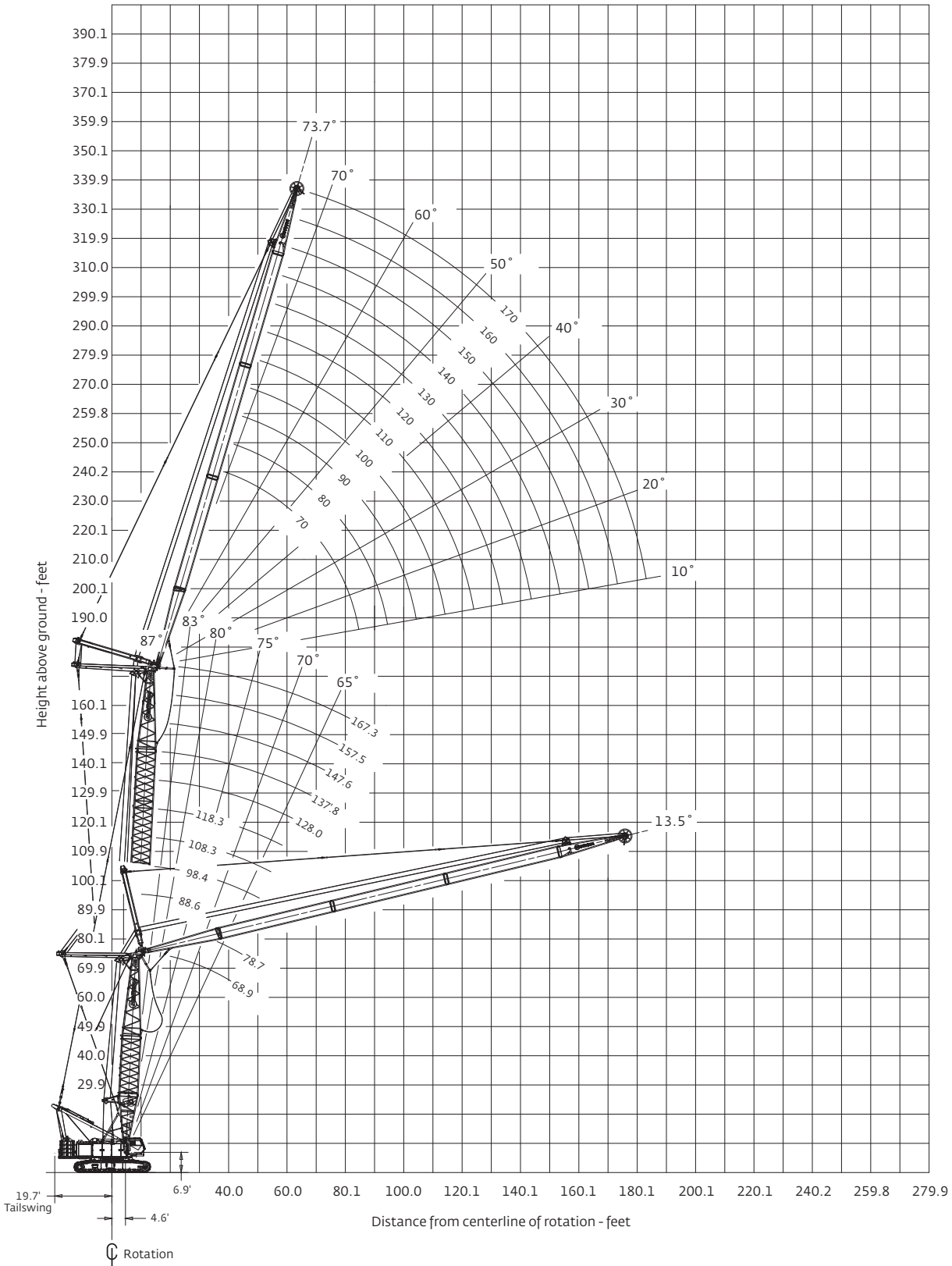
| 80.0 ft fixed jib length | | | | |
|--------------------------|----------------|-------|-------|-------|
| | Boom length ft | | | |
| | 89 | 128 | 167 | 207 |
| Radius ft | | | | |
| 70 | 19.10 | | | |
| 80 | 17.20 | 18.70 | | |
| 90 | 15.60 | 17.20 | 18.40 | 19.00 |
| 100 | 14.30 | 16.00 | 17.20 | 18.30 |
| 120 | 12.30 | 13.90 | 15.20 | 16.30 |
| 140 | 10.80 | 12.40 | 13.70 | 14.80 |
| 160 | | 11.20 | 12.40 | 13.50 |
| 180 | | 10.30 | 11.40 | 10.90 |
| 200 | | | 9.40 | 8.30 |
| 220 | | | | 6.10 |
| 240 | | | | 4.20 |

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

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Luffing jib range diagram

No. 135 luffing jib on No. 74A boom



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Luffing jib load charts

No. 135 luffing jib on No. 74A boom

123,500 lb upper counterweight, 45,000 lb carbody counterweight

360° Rating

lb x 1000

87° boom angle

| 70 ft luffing jib length | | | | | | |
|--------------------------|----------------|-------|------|------|------|------|
| | Boom length ft | | | | | |
| | 69 | 89 | 108 | 128 | 148 | 167 |
| Radius ft | | | | | | |
| 30 | 110.3 | 106.1 | | | | |
| 32 | 110.3 | 106.1 | 98.1 | 90.1 | | |
| 36 | 110.3 | 106.1 | 98.1 | 90.0 | 81.7 | 74.3 |
| 40 | 102.5 | 102.5 | 97.9 | 89.6 | 81.4 | 71.7 |
| 50 | 85.9 | 81.8 | 78.9 | 75.1 | 70.5 | 63.2 |
| 60 | 71.3 | 68.6 | 66.8 | 64.0 | 60.6 | 54.9 |
| 70 | 58.7 | 58.6 | 58.3 | 56.3 | 53.5 | 47.6 |
| 80 | 44.6 | 49.4 | 49.3 | 49.1 | 46.9 | 41.8 |
| 85 | | | | | | 40.0 |

| 100 ft luffing jib length | | | | | | |
|---------------------------|----------------|------|------|------|------|------|
| | Boom length ft | | | | | |
| | 69 | 89 | 108 | 128 | 148 | 167 |
| Radius ft | | | | | | |
| 38 | 82.7 | 79.6 | | | | |
| 40 | 81.2 | 79.5 | 74.5 | 69.3 | | |
| 50 | 73.7 | 73.3 | 72.2 | 68.5 | 59.8 | 51.7 |
| 60 | 67.4 | 67.1 | 66.2 | 61.6 | 53.6 | 46.7 |
| 70 | 58.2 | 58.1 | 57.1 | 54.0 | 47.4 | 41.6 |
| 80 | 49.2 | 49.1 | 48.9 | 46.8 | 41.6 | 36.9 |
| 90 | 42.4 | 42.3 | 42.2 | 40.5 | 36.4 | 32.6 |
| 100 | 37.1 | 37.0 | 36.9 | 35.2 | 31.9 | 29.0 |
| 110 | 29.6 | 32.6 | 32.5 | 31.0 | 28.4 | 26.0 |
| 115 | | | | | | 25.1 |

| 140 ft luffing jib length | | | | | | |
|---------------------------|----------------|------|------|------|------|------|
| | Boom length ft | | | | | |
| | 69 | 89 | 108 | 128 | 148 | 167 |
| Radius ft | | | | | | |
| 50 | 47.8 | 46.4 | 44.8 | 42.9 | | |
| 60 | 46.0 | 44.7 | 43.2 | 41.5 | 38.9 | 34.5 |
| 70 | 43.2 | 43.0 | 41.9 | 40.3 | 36.3 | 32.1 |
| 80 | 39.8 | 39.8 | 39.5 | 37.4 | 33.5 | 29.7 |
| 90 | 36.6 | 36.7 | 36.6 | 34.2 | 30.6 | 27.2 |
| 100 | 33.8 | 33.8 | 34.0 | 31.0 | 27.8 | 24.8 |
| 110 | 31.1 | 31.3 | 30.9 | 27.9 | 25.1 | 22.5 |
| 120 | 28.7 | 28.7 | 27.7 | 25.1 | 22.7 | 20.4 |
| 130 | 25.8 | 25.8 | 24.8 | 22.6 | 20.5 | 18.5 |
| 140 | 23.3 | 23.3 | 22.2 | 20.3 | 18.6 | 16.9 |
| 150 | | 20.9 | 20.3 | 18.7 | 17.1 | 15.7 |
| 155 | | | | | | 15.3 |

| 170 ft luffing jib length | | | | | | |
|---------------------------|----------------|------|------|------|------|------|
| | Boom length ft | | | | | |
| | 69 | 89 | 108 | 128 | 148 | 167 |
| Radius ft | | | | | | |
| 55 | 38.0 | | | | | |
| 60 | 36.7 | 36.3 | 35.1 | 32.5 | 29.7 | |
| 70 | 33.6 | 33.4 | 33.1 | 31.2 | 28.4 | 25.6 |
| 80 | 30.6 | 30.6 | 30.5 | 29.5 | 26.9 | 24.3 |
| 90 | 27.9 | 27.9 | 27.9 | 27.8 | 25.3 | 22.9 |
| 100 | 25.3 | 25.4 | 25.5 | 25.5 | 23.6 | 21.4 |
| 110 | 22.9 | 23.1 | 23.2 | 23.2 | 21.9 | 19.9 |
| 120 | 20.6 | 20.8 | 21.0 | 21.2 | 20.3 | 18.4 |
| 130 | 18.7 | 18.9 | 19.1 | 19.2 | 18.7 | 17.1 |
| 140 | 16.8 | 17.1 | 17.2 | 17.4 | 17.2 | 15.8 |
| 150 | 15.2 | 15.4 | 15.5 | 15.8 | 15.8 | 14.5 |
| 160 | 13.2 | 13.5 | 13.7 | 13.9 | 14.1 | 13.4 |
| 170 | 11.6 | 11.8 | 11.9 | 12.1 | 12.3 | 11.8 |
| 180 | 10.2 | 10.3 | 10.4 | 10.6 | 10.7 | 10.3 |
| 185 | | | | | | 9.6 |

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

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Specifications

Upperworks

Engine

Cummins Model QSL9-325 Tier 3, 6 cylinder, 325 hp at 2100

governed RPM.

Cummins Model QSL9-310 Tier 4 Final, 6 cylinder, 310 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 3) or diesel particulate filter (Tier 4 Final), radiator and fan.

24 volt starting and 70 amp alternator.

One 163 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.

Hydraulic system

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 18 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 16' 2" long and connects the boom hoist reeving to the steel boom strap 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 chain connecting the top of the cylinders and 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 22,500 lb

Series 1

Upper counterweight (6 pieces+tray)

101,450 lb

Series 2

Upper counterweight (8 pieces+tray)

123,500 lb

Carbody counterweight (2 pieces)

45,000 lb

Total counterweight

168,500 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 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.

• Additional optional: External RCI light.

Lowerworks

Carbody

High strength fabricated steel assembly utilizing Manitowoc's FACT™ 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 1.9 mph.

Attachments

No. 74A boom

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

No. 74A boom utilizes steel straps.

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.

Aux drum preparation included as standard.

- No. 74A boom length is increased using 9' 10", 19' 8", and 39' 4" boom inserts with steel suspension straps. 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'.

Specifications

Optional equipment

Mirrors for viewing drum operation and surroundings from operator's cab

- Camera system includes: drum cameras and monitor
- Handrails and ladder to allow easy access to machinery from top of enclosures.
- 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 –

- 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.
- 220 USt hook block with seven 30" sheaves for 26 mm wire rope with duplex swivel hook, hook latch, and swivel lock.

Hydraulic Test Kit: recommended to properly analyze the performance of the hydraulic system.

Service Interval Kits including the items necessary to perform general scheduled maintenance.

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.

Notes

Notes

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This document is non-contractual. Constant improvement and engineering progress make it necessary that we reserve the right to make specification, equipment, and price changes without notice. Illustrations shown may include optional equipment and accessories and may not include all standard equipment.

