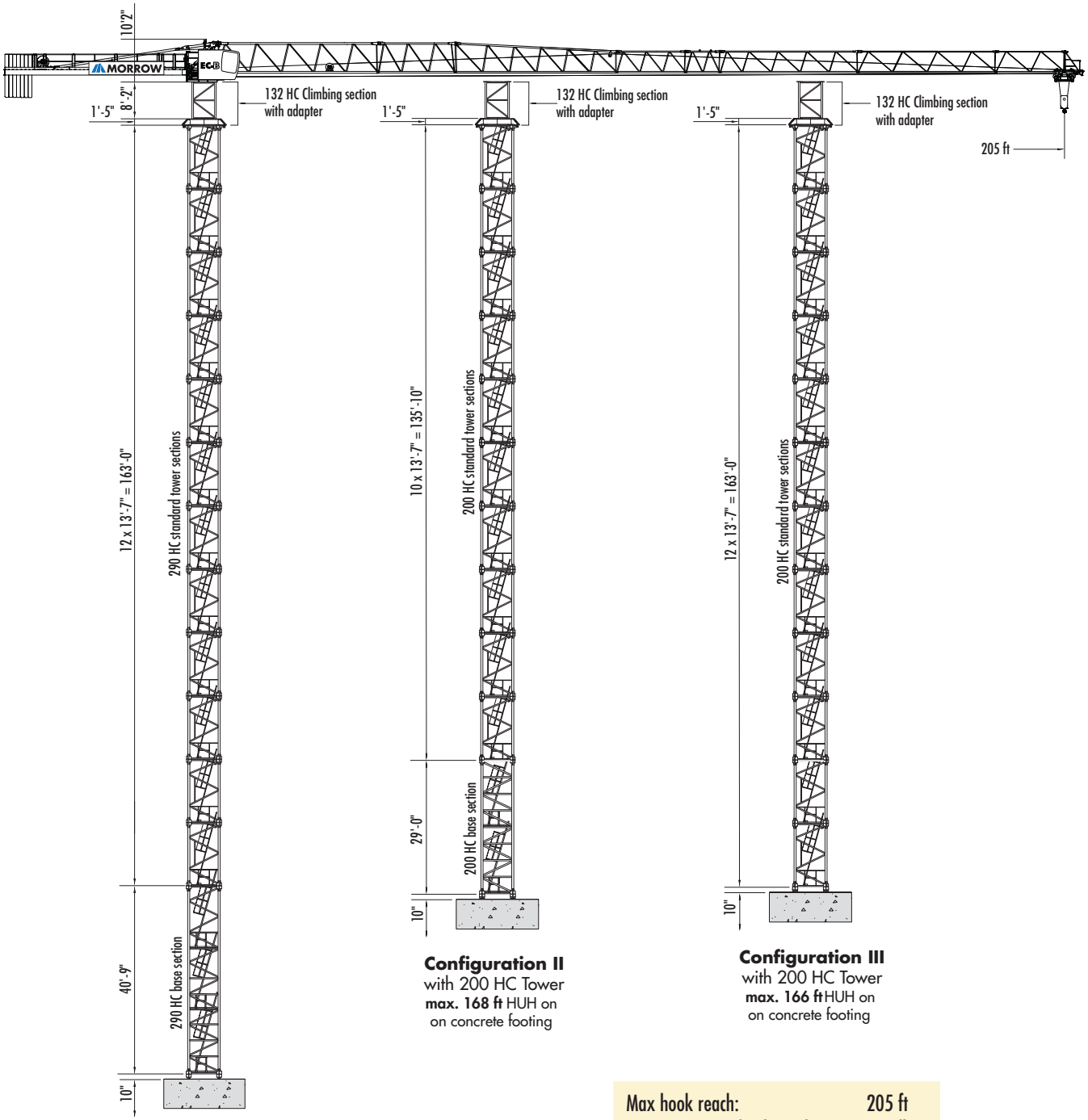
# 172 EC-B 8 Litronic®

## LIEBHERR Flat-Top Tower Crane



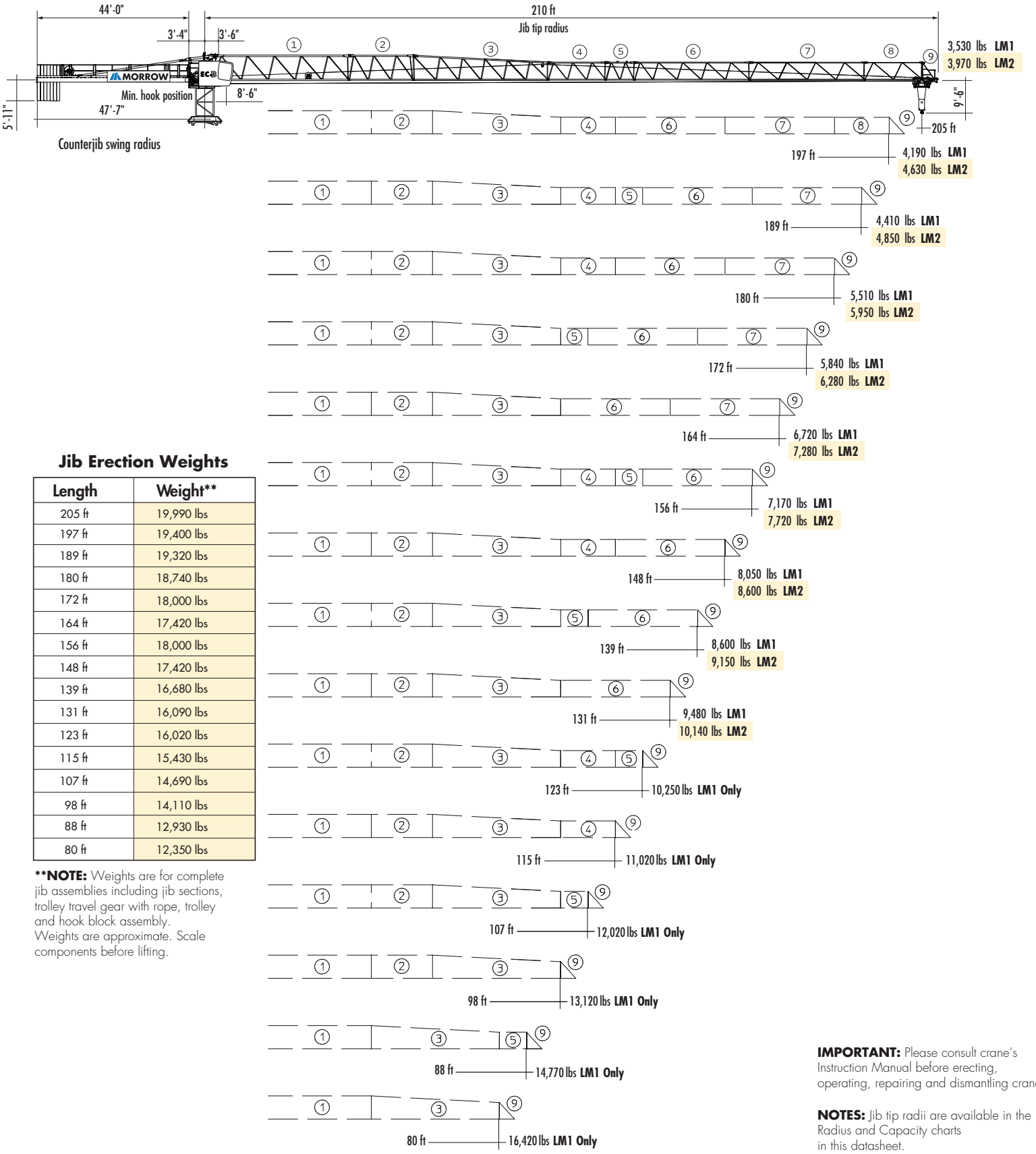

**Configuration I**
with 290 HC Tower
**max. 207 ft** HUH on
concrete footing

**Configuration II**
with 200 HC Tower
**max. 168 ft** HUH on
on concrete footing

**Configuration III**
with 200 HC Tower
**max. 166 ft** HUH on
on concrete footing

| | |
|---|---|
| Max hook reach: | 205 ft |
| Capacity at max hook reach: | 3,530 lbs |
| Maximum capacity: | 17,640 lbs |

# 172 EC-B 8 Litronic®




## Jib Erection Weights

| Length | Weight** |
|---|---|
| 205 ft | 19,990 lbs |
| 197 ft | 19,400 lbs |
| 189 ft | 19,320 lbs |
| 180 ft | 18,740 lbs |
| 172 ft | 18,000 lbs |
| 164 ft | 17,420 lbs |
| 156 ft | 18,000 lbs |
| 148 ft | 17,420 lbs |
| 139 ft | 16,680 lbs |
| 131 ft | 16,090 lbs |
| 123 ft | 16,020 lbs |
| 115 ft | 15,430 lbs |
| 107 ft | 14,690 lbs |
| 98 ft | 14,110 lbs |
| 88 ft | 12,930 lbs |
| 80 ft | 12,350 lbs |

**NOTE: Weights are for complete jib assemblies including jib sections, trolley travel gear with rope, trolley and hook block assembly. Weights are approximate. Scale components before lifting.

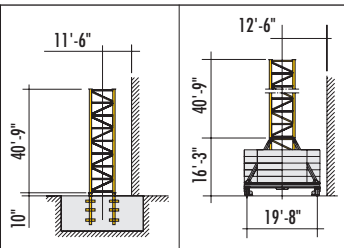
**IMPORTANT:** Please consult crane's Instruction Manual before erecting, operating, repairing and dismantling crane.

**NOTES:** Jib tip radii are available in the Radius and Capacity charts in this datasheet.

# Hook Heights

## Configuration I

**290 HC** tower sections on **290 HC** undercarriage or base section

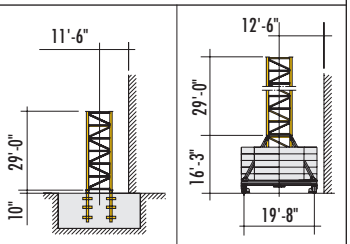



| No. of Tower Sections | Element Type | static concrete footing | rail-travelling undercarriage |
|---|---|---|---|
| | | feet | feet |
| 0 | 290HC BTS | 44 | 59 |
| 1 | 290HC STS | 58 | 73 |
| 2 | 290HC STS | 71 | 87 |
| 3 | 290HC STS | 85 | 100 |
| 4 | 290HC STS | 98 | 114 |
| 5 | 290HC STS | 112 | 127 |
| 6 | 290HC STS | 126 | 141 |
| 7 | 290HC STS | 139 | 155 |
| 8 | 290HC STS | 153 | 168 |
| 9 | 290HC STS | 166 | 182 |
| 10 | 290HC STS | 180 | 195* |
| 11 | 290HC STS | 194* | — |
| 12 | 290HC STS | 207* | — |

**NOTE:** Alternate tower combinations possible.
*Lower top climbing unit to base of crane prior to operating crane.

## Configuration II

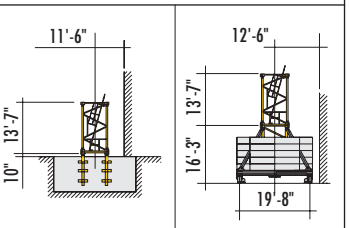
**200 HC** tower sections on **200 HC** base section or **290 HC** undercarriage



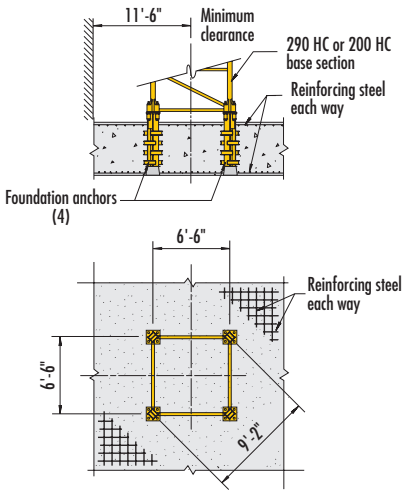

| No. of Tower Sections | Element Type | static concrete footing | rail-travelling undercarriage |
|---|---|---|---|
| | | feet | feet |
| 0 | 200HC BTS | 33 | 48 |
| 1 | 200HC STS | 46 | 61 |
| 2 | 200HC STS | 59 | 75 |
| 3 | 200HC STS | 73 | 89 |
| 4 | 200HC STS | 87 | 102 |
| 5 | 200HC STS | 100 | 116 |
| 6 | 200HC STS | 114 | 129 |
| 7 | 200HC STS | 128 | 143 |
| 8 | 200HC STS | 141 | 157 |
| 9 | 200HC STS | 155* | 170* |
| 10 | 200HC STS | 168* | 184* |

## Configuration III

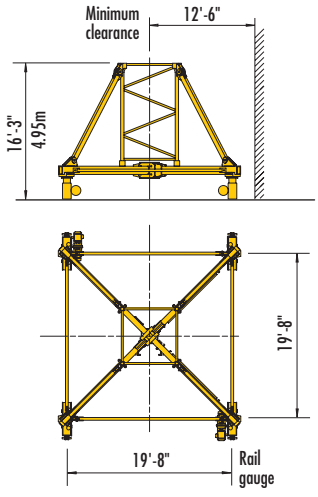
**200 HC** tower sections on **200 HC** tower or **290 HC** undercarriage




| No. of Tower Sections | Element Type | static concrete footing | rail-travelling undercarriage |
|---|---|---|---|
| | | feet | feet |
| 1 | 200HC STS | 17 | 32 |
| 2 | 200HC STS | 30 | 46 |
| 3 | 200HC STS | 44 | 59 |
| 4 | 200HC STS | 58 | 73 |
| 5 | 200HC STS | 71 | 87 |
| 6 | 200HC STS | 85 | 100 |
| 7 | 200HC STS | 98 | 114 |
| 8 | 200HC STS | 112 | 127 |
| 9 | 200HC STS | 126 | 141 |
| 10 | 200HC STS | 139 | 155 |
| 11 | 200HC STS | 153* | 168* |
| 12 | 200HC STS | 166* | 182* |




**200 HC or 290 HC Tower**
concrete footing

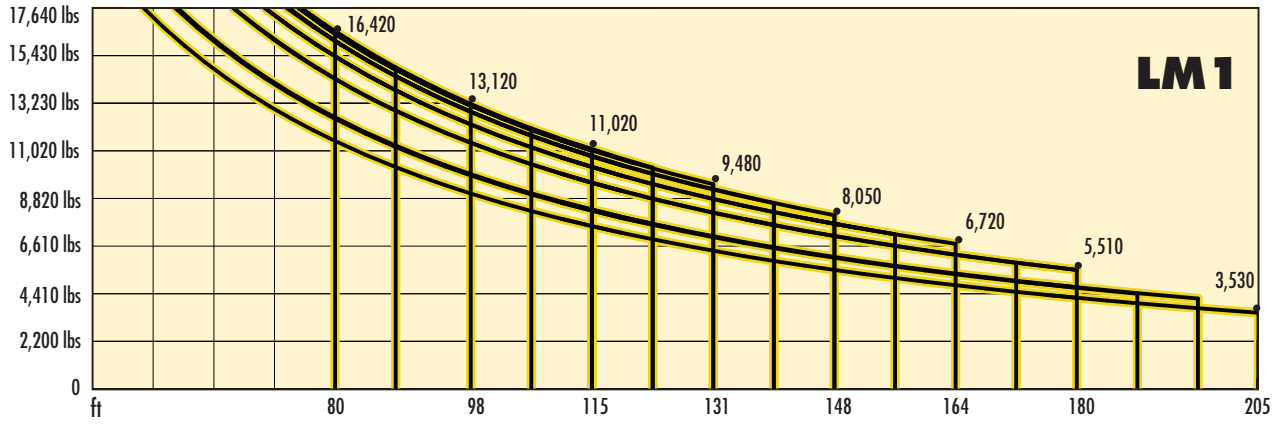



**290 HC**
rail-travelling undercarriage

## Radius and Capacities

| Hook Radius | Tip Radius | 2-Part Line Max Capacity – Radius | ft | 52 | 59 | 69 | 79 | 89 | 98 | 107 | 115 | 121 | 131 | 139 | 148 | 156 | 164 | 172 | 180 | 189 | 197 | 205 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 205 ft | 210 | 17,640 lbs – 54 ft | lbs | 17,640 | 16,070 | 13,580 | 11,490 | 10,270 | 9,060 | 8,250 | 7,540 | 6,940 | 6,390 | 5,930 | 5,510 | 5,140 | 4,810 | 4,500 | 4,230 | 3,970 | 3,750 | 3,530 |
| 197 ft | 202 | 17,640 lbs – 58 ft | lbs | 17,640 | 17,570 | 14,860 | 12,570 | 11,270 | 9,940 | 9,060 | 8,310 | 7,650 | 7,080 | 6,570 | 6,110 | 5,710 | 5,340 | 5,000 | 4,720 | 4,430 | 4,190 | |
| 189 ft | 194 | 17,640 lbs – 59 ft | lbs | 17,640 | 17,460 | 14,770 | 12,500 | 11,200 | 9,900 | 9,020 | 8,250 | 7,610 | 7,030 | 6,610 | 6,080 | 5,670 | 5,310 | 5,050 | 4,670 | 4,410 | | |
| 180 ft | 185 | 17,640 lbs – 66 ft | lbs | 17,640 | 17,640 | 16,930 | 14,370 | 12,900 | 11,400 | 10,410 | 9,550 | 8,820 | 8,160 | 7,610 | 7,080 | 6,640 | 6,220 | 5,840 | 5,510 | | | |
| 172 ft | 177 | 17,640 lbs – 66 ft | lbs | 17,640 | 17,640 | 16,910 | 14,350 | 12,880 | 11,400 | 10,410 | 9,550 | 8,950 | 8,160 | 7,580 | 7,080 | 6,610 | 6,220 | 5,840 | | | | |
| 164 ft | 169 | 17,640 lbs – 70 ft | lbs | 17,640 | 17,640 | 17,640 | 15,390 | 13,820 | 12,240 | 11,180 | 10,270 | 9,480 | 8,800 | 8,180 | 7,650 | 7,160 | 6,720 | | | | | |
| 156 ft | 161 | 17,640 lbs – 70 ft | lbs | 17,640 | 17,640 | 17,640 | 15,410 | 13,820 | 12,560 | 11,200 | 10,270 | 9,500 | 8,800 | 8,200 | 7,650 | 7,160 | | | | | | |
| 148 ft | 153 | 17,640 lbs – 73 ft | lbs | 17,640 | 17,640 | 17,640 | 16,140 | 14,480 | 12,830 | 11,730 | 10,780 | 9,960 | 9,260 | 8,620 | 8,050 | | | | | | | |
| 139 ft | 144 | 17,640 lbs – 73 ft | lbs | 17,640 | 17,640 | 17,640 | 16,120 | 14,460 | 12,830 | 11,730 | 10,780 | 9,940 | 9,240 | 8,600 | | | | | | | | |
| 131 ft | 136 | 17,640 lbs – 75 ft | lbs | 17,640 | 17,640 | 17,640 | 16,510 | 14,840 | 13,160 | 12,010 | 11,050 | 10,210 | 9,480 | | | | | | | | | |
| 123 ft | 128 | 17,640 lbs – 75 ft | lbs | 17,640 | 17,640 | 17,640 | 16,560 | 14,880 | 13,210 | 12,060 | 11,090 | 10,250 | | | | | | | | | | |
| 115 ft | 120 | 17,640 lbs – 75 ft | lbs | 17,640 | 17,640 | 17,640 | 16,470 | 14,790 | 13,120 | 11,990 | 11,020 | | | | | | | | | | | |
| 107 ft | 112 | 17,640 lbs – 75 ft | lbs | 17,640 | 17,640 | 17,640 | 16,490 | 14,840 | 13,140 | 12,010 | | | | | | | | | | | | |
| 98 ft | 103 | 17,640 lbs – 75 ft | lbs | 17,640 | 17,640 | 17,640 | 16,470 | 14,790 | 13,120 | | | | | | | | | | | | | |
| 88 ft | 93 | 17,640 lbs – 74 ft | lbs | 17,640 | 17,640 | 17,640 | 16,450 | 14,770 | | | | | | | | | | | | | | |
| 80 ft | 85 | 17,640 lbs – 74 ft | lbs | 17,640 | 17,640 | 17,640 | 16,420 | | | | | | | | | | | | | | | |

**LM1**
Standard mode

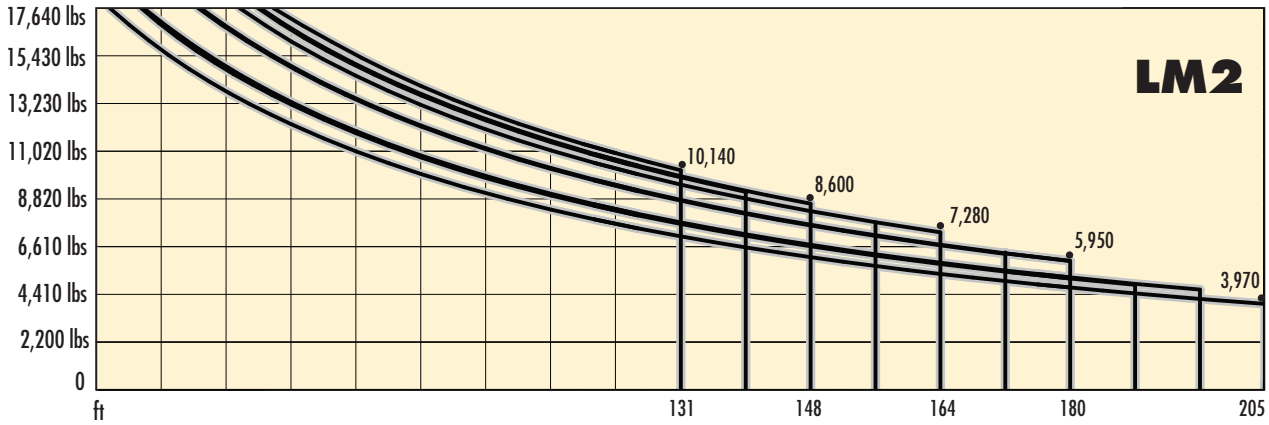





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| Hook Radius | Tip Radius | 2-Part Line Max Capacity – Radius | ft | 52 | 59 | 69 | 79 | 89 | 98 | 115 | 121 | 131 | 139 | 148 | 156 | 164 | 172 | 180 | 189 | 197 | 205 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 205 ft | 210 | 17,640 lbs – 59 ft | lbs | 17,640 | 17,590 | 14,880 | 12,830 | 11,240 | 9,960 | 8,330 | 7,780 | 7,050 | 6,590 | 6,130 | 5,730 | 5,360 | 5,030 | 4,720 | 4,450 | 4,210 | 3,970 |
| 197 ft | 202 | 17,640 lbs – 63 ft | lbs | 17,640 | 17,640 | 16,090 | 13,910 | 12,190 | 10,820 | 9,060 | 8,490 | 7,740 | 7,180 | 6,700 | 6,260 | 5,860 | 5,510 | 5,200 | 4,890 | 4,630 | |
| 189 ft | 194 | 17,640 lbs – 63 ft | lbs | 17,640 | 17,640 | 15,960 | 13,780 | 12,080 | 10,740 | 8,970 | 8,400 | 7,670 | 7,120 | 6,640 | 6,190 | 5,820 | 5,470 | 5,140 | 4,850 | | |
| 180 ft | 185 | 17,640 lbs – 71 ft | lbs | 17,640 | 17,640 | 17,640 | 15,630 | 13,730 | 12,210 | 10,250 | 9,610 | 8,770 | 8,270 | 7,630 | 7,140 | 6,700 | 6,310 | 5,950 | | | |
| 172 ft | 177 | 17,640 lbs – 70 ft | lbs | 17,640 | 17,640 | 17,640 | 15,560 | 13,690 | 12,170 | 10,210 | 9,570 | 8,730 | 8,140 | 7,580 | 7,120 | 6,680 | 6,280 | | | | |
| 164 ft | 169 | 17,640 lbs – 76 ft | lbs | 17,640 | 17,640 | 17,640 | 16,820 | 14,790 | 13,160 | 11,070 | 10,380 | 9,480 | 8,840 | 8,270 | 7,740 | 7,280 | | | | | |
| 156 ft | 161 | 17,640 lbs – 75 ft | lbs | 17,640 | 17,640 | 17,640 | 16,780 | 14,750 | 13,120 | 11,020 | 10,340 | 9,460 | 8,820 | 8,220 | 7,720 | | | | | | |
| 148 ft | 153 | 17,640 lbs – 78 ft | lbs | 17,640 | 17,640 | 17,640 | 17,460 | 15,340 | 13,670 | 11,510 | 10,800 | 9,880 | 9,190 | 8,600 | | | | | | | |
| 139 ft | 144 | 17,640 lbs – 77 ft | lbs | 17,640 | 17,640 | 17,640 | 17,370 | 15,280 | 13,600 | 11,440 | 10,740 | 9,810 | 9,150 | | | | | | | | |
| 131 ft | 136 | 17,640 lbs – 80 ft | lbs | 17,640 | 17,640 | 17,640 | 17,640 | 15,760 | 14,020 | 11,820 | 11,090 | 10,140 | | | | | | | | | |

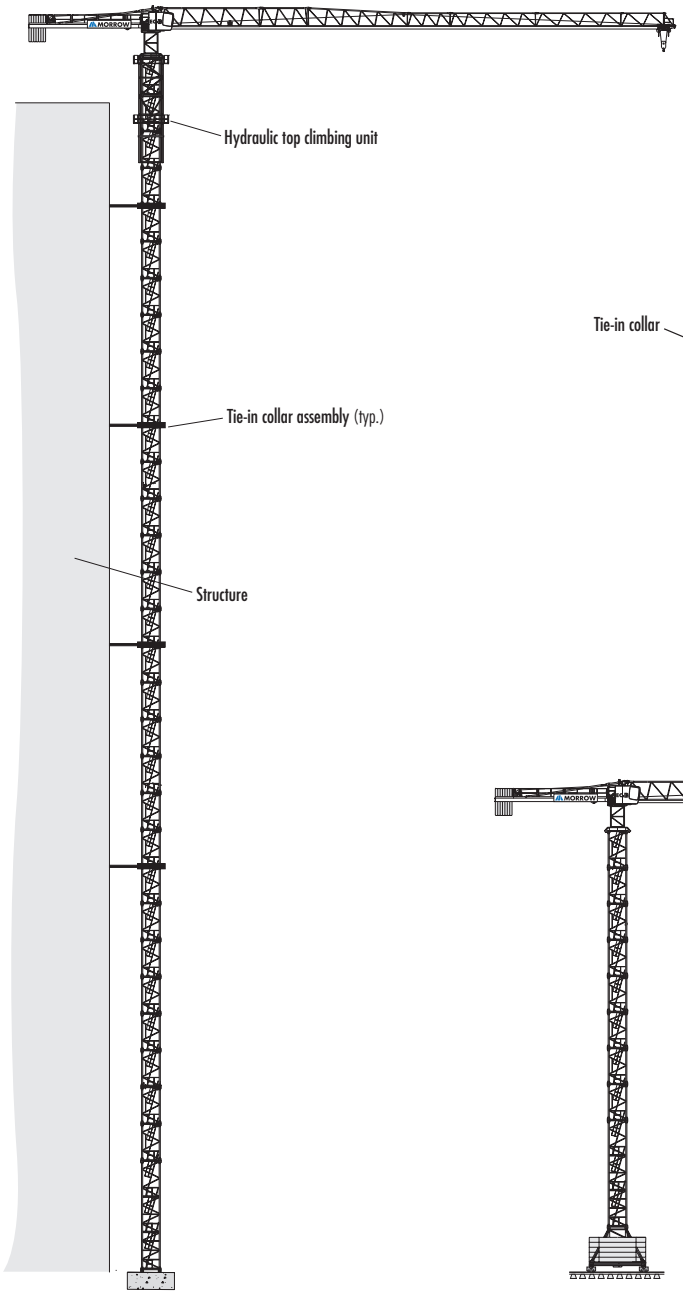
**LM2**
Heavy lift mode




**IMPORTANT:** Litronic cranes are equipped with Liebherr's state of the art PLC system that provides precise monitoring, control and coordination of all cranes functions. This feature also permits a load increase in the heavy lift mode **(LM2 ).** Contact Morrow for more information regarding the many features of the 172 EC-B 8 Litronic tower crane.

# Alternate Configurations

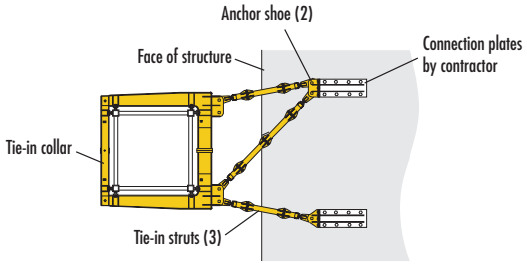
**IMPORTANT:** Configurations shown on this page are for illustrative purposes only. Actual configuration dependent on job site specific criteria. See instruction manual or contact MORROW for information.




## TOP CLIMBING

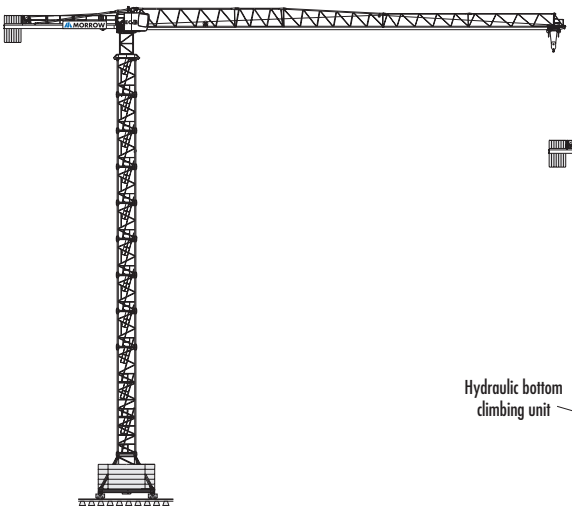
(Climbing tower installed)

Top climbing crane configuration can be used when freestanding crane or when tieing crane to structure.




## TIE-IN ASSEMBLY

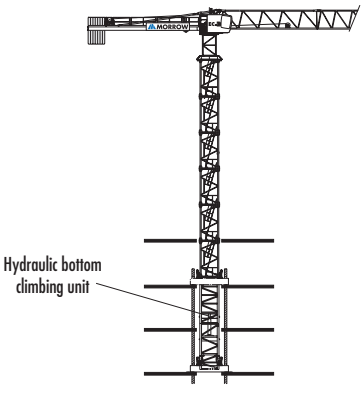
(Top climbing tied to structure)



## RAIL TRAVELING or STATIC

(with undercarriage)

Rail traveling crane configuration offers convenience of greater hook coverage on job site.




## BOTTOM CLIMBING

Bottom (internal) climbing configuration is used primarily when crane is situated within a structure. Crane climbs as floors are added to the structure.

# Hoist Speed and Capacity

**LM1**

| Hoist Unit WiW 260 MZ 419 | 2-Part Line | | |
|---|---|---|---|
| 60 hp (45 kW) AC hoist unit<br>Variable frequency drive<br>1-speed planetary gearbox<br>4L113 | **Speed** | **Capacity** | **Line Speed** |
| | **1** | up to 17,640 lbs<br>up to 1,410 lbs | @ 0 - 95 fpm<br>@ 0 - 574 fpm |
| | **NOTE:** Capacities and line speeds indicated will vary depending on the amount of hoist rope installed. This crane model may be equipped with a hoist unit other than that specified in the data above. To verify, check the serial number of the crane and refer to the 172 EC-B 8 instruction manual for additional information. | | |

# Motor Information

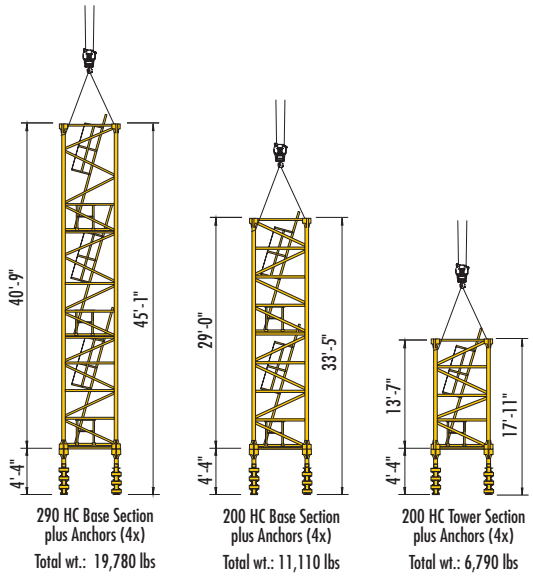
| Drive Unit | Horsepower | Kilowatts | Speed | |
|---|---|---|---|---|
| Trolley (VFD) | 7.4 hp | 5.5 kW | 0 - 328 fpm | 0 - 100 m/min |
| Swing (VFD) | 10 hp | 7.5 kW | 0.8 rpm | |
| Traveling (290 HC) | 2 x 10 hp | 2 x 7.5 kW | 82 fpm | 25 m/min |

**NOTE:** VFD = variable frequency drive.

# Counterweight

| Jib | Block Arrangement | | | | | | | Weight |
|---|---|---|---|---|---|---|---|---|
| 205 ft | A | A | A | A | A | A | A | 38,580 lbs |
| 197 ft | A | A | A | A | A | A | B | 36,600 lbs |
| 189 ft | A | A | A | A | A | A | B | 36,600 lbs |
| 180 ft | A | A | A | A | A | A | E | 34,280 lbs |
| 172 ft | A | A | A | A | A | B | E | 32,300 lbs |
| 164 ft | A | A | A | A | B | B | E | 30,310 lbs |
| 156 ft | A | A | A | A | A | B | E | 32,300 lbs |
| 148 ft | A | A | A | A | B | B | E | 30,310 lbs |
| 139 ft | A | A | A | A | A | E | | 28,770 lbs |
| 131 ft | A | A | A | A | B | E | | 26,790 lbs |
| 123 ft | A | A | A | A | B | E | | 26,790 lbs |
| 115 ft | A | A | A | A | E | E | | 24,470 lbs |
| 107 ft | A | A | A | A | E | | | 23,260 lbs |
| 98 ft | A | A | A | B | E | | | 21,270 lbs |
| 88 ft | A | A | A | E | E | | | 18,960 lbs |
| 80 ft | A | A | A | | | | | 16,530 lbs |

A block = 5,510 lbs; B block = 3,530 lbs , and E block = 1,210 lbs.




**BASE ASSEMBLY**
Installation weights

# Power Requirements

**Power supply:** 3-phase 480 V, 60 Hz; 3-wire plus ground; no Neutral.
480 V phase-phase, 277 V each phase to ground with 120° phase shift between phases.
**Service size:** 125 Amperes

NOTES:
1. For electric power provided by an electric utility, do not use open Delta transformers.
2. For electric power provided by a generator, the minimum generator size required is 100kW. Verify the generator provided is suitable for use with variable frequency drives (VFDs). A properly sized generator is critical to the safe operation of the crane.

Specifications are subject to change without prior notice. Drawings shown in this datasheet are for illustrative purposes only. Refer to the 172 EC-B 8 Litronic Instruction Manual. For additional information, contact MORROW. All rights are reserved.

# Component List

| Description | Dimensions L x W x H | Wt. |
|---|---|---|
| Slewing Assembly (Complete) [1] | 18'-1" x 7'-7" x 8'-3" | 17,090 lbs |
| Counterjib (Compl) [2] | 44'-4" x 9'-4" x 5'-10" | 15,430 lbs |
| Climbing Section (132 HC with 200/290 HC adapter) | 10'-5" x 9'-3" x 8'-11" | 5,840 lbs |
| Base Tower Section 200 HC | 29'-0" x 7'-7" x 7'-7" | 8,960 lbs |
| Base Tower Section 290 HC | 40'-9" x 7'-7" x 7'-7" | 17,500 lbs |
| Long Tower Section 290 HC | 40'-9" x 7'-7" x 7'-7" | 12,720 lbs |
| Standard Tower Section 200 HC | 13'-7" x 7'-7" x 7'-7" | 4,520 lbs |
| Standard Tower Section 290 HC | 13'-7" x 7'-7" x 7'-7" | 5,070 lbs |
| Top Climbing Unit 290 HC | 27'-6" x 8'-10" x 9'-11" | 11,460 lbs |
| Top Climbing Unit Hydraulic unit/Cross members | 7'-7" x 4'-1" x 3'-3" | 2,540 lbs |

| Description | Dimensions L x W x H | Wt. |
|---|---|---|
| Jib Butt Section [3] ① 611 | 39'-2" x 4'-11" x 8'-2" | 8,050 lbs |
| Jib Intermediate Section ② 621 | 19'-2" x 3'-11" x 7'-6" | 1,980 lbs |
| Jib Intermediate Section ③ 622 | 39'-1" x 3'-11" x 7'-5" | 3,480 lbs |
| Jib Intermediate Section ④ 631 | 17'-1" x 3'-11" x 5'-5" | 1,300 lbs |
| Jib Intermediate Section ⑤ 639 | 8'-9" x 3'-11" x 5'-5" | 584 lbs |
| Jib Intermediate Section ⑥ 632 | 33'-6" x 3'-11" x 5'-5" | 2,030 lbs |
| Jib Intermediate Section ⑦ 633 | 33'-6" x 3'-11" x 5'-5" | 1,370 lbs |
| Jib Intermediate Section ⑧ 634 | 17'-0" x 3'-11" x 5'-5" | 660 lbs |
| Jib Tip Section ⑨ 641 | 4'-11" x 4'-6" x 6'-1" | 350 lbs |
| Foundation Anchor (each) 21HC290FAr | 4'-4" x 1'-2" x 1'-2" | 510 lbs |

**NOTE:** Weights and dimensions are approximate. Scale components before lifting.

[1] Slewing gear with slewing ring support (11,700 lbs), switchbox cabinet (2,700 lbs) and cabin with platform (2,800 lbs).

[2] Counterjib complete includes counterjib parts one and two, hoist gear, pendent bar and guard rails. Counterjib can be broken into 2 parts for shipment via container.

[3] Jib butt section complete includes jib section, trolley travel gear with rope and hook assembly.

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