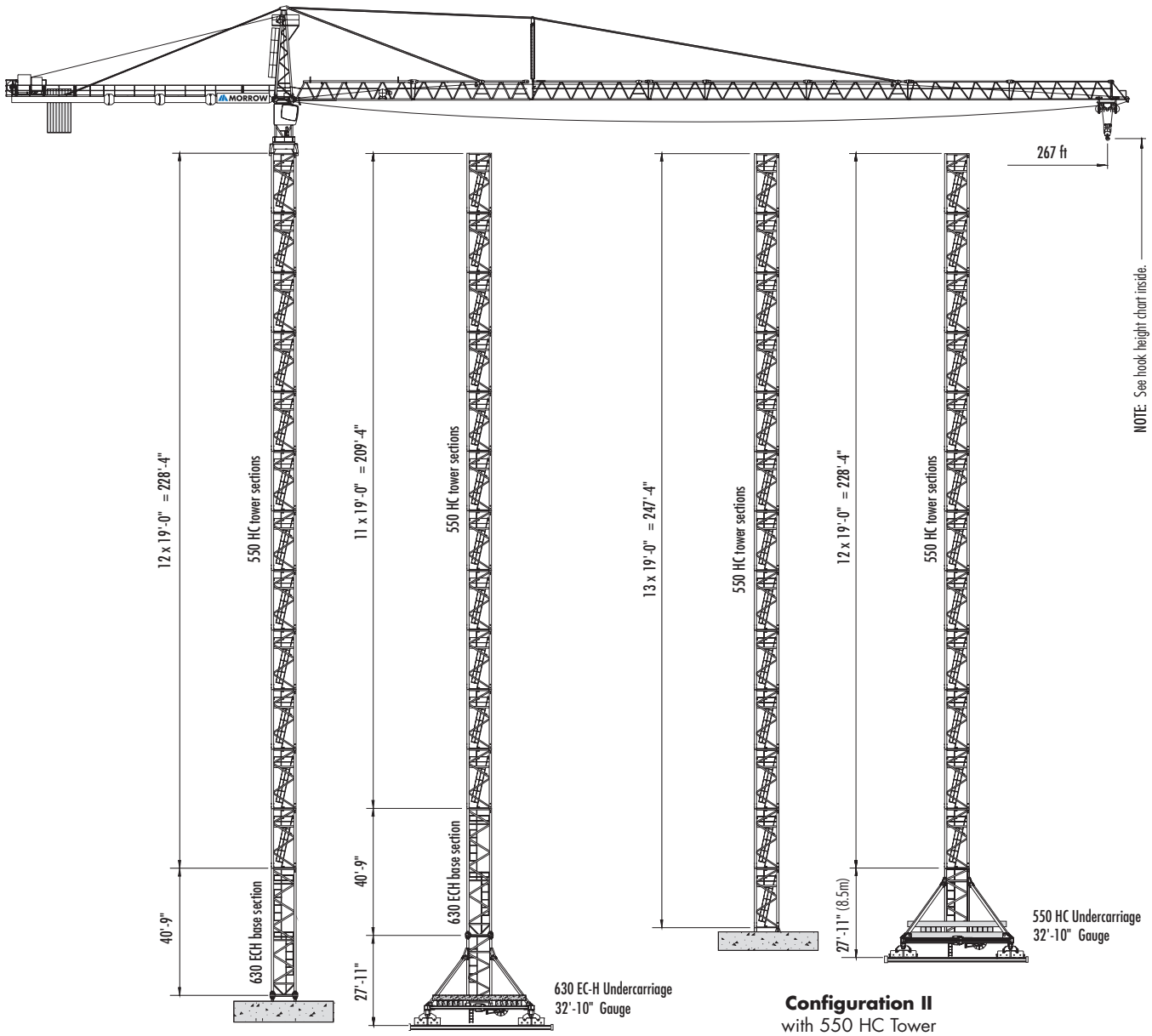
550 EC-H 20 Litronic®

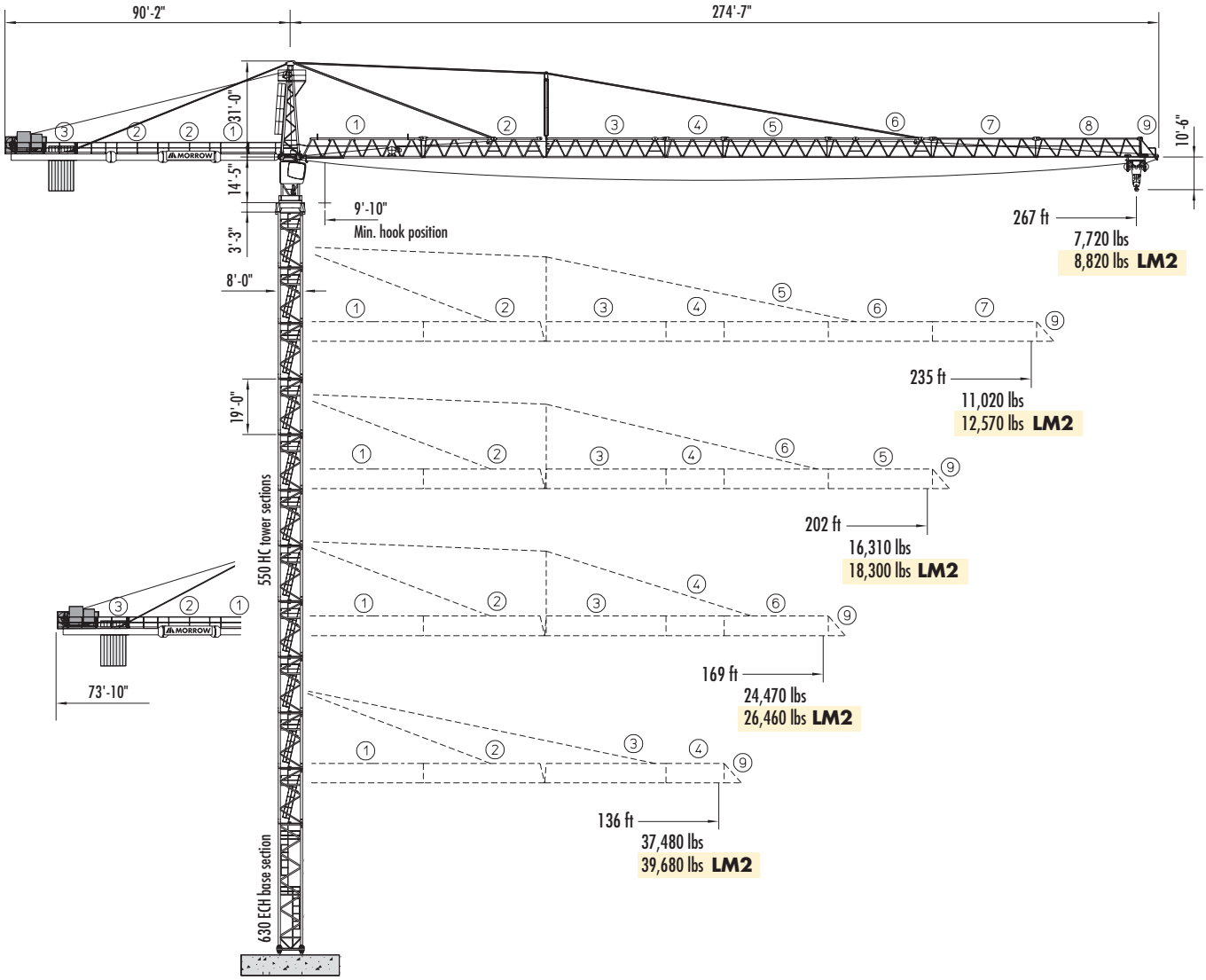
LIEBHERR Hammerhead Tower Crane



Configuration I
with 550 HC Tower
on 630 EC-H Base Section
max. 277 ft HUH on concrete footing
max. 285 ft HUH on undercarriage

Configuration II
with 550 HC Tower
max. 256 ft HUH on concrete footing
max. 263 ft HUH on undercarriage

Jib Assemblies



Configuration I
with 550 HC Tower
on 630 EC-H Base Section

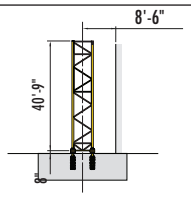
NOTE! Consult Morrow for specific information regarding alternate tower configurations, foundation details, dimensions, reaction forces and slab opening requirements.

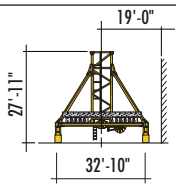
IMPORTANT! Please consult crane's operation manual before erecting, operating, servicing and dismantling crane.

Hook Heights

Configuration I

550 HC
tower sections on
630 EC-H
undercarriage
and base section

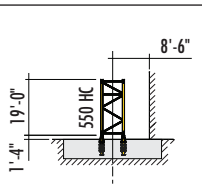


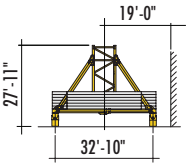


No. of Tower Elements	Tower Element Type	static concrete footing	rail-travelling undercarriage
		feet	feet
0	630 ECH BS	49	76
1	550 HC STS	68	95
2	550 HC STS	87	114
3	550 HC STS	106	133
4	550 HC STS	125	152
5	550 HC STS	144	171
6	550 HC STS	163	190
7	550 HC STS	182	209
8	550 HC STS	201	228
9	550 HC STS	220	247
10	550 HC STS	239	266[1]
11	550 HC STS	258[1]	285[1]
12	550 HC STS	277[1]	—

Configuration II

550 HC
tower sections
on 19'-0"
550 HC
standard tower section
(undercarriage)





No. of Tower Elements	Tower Element Type	static concrete footing	rail-travelling undercarriage
		feet	feet
1	550 HC STS	28	54
2	550 HC STS	47	73
3	550 HC STS	66	92
4	550 HC STS	85	111
5	550 HC STS	104	130
6	550 HC STS	123	149
7	550 HC STS	142	168
8	550 HC STS	161	187
9	550 HC STS	180	206
10	550 HC STS	199	225
11	550 HC STS	218	244
12	550 HC STS	237[1]	263[1]
13	550 HC STS	256[1]	—

[1] Lower top climbing unit to base of crane prior to operating crane at maximum hook height.

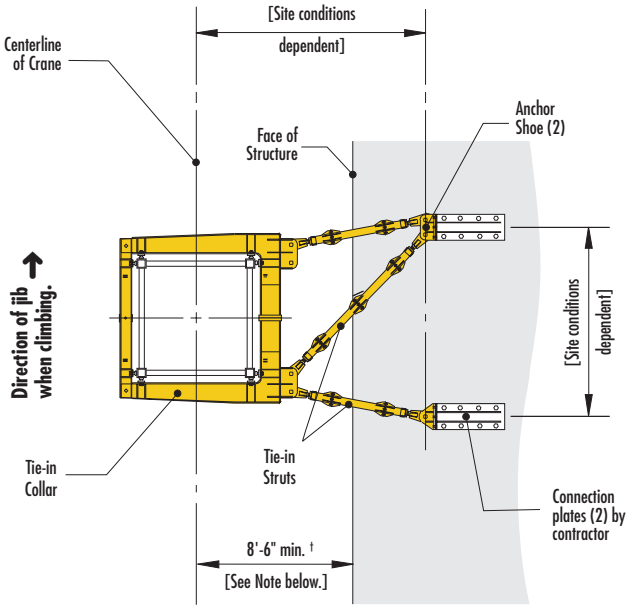
NOTE: Special tower configurations giving additional hook heights are available using reinforced base tower sections and/or reinforced tower sections. Contact MORROW for more information.

NOTE: Contact MORROW for specific information regarding climbing inside the structure details such as dimensions, reaction forces and slab opening requirements.

Tie-in Details

* **NOTE:** Tie-in assemblies must be positioned and installed according to manufacturer requirements. Restrictions apply; please consult operation manual or contact Morrow Equipment for specific recommendations.

Lower top climbing unit to upper tie-in prior to operating crane.



TIE-IN ASSEMBLY
with 550 HC Tower Sections
plan view

TOP CLIMBING
with 550 HC Tower Sections
Tied to Structure

NOTE: The tie-in assembly shown above is an example of a typical installation. Please note, however, that factors determining the installation of tie-in assemblies may vary due to project specific criteria.

† Minimum clearance between face of structure and the center of crane is 8'–6" when using 550 HC tower. The maximum clearance is dependent upon project specific criteria.

Verify all dimensions.

Contact Morrow for additional information regarding dimensions, alternate tower configurations, reaction forces, tie-in installation and slab opening requirements.

MEC-MKT-1298
05/22/2023

MORROW

Radius and Capacities

2-Part Line	Hook Radius	Jib Tip Radius	Maximum Capacity – Radius	ft	69	82	95	108	121	136	154	169	187	202	220	235	253	267
	267 ft	274'-7"	44,090 lbs – 65 ft	lbs	41 230	33,820	28,810	24,960	21,890	19,140	16,450	14,660	12,850	11,620	10,320	9 390	8,420	7,720
	235 ft	241'-10"	44,090 lbs – 72 ft	lbs	44,090	38,290	32,690	28,370	24,960	21,890	18,890	16,910	14,880	13,490	12,040	11,020		
	202 ft	209'-0"	44,090 lbs – 84 ft	lbs	44,090	44,090	38,490	33,510	29,560	26,010	22,550	20,240	17,920	16,310				
	169 ft	176'-2"	44,090 lbs – 99 ft	lbs	44,090	44,090	44,090	39,990	35,380	31,220	27,160	24,470						
	136 ft	143'-4"	44,090 lbs – 117 ft	lbs	44,090	44,090	44,090	44,090	42,370	37,480								

LM1
Standard mode

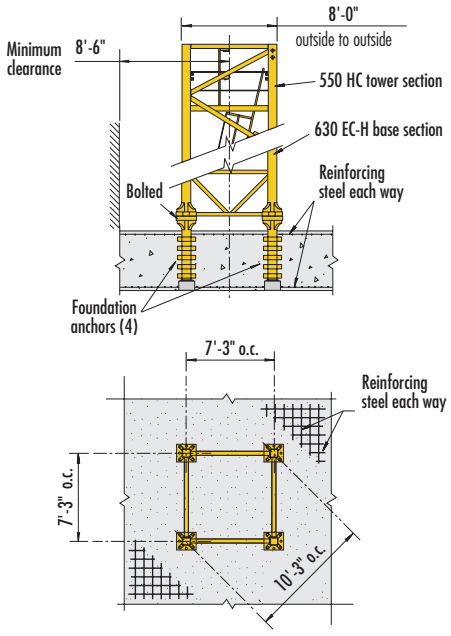
2-Part Line	Hook Radius	Jib Tip Radius	Maximum Capacity – Radius	ft	69	82	95	108	121	136	154	169	187	202	220	235	253	267
	267 ft	274'-7"	44,090 lbs – 71 ft	lbs	44,090	37,260	31,790	27,600	24,250	20,860	18,320	16,380	14,420	13,070	11,640	10,650	9,590	8,820
	235 ft	241'-10"	44,090 lbs – 79 ft	lbs	44,090	42,530	36,380	31,640	27,890	24,490	21,210	19,030	16,800	15,280	13,690	12,570		
	202 ft	209'-0"	44,090 lbs – 92 ft	lbs	44,090	44,090	42,590	37,150	32,830	28,900	25,130	22,600	20,060	18,300				
	169 ft	176'-2"	44,090 lbs – 106 ft	lbs	44,090	44,090	44,090	43,060	38,120	33,660	29,320	26,460						
	136 ft	143'-4"	44,090 lbs – 123 ft	lbs	44,090	44,090	44,090	44,090	44,090	39,680								

LM2
Heavy lift mode

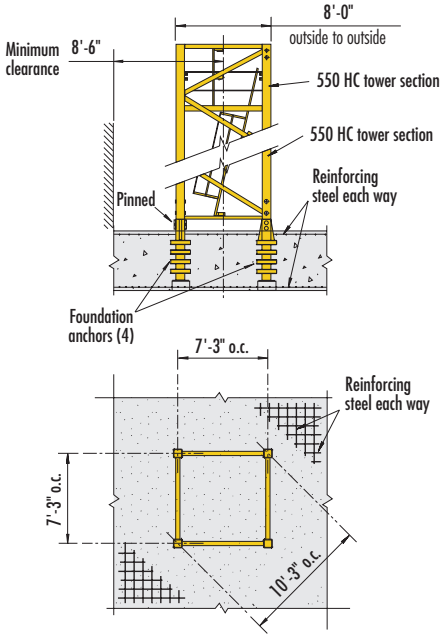
IMPORTANT: Litronic® cranes are equipped with Liebherr's state of the art PLC system that provides precise monitoring, control and coordination of all cranes functions. This feature also permits a load increase of up to 20% as illustrated in the heavy lift mode (**LM2**) chart above. Contact Morrow for more information regarding the many features of the 550 EC-H 20 Litronic tower crane.

Consult Operation Manual before erecting, operating, servicing or dismantling crane.

Foundation Details on concrete footing

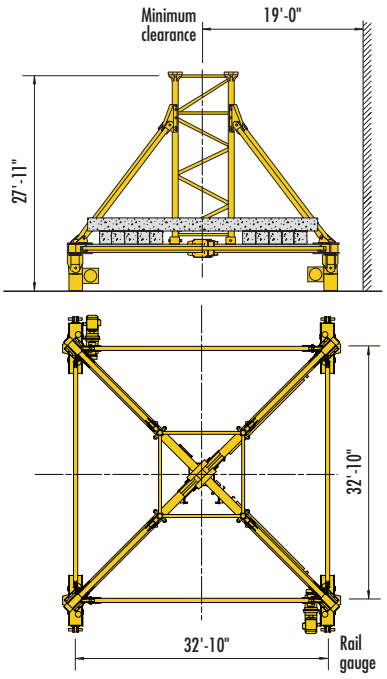


on 630 EC-H Base Section

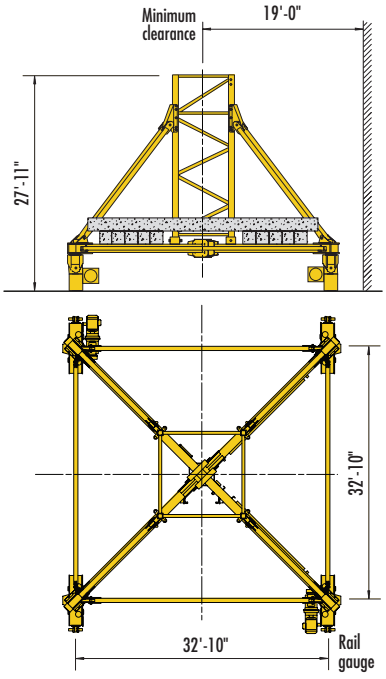


with 550 HC Tower

Undercarriage Details on rail-travelling undercarriage



630 EC-H



550 HC

NOTE: For information regarding rail-travelling, static undercarriages and central ballast configurations, see 550 EC-H Litronic Operation Manual.

Hoist Speed and Capacities

Hoist Unit	2-Part Line	LM1
147 hp (110 kW) FC hoist unit Variable frequency drive (VFD) 6L - 237	**Capacity**	**Line Speed**
	44,090 lbs	@ 89 fpm
	25,355 lbs	@ 151 fpm
	14,110 lbs	@ 253 fpm
	4,850 lbs	@ 459 fpm

IMPORTANT: Capacities and line speeds indicated will vary depending on the amount of hoist wire rope installed. This crane model may be equipped with a hoist unit other than that specified in the data shown above. To verify, check serial number and refer to 550 EC-H 20 Litronic Operation Manual for additional information.

Motor Information

Drive Unit	Horsepower	Kilowatts	Speed	
Trolley (VFD)	14 hp	10.5 kW	0 - 299 fpm	0 - 91 m/min
Swing (VFD)	3 x 10 hp	3 x 7.5 kW	0.6 rpm	
Travelling	4 x 10 hp	4 x 7.5 kW	82 fpm	25 m/min

NOTE: VFD denotes variable frequency drive.

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: 200 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 200 kW. 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 subject to change without prior notice. For additional information, contact MORROW.

Component List

Description	Dimensions L x W x H	Weight
Tower Top (Complete)	30'-10" x 5'-10" x 6'-3"	12,020 lbs
Slewing Assembly (Complete) [1]	22'-5" x 9'-6" x 10'-8"	37,700 lbs
Slewing Assembly Upper Part [2]	18'-3" x 9'-0" x 8'-10"	21,500 lbs
Slewing Assembly Lower Part [3]	4'-2" x 9'-6" x 10'-8"	16,200 lbs
Hoist Unit (VFD) [4] 147 hp (110 kW)	9'-10" x 7'-10" x 6'-11"	14,550 lbs
Counterjib Section #1 (Inner)	20'-10" x 6'-4" x 6'-1"	6,170 lbs
Counterjib Section #2 (Intermediate)	17'-1" x 6'-1" x 6'-1"	5,290 lbs
Counterjib Section #3 (Outer)	31'-10" x 7'-11" x 6'-1"	10,580 lbs
Counterjib A [5] (90 ft version)	85'-0" x 7'-11" x 6'-1"	33,950 lbs
Counterjib B [6] (74 ft version)	68'-7" x 7'-11" x 6'-1"	28,440 lbs
Counterweight [7] Block A	4'-6" x 11" x 10'-9"	6,350 lbs
Counterweight [7] Block C	4'-6" x 11" x 13'-7"	8,730 lbs
Counterweight [7] Block D	2'-11" x 1'-6" x 5'-11"	5,290 lbs
Base Section 630ECH (P/B)	40'-9" x 8'-10" x 8'-10"	31,970 lbs
Tower Section 550HC (P/P)	20'-7" x 8'-0" x 8'-0"	14,150 lbs
Top Climbing Unit w/hydraulics	40'-8" x 9'-1" x 10'-4"	22,420 lbs
Jib A-frame w/ladder	26'-11" x 1'-7" x 4'-8"	1,100 lbs

Description	Dimensions L x W x H	Weight
Jib Section #611 ①	39'-6" x 5'-9" x 7'-7"	9,700 lbs
Jib Section #621 ②	39'-5" x 5'-9" x 6'-6"	6,830 lbs
Jib Section #631 ③	39'-5" x 5'-9" x 6'-5"	5,290 lbs
Jib Section #635 ④	19'-8" x 5'-9" x 6'-5"	2,755 lbs
Jib Section #632 ⑤	34'-1" x 5'-9" x 6'-5"	4,080 lbs
Jib Section #633 ⑥	34'-1" x 5'-9" x 6'-5"	4,080 lbs
Jib Section #634 ⑦	34'-1" x 5'-9" x 6'-5"	3,405 lbs
Jib Section #636 ⑧	34'-1" x 5'-9" x 6'-5"	2,515 lbs
Jib Tip Section #641 ⑨	6'-1" x 5'-9" x 6'-5"	705 lbs
Jib Assembly Pt 1 (Inner) [8] (All jibs) ①②	77'-9" x 5'-9" x 7'-7"	25,350 lbs
Jib Assembly Pt 2 [8] 267 ft ③④⑤⑥⑦⑧⑨	194'-2" x 5'-9" x 6'-5"	29,980 lbs
Jib Assembly Pt 2 [8] 235 ft ③④⑤⑥⑦⑨	161'-5" x 5'-9" x 6'-5"	27,120 lbs
Jib Assembly Pt 2 [8] 202 ft ③④⑥⑤⑨	128'-7" x 5'-9" x 6'-5"	22,930 lbs
Jib Assembly Pt 2 [8] 169 ft ③④⑥⑨	95'-10" x 5'-9" x 6'-5"	18,520 lbs
Jib Assembly [8] 136 ft Complete ①②③④⑨	139'-5" x 5'-9" x 7'-7"	37,480 lbs
Hook Block	2'-7" x 1'-4" x 9'-10"	2,200 lbs
Trolley	7'-10" x 7'-0" x 4'-7"	1,810 lbs

NOTE: Weights and dimensions are approximate. Scale components before lifting. Please consult Operation Manual before erecting, operating, servicing or dismantling crane.

[1] Slewing Assembly Complete includes operator's cab, platforms, three swing motors, slewing ring, slewing ring support and four non-detachable climbing shoes.
[2] Slewing Assembly Upper Part includes operator's cab, platforms and three swing motors.
[3] Slewing Assembly Lower Part includes slewing ring, slewing ring support and four non-detachable climbing shoes.
[4] Includes 147 hp (110 kW) hoist drive with rope drum, switchgear & resistor panels, & hoist unit frame. Weight indicated includes 968 ft of wire rope. Contact Morrow for information.
[5] Counterjib A includes counterjib sections 1, 2, 2, 3, pendant bars, handrails and D block. Counterjib A is required for jibs 202 ft and longer. D block weighs 5,290 lbs.
[6] Counterjib B includes counterjib sections 1, 2, 3, pendant bars, handrails and D block. Counterjib B is required for jibs 169 ft and shorter. D block weighs 5,290 lbs.
[7] When fabricating counterweights, consult 550 ECH 20 Litronic Operation Manual for concrete requirements.
[8] Complete Jib Assemblies include jib sections, pendant bars, jib A-frame, pendant bar connecting pins and plates, trolley drive unit, trolley wire rope, hook block assembly and trolley assembly. The 131 ft Jib Assembly does not require a jib A-frame.

@MorrowEquipment:
(503) 585-5721
info@morrow.com
morrow.com
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