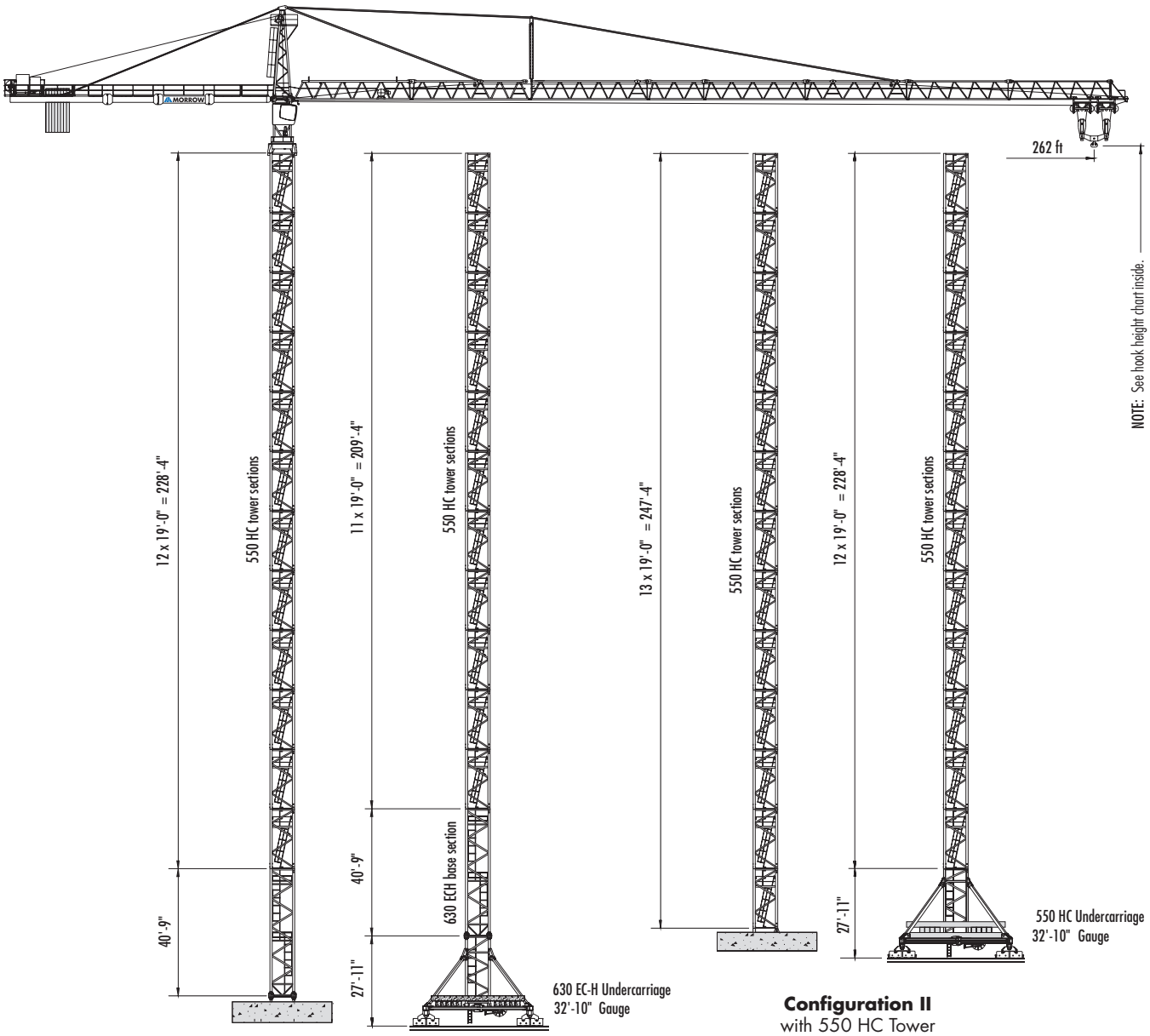
550 EC-H 40 Litronic®

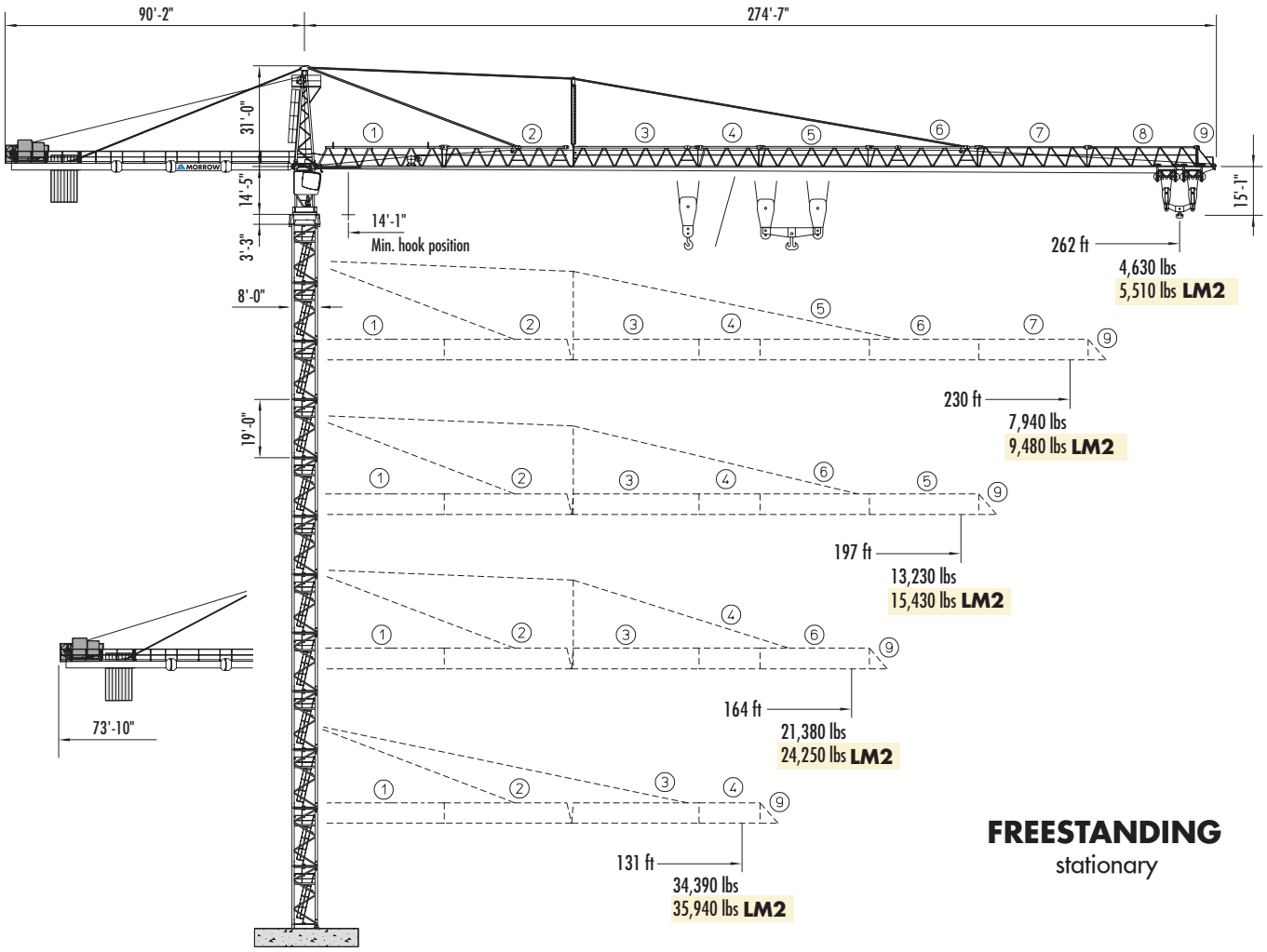
LIEBHERR Hammerhead Tower Crane



Configuration I
with 550 HC/630 EC-H Tower
max. 273 ft HUH on concrete foundation
max. 281 ft HUH on undercarriage

Configuration II
with 550 HC Tower
max. 251 ft HUH on concrete foundation
max. 259 ft HUH on undercarriage

FREESTANDING
travelling and stationary



FREESTANDING
stationary

Hook Heights

No. of Tower Sections	Tower Configuration I	Hook Height Concrete Foundation ft	Hook Height 10m Undercarriage ft
0	630 ECH BS	44	71
1	550 HC STS	63	90
2	550 HC STS	82	109
3	550 HC STS	101	128
4	550 HC STS	120	147
5	550 HC STS	139	166
6	550 HC STS	158	185
7	550 HC STS	177	204
8	550 HC STS	197	223
9	550 HC STS	216	242
10	550 HC STS	235	262[1]
11	550 HC STS	254[1]	281[1]
12	550 HC STS	273[1]	—

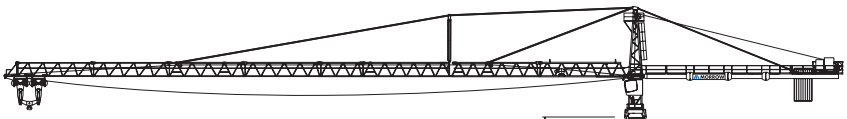
No. of Tower Sections	Tower Configuration II	Hook Height Concrete Foundation ft	Hook Height 10m Undercarriage ft
1	550 HC STS	23	50
2	550 HC STS	42	69
3	550 HC STS	61	88
4	550 HC STS	80	107
5	550 HC STS	99	126
6	550 HC STS	118	145
7	550 HC STS	137	164
8	550 HC STS	156	183
9	550 HC STS	175	202
10	550 HC STS	194	221
11	550 HC STS	213	240
12	550 HC STS	232[1]	259[1]
13	550 HC STS	251[1]	—

[1] Lower top climbing unit to base of crane prior to operating crane.

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

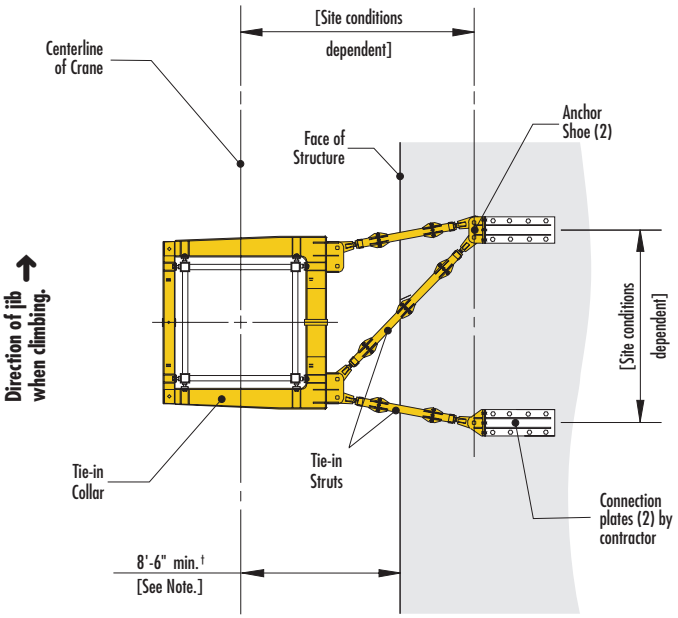
IMPORTANT: Please consult crane's operation manual before erecting, operating, servicing and dismantling crane.

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

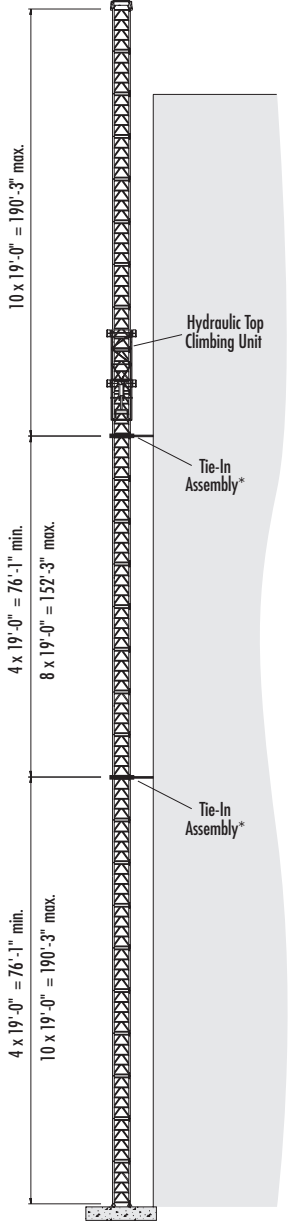


*** NOTE:** Tie-in assemblies must be positioned and installed according to manufacturer requirements. Restrictions apply; please consult operation manual or contact Morrow Equipment for specific recommendations.

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 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.

IMPORTANT: Litronic® cranes are equipped with Liebherr's state of the art PLC system that provides precise monitoring, control and coordination of all crane functions. This feature also permits up to a 20% load increase as illustrated in the heavy lift mode (LM2) charts to the right. Contact Morrow for more information regarding the many features of the 550 EC-H 40 Litronic tower crane.

2-Part Line

Hook Radius	Jib Tip Radius	Maximum Capacity – Radius	ft	49	66	82	98	115	136	148	169	180	202	213	235	246	267
267 ft	274'-7"	44,090 lbs – 65 ft	lbs	44,090	43,560	33,820	27,760	23,320	19,140	17,350	14,660	13,470	11,620	10,760	9,390	8,750	7,720
235 ft	241'-10"	44,090 lbs – 72 ft	lbs	44,090	44,090	38,300	31,500	26,590	21,890	19,890	16,910	15,560	13,490	12,540	11,020		
202 ft	209'-0"	44,090 lbs – 84 ft	lbs	44,090	44,090	44,090	37,130	31,440	26,010	23,720	20,240	18,720	16,310				
169 ft	176'-2"	44,090 lbs – 99 ft	lbs	44,090	44,090	44,090	44,090	37,570	31,220	28,530	24,470						
136 ft	143'-4"	44,090 lbs – 117 ft	lbs	44,090	44,090	44,090	44,090	44,090	37,480								

LM1

2-Part Line

267 ft	274'-7"	44,090 lbs – 71 ft	lbs	44,090	44,090	37,260	30,640	25,840	21,250	19,310	16,380	15,100	13,070	12,150	10,650	9,960	8,820
235 ft	241'-10"	44,090 lbs – 79 ft	lbs	44,090	44,090	45,530	35,080	29,650	24,490	22,310	19,030	17,570	15,280	14,240	12,570		
202 ft	209'-0"	44,090 lbs – 92 ft	lbs	44,090	44,090	44,090	41,090	34,860	28,900	26,390	22,600	20,920	18,300				
169 ft	176'-2"	44,090 lbs – 106 ft	lbs	44,090	44,090	44,090	44,090	40,450	33,660	30,780	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

4-Part Line

Hook Radius	Jib Tip Radius	Maximum Capacity – Radius	ft	49	66	82	98	115	131	148	164	180	197	213	230	246	262
262 ft	274'-7"	88,180 lbs – 36 ft	lbs	61,290	43,100	32,500	25,900	21,140	17,530	14,700	12,410	10,540	8,970	7,650	6,500	5,510	4,630
230 ft	241'-10"	88,180 lbs – 39 ft	lbs	67,920	47,990	36,400	29,190	23,960	20,020	16,910	14,420	12,370	10,650	9,190	7,940		
197 ft	209'-0"	88,180 lbs – 44 ft	lbs	78,130	55,560	42,390	34,240	28,330	23,080	20,330	17,500	15,170	13,230				
164 ft	176'-2"	88,180 lbs – 51 ft	lbs	88,180	65,080	49,980	40,610	33,820	28,660	24,630	21,380						
131 ft	143'-4"	88,180 lbs – 58 ft	lbs	88,180	76,350	58,950	48,150	40,320	34,390								

LM1

4-Part Line

262 ft	274'-7"	88,180 lbs – 38 ft	lbs	65,920	46,520	35,210	28,200	23,130	19,270	16,250	13,820	11,820	10,140	8,730	7,500	6,440	5,510
230 ft	241'-10"	88,180 lbs – 43 ft	lbs	75,020	53,260	40,570	32,690	27,000	22,690	19,290	16,560	14,330	12,430	10,850	9,480		
197 ft	209'-0"	88,180 lbs – 49 ft	lbs	86,880	62,020	47,530	38,560	32,060	27,120	23,260	20,130	17,570	15,430				
164 ft	176'-2"	88,180 lbs – 55 ft	lbs	88,180	72,110	55,580	45,300	37,880	32,230	27,780	24,250						
131 ft	143'-4"	88,180 lbs – 60 ft	lbs	88,180	79,410	61,350	50,180	42,090	35,940								

LM2

Hoist Speed and Capacity

Hoist Unit WiW 300 VZ 401	2-Part Line		LM1
147 hp (110 kW) FC hoist unit *Variable frequency drive (VFD)* *3-speed electromagnetic gear shifting*	**Speed**	**Capacity**	**Line Speed**
	1	up to 44,090 lbs up to 21,605 lbs	@ 89 fpm @ 157 fpm
	2	up to 25,355 lbs up to 11,245 lbs	@ 151 fpm @ 266 fpm
	3	up to 14,110 lbs up to 4,850 lbs	@ 253 fpm @ 459 fpm
	4-Part Line		
	1	up to 88,180 lbs up to 42,990 lbs	@ 46 fpm @ 79 fpm
	2	up to 50,705 lbs up to 23,150 lbs	@ 75 fpm @ 135 fpm
6L - 237 6L - 118	3	up to 28,660 lbs up to 11,905 lbs	@ 125 fpm @ 230 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 40 Operation Manual for additional information.

Motor Information

Drive Unit	Horsepower	Kilowatts	Speed	
Trolley (VFD)	14.7 hp	11 kW	0 - 223 fpm	0 - 68 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 vaiable 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 Equipment.

Component List

Description	Dimensions L x W x H	Weight	Description	Dimensions L x W x H	Weight
Tower Top (Complete)	30'-10" x 5'-10" x 6'-3"	11,680 lbs	Jib Section #611 ①	39'-6" x 5'-9" x 7'-7"	12,260 lbs
Slewing Assembly (Complete) [1]	22'-5" x 9'-6" x 10'-8"	37,700 lbs	Jib Section #621 ②	39'-5" x 5'-9" x 6'-6"	7,230 lbs
Slewing Assembly Upper Part [2]	18'-3" x 9'-0" x 8'-10"	21,500 lbs	Jib Section #631 ③	39'-5" x 5'-9" x 6'-5"	5,665 lbs
Slewing Assembly Lower Part [3]	4'-2" x 9'-6" x 10'-8"	16,200 lbs	Jib Section #635 ④	19'-8" x 5'-9" x 6'-5"	2,755 lbs
Hoist Unit (VFD) [4] 147 hp *(110 kW)*	9'-10" x 7'-10" x 6'-11"	16,000 lbs	Jib Section #632 ⑤	34'-1" x 5'-9" x 6'-5"	4,080 lbs
Counterjib Section #1 (Inner)	20'-10" x 6'-4" x 6'-1"	6,170 lbs	Jib Section #633 ⑥	34'-1" x 5'-9" x 6'-5"	4,080 lbs
Counterjib Section #2 (Intermediate)	17'-1" x 6'-1" x 6'-1"	5,290 lbs	Jib Section #634 ⑦	34'-1" x 5'-9" x 6'-5"	3,405 lbs
Counterjib Section #3 (Outer)	29'-10" x 7'-11" x 6'-1"	10,580 lbs	Jib Section #636 ⑧	34'-1" x 5'-9" x 6'-5"	2,515 lbs
Counterjib [5] (90-ft version)	84'-5" x 7'-11" x 6'-1"	33,950 lbs	Jib Tip Section #641 ⑨	6'-1" x 5'-9" x 6'-5"	750 lbs
Counterjib [6] (74-ft version)	68'-0" x 7'-11" x 6'-1"	28,440 lbs	Jib Assembly Pt 1 [8] (All jibs) ①②	77'-9" x 5'-9" x 7'-7"	28,440 lbs
Counterweight [7] Block A	4'-6" x 11" x 10'-9"	6,350 lbs	Jib Assembly Pt 2 [8] 262 ft ③④⑤⑥⑦⑧⑨	194'-3" x 5'-9" x 6'-5"	30,420 lbs
Counterweight [7] Block C	4'-6" x 11" x 14'-7"	8,730 lbs	Jib Assembly Pt 2 [8] 230 ft ③④⑤⑥⑦⑨	161'-5" x 5'-9" x 6'-5"	27,560 lbs
Counterweight [7] Block D	2'-11" x 1'-6" x 5'-11"	5,290 lbs	Jib Assembly Pt 2 [8] 197 ft ③④⑥⑤⑨	128'-7" x 5'-9" x 6'-5"	23,370 lbs
Base Section 630ECH (P/B)	40'-9" x 8'-10" x 8'-10"	31,970 lbs	Jib Assembly Pt 2 [8] 164 ft ③④⑥⑨	95'-10" x 5'-9" x 6'-5"	18,960 lbs
Tower Section 550HC (P/P)	20'-7" x 8'-0" x 8'-0"	14,150 lbs	Jib Assembly [8] 131 ft Complete ①②③④⑨	139'-5" x 5'-9" x 7'-7"	41,000 lbs
Top Climbing Unit w/hydraulics	40'-8" x 9'-1" x 10'-4"	22,420 lbs	Hook Block 4-part Assembly	10'-6" x 1'-8" x 7'-7"	4 890 lbs
Jib A-frame	26'-11" x 1'-7" x 4'-8"	1,430 lbs	Trolley 4-part Assembly	16'-5" x 7'-0" x 4'-7"	4,010 lbs

NOTE: Weights and dimensions are approximate. Scale components before lifting. Please consult Operations 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 1,490 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 197 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 164 ft and shorter. D block weighs 5,290 lbs.
[7] When fabricating counterweights, consult 550 ECH 40 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.