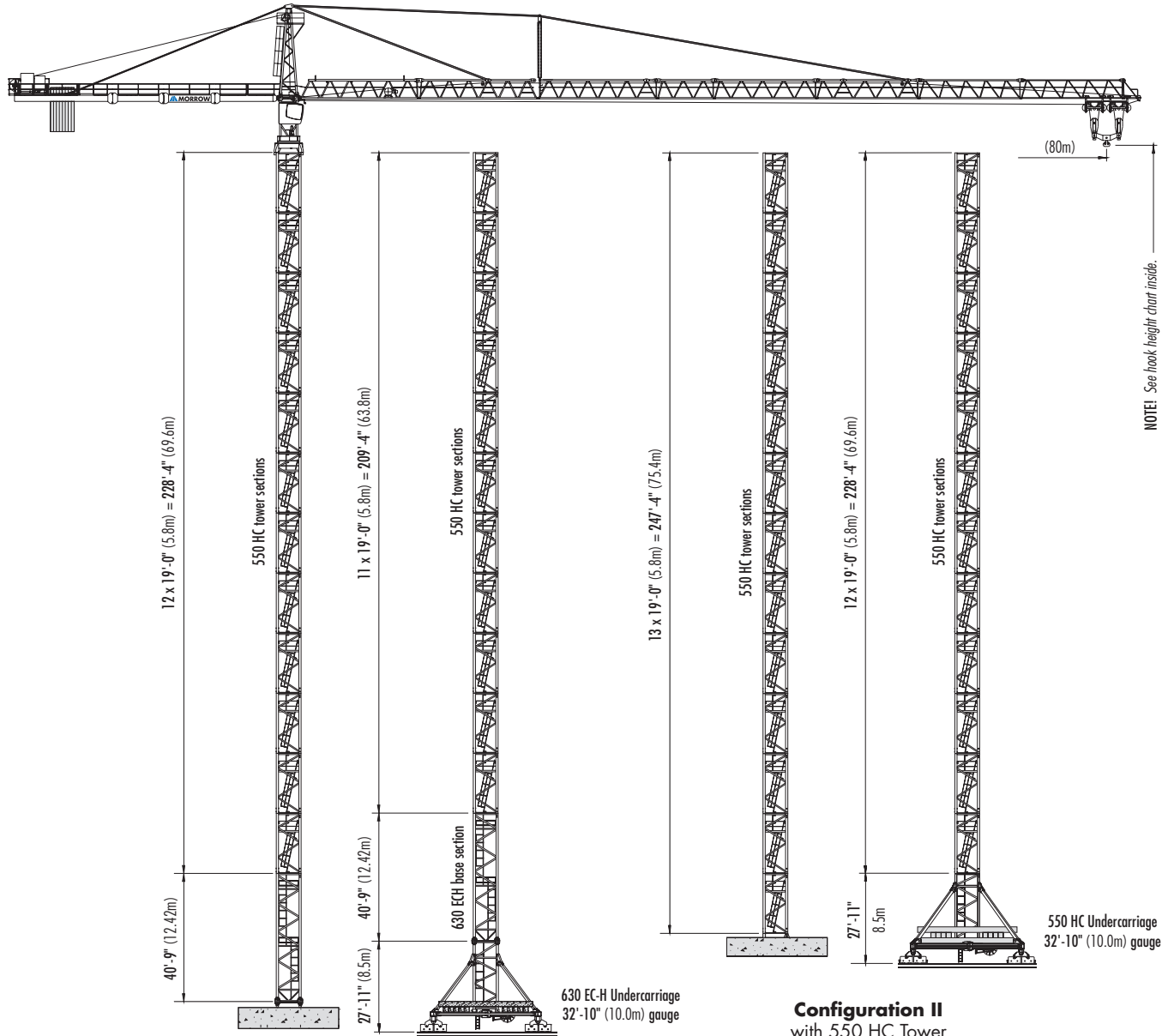
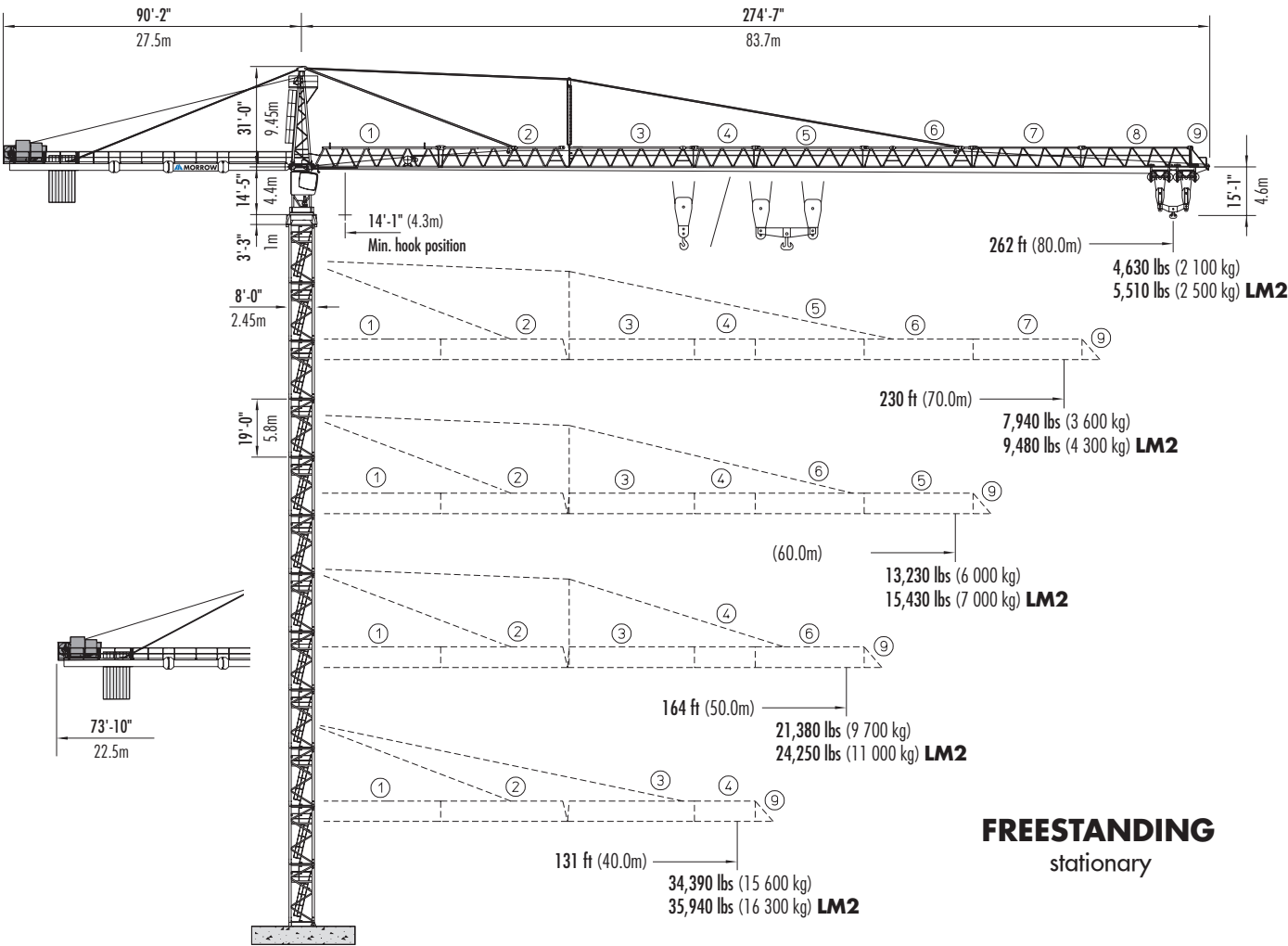


550 EC-H 40 Litronic® LIEBHERR Hammerhead Tower Crane



FREESTANDING
travelling and stationary



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

No. of Tower Sections	Tower Configuration I	Hook Height Concrete Foundation		Hook Height 10m Undercarriage	
		ft	m	ft	m
0	630 ECH BS	44	13.5	71	21.7
1	550 HC STS	63	19.3	90	27.5
2	550 HC STS	82	25.1	109	33.3
3	550 HC STS	101	30.9	128	39.1
4	550 HC STS	120	36.7	147	44.9
5	550 HC STS	139	42.5	166	50.7
6	550 HC STS	158	48.3	185	56.5
7	550 HC STS	177	54.1	204	62.3
8	550 HC STS	197	59.9	223	68.1
9	550 HC STS	216	65.7	242	73.9
10	550 HC STS	235	71.5	262 ¹	79.7 ¹
11	550 HC STS	254 ¹	77.3 ¹	281 ¹	85.5 ¹
12	550 HC STS	273 ¹	83.1 ¹	—	—

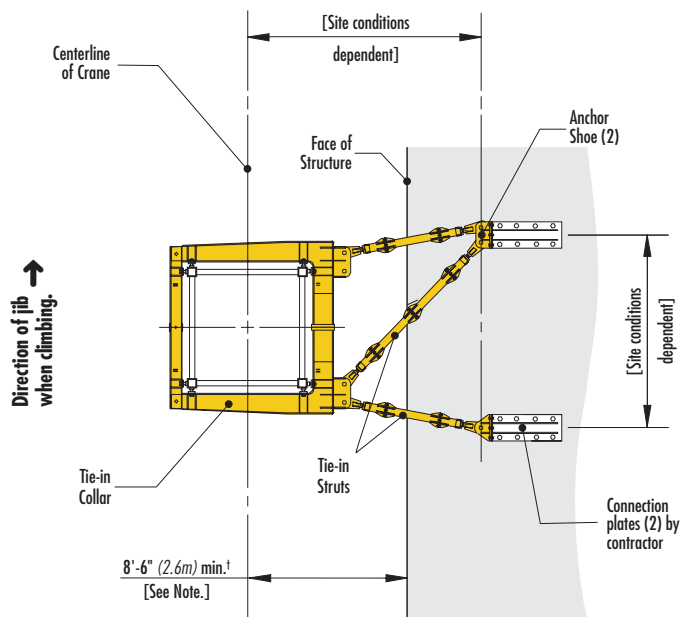
No. of Tower Sections	Tower Configuration II	Hook Height Concrete Foundation		Hook Height 10m Undercarriage	
		ft	m	ft	m
1	550 HC STS	23	7	50	15.1
2	550 HC STS	42	12.8	69	20.9
3	550 HC STS	61	18.6	88	26.7
4	550 HC STS	80	24.4	107	32.5
5	550 HC STS	99	30.2	126	38.3
6	550 HC STS	118	36	145	44.1
7	550 HC STS	137	41.8	164	49.9
8	550 HC STS	156	47.6	183	55.7
9	550 HC STS	175	53.4	202	61.5
10	550 HC STS	194	59.2	221	67.3
11	550 HC STS	213	65	240	73.1
12	550 HC STS	232 ¹	70.8 ¹	259 ¹	78.9 ¹
13	550 HC STS	251 ¹	76.6 ¹	—	—

¹ Lower top climbing unit to base of crane prior to operating 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

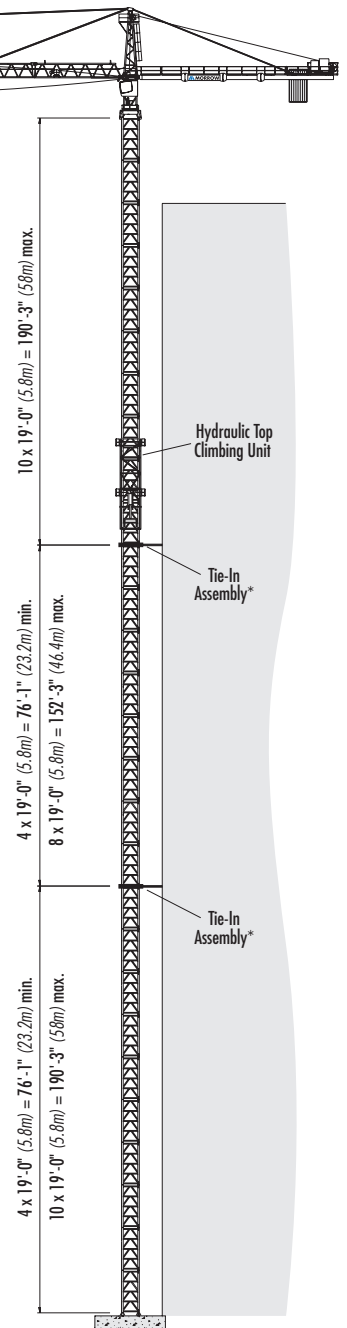
NOTE: The tie-in assembly shown is an example of a typical installation. Please note, however, that factors determining the installation of tie-in assemblies may vary due to project specific criteria.

† Minimum clearance between face of structure and the center of crane is 8'-6" (2.6m) 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.



**TOP CLIMBING
with 550 HC Tower Sections**
Tied to Structure

2-Part Line	Hook Radius	Jib Tip Radius	Maximum Capacity – Radius	ft m	49 15	66 20	82 25	98 30	115 35	136 41.5	148 45	169 51.5	180 55	202 61.5	213 65.0	235 71.5	246 75	267 81.5						
	267 ft 81.5m	274'-7" 83.7m	44,090 lbs – 65 ft 20 000 kg – 19.8m	lbs kg	44,090 20 000	43,560 19 760	33,820 15 340	27,760 12 590	23,320 10 580	19,140 8 680	17,350 7 870	14,660 6 650	13,470 6 110	11,620 5 270	10,760 4 880	9,390 4 260	8,750 3 970	7,720 3 500						
	235 ft 71.5m	241'-10" 73.7m	44,090 lbs – 72 ft 20 000 kg – 22m	lbs kg	44,090 20 000	44,090 20 000	38,300 17 370	31,500 14 290	26,590 12 060	21,890 9 930	19,890 9 020	16,910 7 670	15,560 7 060	13,490 6 120	12,540 5 690	11,020 5 000								
	202 ft 61.5m	209'-0" 63.7m	44,090 lbs – 84 ft 20 000 kg – 25.5m	lbs kg	44,090 20 000	44,090 20 000	44,090 20 000	37,130 16 840	31,440 14 260	26,010 11 800	23,720 10 760	20,240 9 180	18,720 8 490	16,310 7 400										
	169 ft 51.5m	176'-2" 53.7m	44,090 lbs – 99 ft 20 000 kg – 30.1m	lbs kg	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	37,570 17 040	31,220 14 160	28,530 12 940	24,470 11 100												
	136 ft 41.5m	143'-4" 43.7m	44,090 lbs – 117 ft 20 000 kg – 35.6m	lbs kg	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	37,480 17 000														

LM 1

LM 1

2-Part Line	267 ft 81.5m	274'-7" 83.7m	44,090 lbs – 71 ft 20 000 kg – 21.5m	lbs kg	44,090 20 000	44,090 20 000	37,260 16 900	30,640 13 900	25,840 11 720	21,250 9 640	19,310 8 760	16,380 7 430	15,100 6 850	13,070 5 930	12,150 5 510	10,650 4 830	9,960 4 520	8,820 4 000
	235 ft 71.5m	241'-10" 73.7m	44,090 lbs – 79 ft 20 000 kg – 24.2m	lbs kg	44,090 20 000	44,090 20 000	45,530 19 290	35,080 15 910	29,650 13 450	24,490 11 110	22,310 10 120	19,030 8 630	17,570 7 970	15,280 6 930	14,240 6 460	12,570 5 700	LM2	
	202 ft 61.5m	209'-0" 63.7m	44,090 lbs – 92 ft 20 000 kg – 28.1m	lbs kg	44,090 20 000	44,090 20 000	44,090 20 000	41,090 18 640	34,860 15 810	28,900 13 110	26,390 11 970	22,600 10 250	20,920 9 490	18,300 8 300				
	169 ft 51.5m	176'-2" 53.7m	44,090 lbs – 106 ft 20 000 kg – 32.3m	lbs kg	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	40,450 18 350	33,660 15 270	30,780 13 960	26,460 12 000						
	136 ft 41.5m	143'-4" 43.7m	44,090 lbs – 123 ft 20 000 kg – 37.6m	lbs kg	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	39,680 18 000								

LM 2

4-Part Line	Hook Radius	Jib Tip Radius	Maximum Capacity – Radius	ft m	49 15	66 20	82 25	98 30	115 35	131 40	148 45	164 50	180 55	197 60	213 65	230 70	246 75	262 80						
	262 ft 80m	274'-7" 83.7m	88,180 lbs – 36 ft 40 000 kg – 11.1m	lbs kg	61,290 27 800	43,100 19 550	32,500 14 740	25,900 11 750	21,140 9 590	17,530 7 950	14,700 6 670	12,410 5 630	10,540 4 780	8,970 4 070	7,650 3 470	6,500 2 950	5,510 2 500	4,630 2 100						
	230 ft 70m	241'-10" 73.7m	88,180 lbs – 39 ft 40 000 kg – 12m	lbs kg	67,920 30 810	47,990 21 770	36,400 16 510	29,190 13 240	23,960 10 870	20,020 9 080	16,910 7 670	14,420 6 540	12,370 5 610	10,650 4 830	9,190 4 170	7,940 3 600								
	197 ft 60m	209'-0" 63.7m	88,180 lbs – 44 ft 40 000 kg – 13.5m	lbs kg	78,130 35 440	55,560 25 200	42,390 19 230	34,240 15 530	28,330 12 850	23,080 10 470	20,330 9 220	17,500 7 940	15,170 6 880	13,230 6 000										
	164 ft 50m	176'-2" 53.7m	88,180 lbs – 51 ft 40 000 kg – 15.4m	lbs kg	88,180 40 000	65,080 29 520	49,980 22 670	40,610 18 420	33,820 15 340	28,660 13 000	24,630 11 170	21,380 9 700												
	131 ft 40m	143'-4" 43.7m	88,180 lbs – 58 ft 40 000 kg – 17.6m	lbs kg	88,180 40 000	76,350 34 630	58,950 26 740	48,150 21 840	40,320 18 290	34,390 15 600														

LM 1

LM 1

4-Part Line	262 ft 80m	274'-7" 83.7m	88,180 lbs – 38 ft 40 000 kg – 11.7m	lbs kg	65,920 29 900	46,520 21 100	35,210 15 970	28,200 12 790	23,130 10 490	19,270 8 740	16,250 7 370	13,820 6 270	11,820 5 360	10,140 4 600	8,730 3 960	7,500 3 400	6,440 2 920	5,510 2 500
	230 ft 70m	241'-10" 73.7m	88,180 lbs – 43 ft 40 000 kg – 13.1m	lbs kg	75,020 34 030	53,260 24 160	40,570 18 400	32,690 14 830	27,000 12 250	22,690 10 290	19,290 8 750	16,560 7 510	14,330 6 500	12,430 5 640	10,850 4 920	9,480 4 300	LM2	
	197 ft 60m	209'-0" 63.7m	88,180 lbs – 49 ft 40 000 kg – 14.8m	lbs kg	86,880 39 410	62,020 28 130	47,530 21 560	38,560 17 490	32,060 14 540	27,120 12 300	23,260 10 550	20,130 9 130	17,570 7 970	15,430 7 000				
	164 ft 50m	176'-2" 53.7m	88,180 lbs – 55 ft 40 000 kg – 16.8m	lbs kg	88,180 40 000	72,110 32 710	55,580 25 210	45,300 20 550	37,880 17 180	32,230 14 620	27,780 12 600	24,250 11 000						
	131 ft 40m	143'-4" 43.7m	88,180 lbs – 60 ft 40 000 kg – 18.3m	lbs kg	88,180 40 000	79,410 36 020	61,350 27 830	50,180 22 760	42,090 19 090	35,940 16 300								

LM 2

Hoist Speed and Capacity

Hoist Unit	WiW 300 VZ 401	2-Part Line				LM 1	
147 hp (110 kW) FC hoist unit Variable frequency drive (VFD) 3-speed electromagnetic gear shifting	6L - 237 6L - 118	Speed	Capacity	Line Speed	Capacity	Line Speed	
		1	up to 44,090 lbs up to 21,605 lbs	@ 89 fpm @ 157 fpm	up to 20 000 kg up to 9 800 kg	@ 27 m/min @ 48 m/min	
		2	up to 25,355 lbs up to 11,245 lbs	@ 151 fpm @ 266 fpm	up to 11 500 kg up to 5 100 kg	@ 46 m/min @ 81 m/min	
		3	up to 14,110 lbs up to 4,850 lbs	@ 253 fpm @ 459 fpm	up to 6 400 kg up to 2 200 kg	@ 77 m/min @ 140 m/min	
		4-Part Line					
		1	up to 88,180 lbs up to 42,990 lbs	@ 46 fpm @ 79 fpm	up to 40 000 kg up to 19 500 kg	@ 14 m/min @ 24 m/min	
		2	up to 50,705 lbs up to 23,150 lbs	@ 75 fpm @ 135 fpm	up to 23 000 kg up to 10 500 kg	@ 23 m/min @ 41 m/min	
		3	up to 28,660 lbs up to 11,905 lbs	@ 125 fpm @ 230 fpm	up to 13 000 kg up to 5 400 kg	@ 38 m/min @ 70 m/min	

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 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

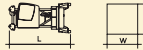
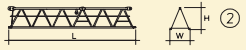
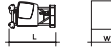
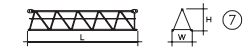
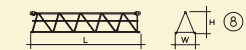
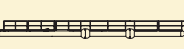
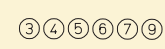
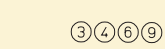
NOTES:

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 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" 9.4m x 1.78m x 1.91m	11,680 lbs 5 300 kg	Jib Section #611 	39'-6" x 5'-9" x 7'-7" 12.03m x 1.74m x 2.3m	12,260 lbs 5 560 kg
Slewing Assembly (Complete) ¹ 	22'-5" x 9'-6" x 10'-8" 6.82m x 2.9m x 3.25m	37,700 lbs 17 100 kg	Jib Section #621 	39'-5" x 5'-9" x 6'-6" 12.02m x 1.74m x 1.98m	7,230 lbs 3 280 kg
Slewing Assembly Upper Part ² 	18'-3" x 9'-0" x 8'-10" 5.56m x 2.74m x 2.68m	21,500 lbs 9 750 kg	Jib Section #631 	39'-5" x 5'-9" x 6'-5" 12.02m x 1.74m x 1.96m	5,665 lbs 2 570 kg
Slewing Assembly Lower Part ³ 	4'-2" x 9'-6" x 10'-8" 1.26m x 2.9m x 3.25m	16,200 lbs 7 350 kg	Jib Section #635 	19'-8" x 5'-9" x 6'-5" 6m x 1.74m x 1.96m	2,755 lbs 1 250 kg
Hoist Unit (VFD) ⁴ 147 hp (110 kW) 	9'-10" x 7'-10" x 6'-11" 3m x 2.4 x 2.1m	16,000 lbs 7 260 kg	Jib Section #632 	34'-1" x 5'-9" x 6'-5" 10.4m x 1.74m x 1.96m	4,080 lbs 1 850 kg
Counterjib Section #1 (Inner) 	20'-10" x 6'-4" x 6'-1" 6.34m x 1.93m x 1.85m	6,170 lbs 2 800 kg	Jib Section #633 	34'-1" x 5'-9" x 6'-5" 10.4m x 1.74m x 1.96m	4,080 lbs 1 850 kg
Counterjib Section #2 (Intermediate) 	17'-1" x 6'-1" x 6'-1" 5.2m x 1.86m x 1.85m	5,290 lbs 2 400 kg	Jib Section #634 	34'-1" x 5'-9" x 6'-5" 10.4m x 1.74m x 1.96m	3,405 lbs 1 545 kg
Counterjib Section #3 (Outer) 	29'-10" x 7'-11" x 6'-1" 9.1m x 2.42m x 1.85m	10,580 lbs 4 800 kg	Jib Section #636 	34'-1" x 5'-9" x 6'-5" 10.4m x 1.74m x 1.96m	2,515 lbs 1 140 kg
Counterjib ⁵ (90-ft version) 	84'-5" x 7'-11" x 6'-1" 25.74m x 2.42m x 1.85m	33,950 lbs 15 400 kg	Jib Tip Section #641 	6'-1" x 5'-9" x 6'-5" 1.86m x 1.74m x 1.96m	750 lbs 340 kg
Counterjib ⁶ (74-ft version) 	68'-0" x 7'-11" x 6'-1" 20.74m x 2.42m x 1.85m	28,440 lbs 12 900 kg	Jib Assembly Pt 1 ⁸ (All jibs) 	77'-9" x 5'-9" x 7'-7" 23.7m x 1.74m x 2.3m	28,440 lbs 12 900 kg
Counterweight ⁷ Block A 	4'-6" x 11" x 10'-9" 1.37m x 0.28m x 3.27m	6,350 lbs 2 880 kg	Jib Assembly Pt 2 ⁸ 262 ft (80m) 	194'-3" x 5'-9" x 6'-5" 59.2m x 1.74m x 1.96m	30,420 lbs 13 800 kg
Counterweight ⁷ Block C 	4'-6" x 11" x 14'-7" 1.37m x 0.28m x 4.44m	8,730 lbs 3 960 kg	Jib Assembly Pt 2 ⁸ 230 ft (70m) 	161'-5" x 5'-9" x 6'-5" 49.2m x 1.74m x 1.96m	27,560 lbs 12 500 kg
Counterweight ⁷ Block D 	2'-11" x 1'-6" x 5'-11" 0.9m x 0.43m x 2.64m	5,290 lbs 2 400 kg	Jib Assembly Pt 2 ⁸ 197 ft (60m) 	128'-7" x 5'-9" x 6'-5" 39.2m x 1.74m x 1.96m	23,370 lbs 10 600 kg
Base Section 630ECH (P/B) 	40'-9" x 8'-10" x 8'-10" 12.42m x 2.68m x 2.68m	31,970 lbs 14 500 kg	Jib Assembly Pt 2 ⁸ 164 ft (50m) 	95'-10" x 5'-9" x 6'-5" 29.2m x 1.74m x 1.96m	18,960 lbs 8 600 kg
Tower Section 550HC (P/P) 	20'-7" x 8'-0" x 8'-0" 6.28m x 2.45m x 2.45m	14,150 lbs 6 420 kg	Jib Assembly ⁸ 131 ft (40m) Complete 	139'-5" x 5'-9" x 7'-7" 42.5m x 1.74m x 2.3m	41,000 lbs 18 600 kg
Top Climbing Unit w/hydraulics 	40'-8" x 9'-1" x 10'-4" 12.4m x 2.77m x 3.16m	22,420 lbs 10 170 kg	Hook Block 4-part Assembly 	10'-6" x 1'-8" x 7'-7" 3.2m x 0.5m x 2.3m	4 890 lbs 2 220 kg
Jib A-frame 	26'-11" x 1'-7" x 4'-8" 8.2m x 0.48m x 1.41m	1,430 lbs 650 kg	Trolley 4-part Assembly 	16'-5" x 7'-0" x 4'-7" 5m x 2.14m x 1.4m	4,010 lbs 1 820 kg

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 (455m) 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 (60.0m) and longer. D block weighs 5,290 lbs (2 400 kg).

⁶ Counterjib B includes counterjib sections 1, 2, 3, pendant bars, handrails and D block. Counterjib B is required for jibs 164 ft (50.0m) and shorter. D block weighs 5,290 lbs (2 400 kg).

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 (40m) Jib Assembly does not require a jib A-frame.