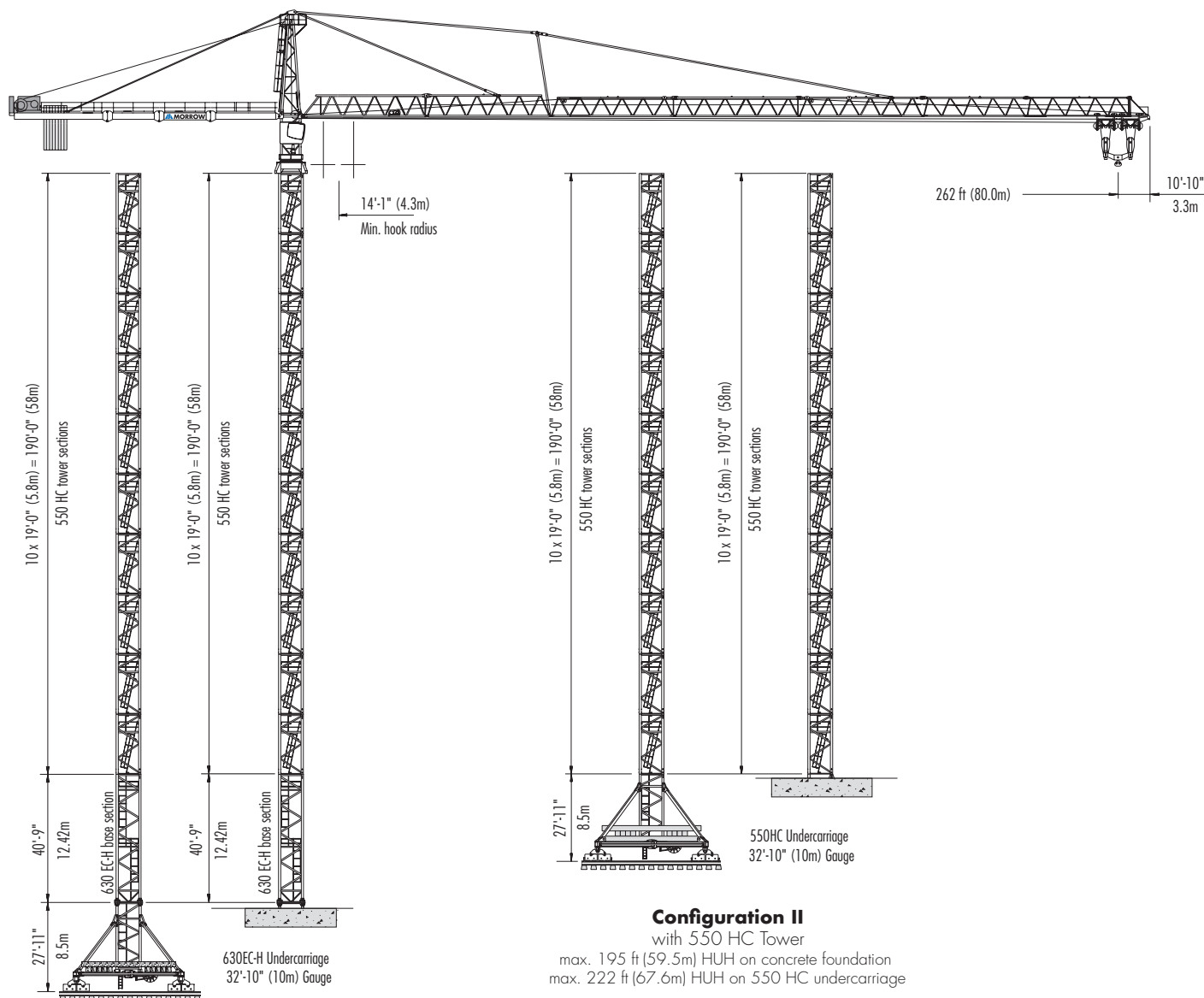


630 EC-H 40 Litronic

LIEBHERR Hammerhead Tower Crane



Configuration I

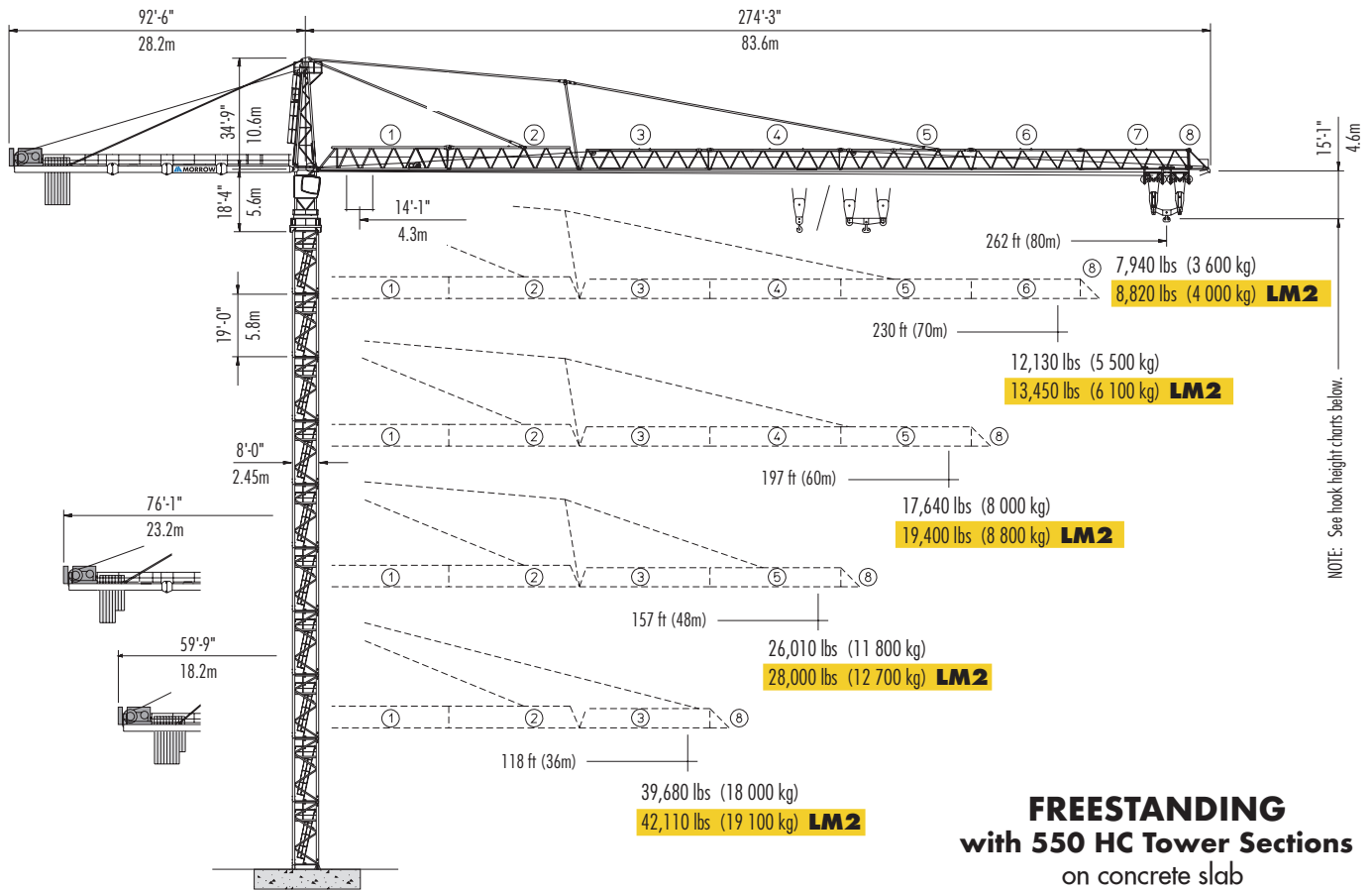
with 550 HC/630 EC-H Tower
max. 235 ft (71.7m) HUH on concrete foundation
max. 262 ft (80m) HUH on 630 EC-H undercarriage

Configuration II

with 550 HC Tower
max. 195 ft (59.5m) HUH on concrete foundation
max. 222 ft (67.6m) HUH on 550 HC undercarriage

FREESTANDING
travelling and stationary

LIEBHERR 630 EC-H 40 Litronic®



FREESTANDING
with 550 HC Tower Sections
on concrete slab

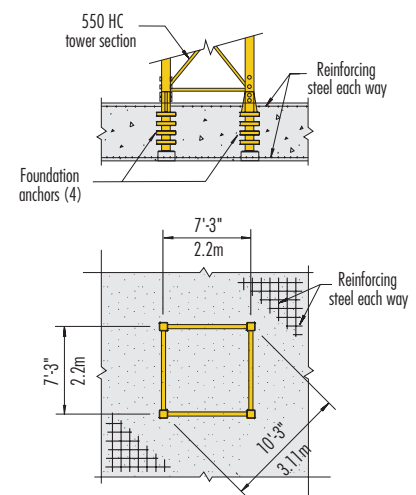
Hook Heights

No. of Tower Elements	Tower Configuration I	Hook Height Concrete Foundation		Hook Height 10m Undercarriage		No. of Tower Sections	Tower Configuration II	Hook Height Concrete Foundation		Hook Height 10m Undercarriage	
		ft	m	ft	m			ft	m	ft	m
1	630ECH BTS	45	13.7	72	22	1	550HC TS	24	7.2	51	15.4
2	550HC TS	64	19.5	91	27.8	2	550HC TS	43	13.1	70	21.2
3	550HC TS	83	25.3	110	33.6	3	550HC TS	62	18.9	89	27
4	550HC TS	102	31.1	129	39.4	4	550HC TS	81	24.7	108	32.8
5	550HC TS	121	36.9	148	45.2	5	550HC TS	100	30.5	127	38.6
6	550HC TS	140	42.7	167	51	6	550HC TS	119	36.3	146	44.4
7	550HC TS	159	48.5	186	56.8	7	550HC TS	138	42.1	165	50.2
8	550HC TS	178	54.3	205	62.6	8	550HC TS	157	47.9	184	56
9	550HC TS	197	60.1	224	68.4	9	550HC TS	176	53.7	203	61.8
10	550HC TS	216	65.9	243	74.2	10 ¹	550HC TS	195	59.5	222	67.6
11 ¹	550HC TS	235	71.7	262	80						

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

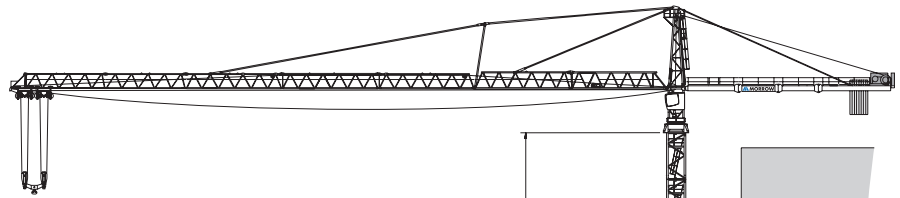
NOTE: Contact Morrow for specific information regarding alternate tower configurations, special jib assemblies, alternate foundation details, dimensions, reaction forces and slab opening requirements.

Please consult 630 EC-H 40 Litronic Operations Manual before erecting, operating, servicing or dismantling crane.

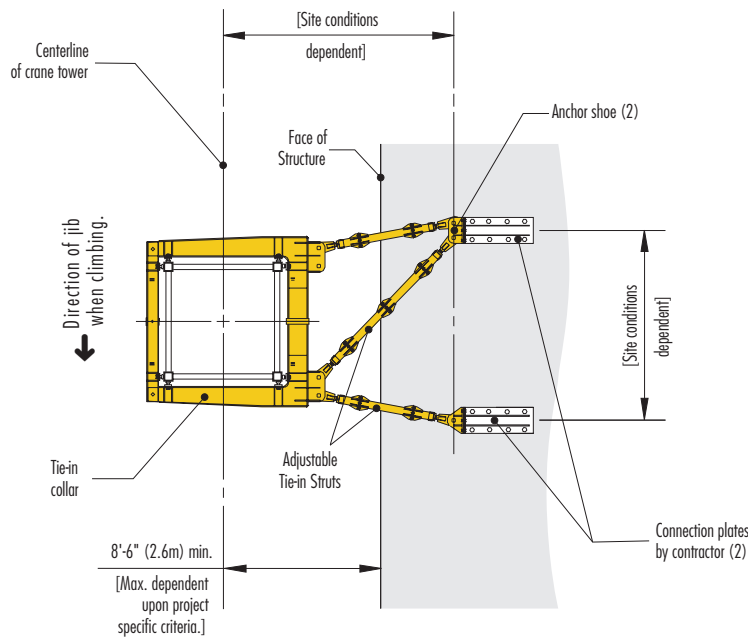


with 550 HC Tower Section
on concrete slab

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



* NOTE! Lower the top climbing unit to the uppermost tie-in prior to operating crane at maximum hook height.

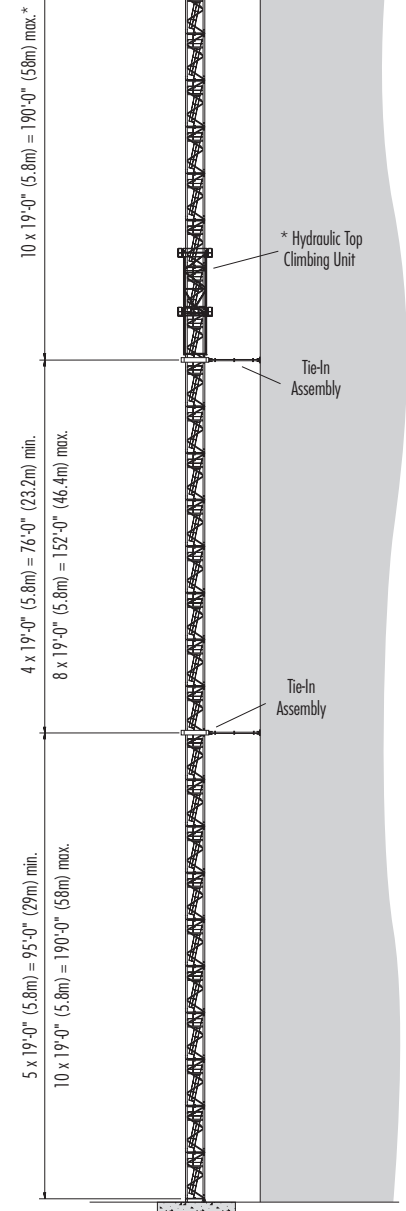


TIE-IN ASSEMBLY

Plan view

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 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 a load increase of up to 10% as illustrated in the heavy lift mode (LM2) charts to the right. Heavy lift mode is permitted only when wind speed is less than 31 mph (50 km/h). Contact Morrow for more information regarding the many features of the 630 EC-H 40 Litronic tower crane.



TOP CLIMBING

with 550 HC Tower Sections
Tied to structure

LIEBHERR 630 EC-H 40 Litronic®

2-Part Line	Hook Radius	Jib tip Radius	Maximum Capacity – Radius	ft m	18 5.5	49 15	66 20	82 25	98 30	123 37.4	148 45	162 49.4	180 55	201 61.4	213 65	234 71.4	246 75	267 81.4
	267 ft 81.4m	274'-3" 83.6m	44,090 lbs – 88 ft 20 000 kg – 26.73m	lbs kg	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	39,040 17 710	30,750 13 950	24,980 11 330	22,400 10 160	19,710 8 940	17,220 7 810	16,030 7 270	14,200 6 440	13,290 6 030	11,900 5 400
	234 ft 71.4m	241'-6" 73.6m	44,090 lbs – 100 ft 20 000 kg – 30.54m	lbs kg	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	35,540 16 120	28,970 13 140	26,060 11 820	23,020 10 440	20,170 9 150	18,830 8 540	16,760 7 600	LM 1	
	201 ft 61.4m	208'-8" 63.6m	44,090 lbs – 106 ft 20 000 kg – 32.28m	lbs kg	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	37,830 17 160	30,890 14 010	27,820 12 620	24,580 11 150	21,610 9 800				
	162 ft 49.4m	169'-4" 51.6m	44,090 lbs – 113 ft 20 000 kg – 34.41m	lbs kg	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	40,370 18 310	33,030 14 980	29,760 13 500						
	123 ft 37.4m	129'-11" 39.6m	44,090 lbs – 119 ft 20 000 kg – 36.16m	lbs kg	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	42,550 19 300								

2-Part Line	267 ft 81.4m	274'-3" 83.6m	44,090 lbs – 93 ft 20 000 kg – 28.22m	lbs kg	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	41,360 18 760	32,630 14 800	26,540 12 040	23,830 10 810	21,010 9 530	18,390 8 340	17,130 7 770	15,210 6 900	14,260 6 470	12,790 5 800	
	234 ft 71.4m	241'-6" 73.6m	44,090 lbs – 106 ft 20 000 kg – 32.19m	lbs kg	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	37,590 17 050	30,690 13 920	27,650 12 540	24,430 11 080	21,450 9 730	20,040 9 090	17,860 8 100			
	201 ft 61.4m	208'-8" 63.6m	44,090 lbs – 113 ft 20 000 kg – 34.37m	lbs kg	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	40,300 18 280	32,980 14 960	29,720 13 480	26,300 11 930	23,150 10 500					
	162 ft 49.4m	169'-4" 51.6m	44,090 lbs – 119 ft 20 000 kg – 36.26m	lbs kg	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	42,660 19 350	34,940 15 850	31,530 14 300							
	123 ft 37.4m	129'-11" 39.6m	44,090 lbs – 123 ft 20 000 kg – 37.4m	lbs kg	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000	44,090 20 000									
LM2																			

4-Part Line	Hook Radius	Jib tip Radius	Maximum Capacity – Radius	ft m	14 4.3	49 15	66 20	82 25	98 30	118 36	131 40	157 48	180 55	197 60	213 65	230 70	246 75	262 80
	262 ft 80m	274'-3" 83.6m	88,180 lbs – 46 ft 40 000 kg – 14m	lbs kg	88,180 40 000	81,330 36 890	57,740 26 190	43,890 19 910	35,410 16 060	28,240 12 810	24,600 11 160	19,110 8 670	15,590 7 070	13,560 6 150	11,840 5 370	10,360 4 700	9,060 4 110	7,940 3 600
	230 ft 70m	241'-6" 73.6m	88,180 lbs – 50 ft 40 000 kg – 15.19m	lbs kg	88,180 40 000	88,180 40 000	63,760 28 920	48,680 22 080	39,420 17 880	31,610 14 340	27,670 12 550	21,670 9 830	17,840 8 090	15,610 7 080	13,730 6 230	12,130 5 500	LM 1	
	197 ft 60m	208'-8" 63.6m	88,180 lbs – 54 ft 40 000 kg – 16.35m	lbs kg	88,180 40 000	88,180 40 000	69,690 31 610	53,370 24 210	43,360 19 670	34,920 15 840	30,640 13 900	24,180 10 970	20,020 9 080	17,640 8 000				
	157 ft 48m	169'-4" 51.6m	88,180 lbs – 56 ft 40 000 kg – 17.2m	lbs kg	88,180 40 000	88,180 40 000	73,990 33 560	56,790 25 760	46,250 20 980	37,350 16 940	32,850 14 900	26,010 11 800						
	118 ft 36m	129'-11" 39.6m	88,180 lbs – 59 ft 40 000 kg – 18.02m	lbs kg	88,180 40 000	88,180 40 000	78,130 35 440	60,080 27 250	49,030 22 240	39,680 18 000								

4-Part Line	262 ft 80m	274'-3" 83.6m	88,180 lbs – 48 ft 40 000 kg – 14.67m	lbs kg	88,180 40 000	85,960 38 990	61,160 27 740	46,610 21 140	37,680 17 090	30,160 13 680	26,350 11 950	20,570 9 330	16,870 7 650	14,730 6 680	12,920 5 860	11,350 5 150	10,010 4 540	8,820 4 000	
	230 ft 70m	241'-6" 73.6m	88,180 lbs – 53 ft 40 000 kg – 16.08m	lbs kg	88,180 40 000	88,180 40 000	68,280 30 970	52,250 23 700	42,440 19 250	34,130 15 480	29,940 13 580	23,590 10 700	19,510 8 850	17,150 7 780	15,170 6 880	13,450 6 100			
	197 ft 60m	208'-8" 63.6m	88,180 lbs – 57 ft 40 000 kg – 17.37m	lbs kg	88,180 40 000	88,180 40 000	74,850 33 950	57,470 26 070	46,830 21 240	37,810 17 150	33,270 15 090	26,370 11 960	21,960 9 960	19,400 8 800					
	157 ft 48m	169'-4" 51.6m	88,180 lbs – 59 ft 40 000 kg – 18.12m	lbs kg	88,180 40 000	88,180 40 000	78,660 35 680	60,490 27 440	49,360 22 390	39,970 18 130	35,210 15 970	28,000 12 700							
	118 ft 36m	129'-11" 39.6m	88,180 lbs – 62 ft 40 000 kg – 18.87m	lbs kg	88,180 40 000	88,180 40 000	82,450 37 400	63,520 28 810	51,920 23 550	42,110 19 100									
LM2																			

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		Speed	Capacity		Line Speed		Capacity		Line Speed	
		1	up to 44,090 lbs	@	89 fpm		up to 20 000 kg	@	27 m/min	
			up to 21,605 lbs	@	157 fpm		up to 9 800 kg	@	48 m/min	
		2	up to 25,355 lbs	@	151 fpm		up to 11 500 kg	@	46 m/min	
			up to 11,245 lbs	@	266 fpm		up to 5 100 kg	@	81 m/min	
		3	up to 14,110 lbs	@	253 fpm		up to 6 400 kg	@	77 m/min	
			up to 4,850 lbs	@	459 fpm		up to 2 200 kg	@	140 m/min	
		4-Part Line								
		1	up to 88,180 lbs	@	46 fpm		up to 40 000 kg	@	14 m/min	
		up to 42,990 lbs	@	79 fpm		up to 19 500 kg	@	24 m/min		
	2	up to 50,705 lbs	@	75 fpm		up to 23 000 kg	@	23 m/min		
		up to 23,150 lbs	@	135 fpm		up to 10 500 kg	@	41 m/min		
	3	up to 28,660 lbs	@	125 fpm		up to 13 000 kg	@	38 m/min		
		up to 11,905 lbs	@	230 fpm		up to 5 400 kg	@	70 m/min		
	6L - 237 6L - 118									

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 630 EC-H 40 Litronic Operation Manual for additional information.

Motor Information

Drive Unit	Horsepower	Kilowatts	Speed	
Trolley (FC)	14.7 hp	11 kW	0 – 223 fpm	0 – 68 m/min
Swing (fluid coupling)	2 x 14.2 hp	2 x 10.6 kW	0.6 rpm	
Traveling (fluid coupling)	4 x 10 hp	4 x 7.5 kW	82 fpm	25.0 m/min

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.

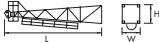
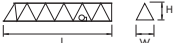
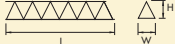
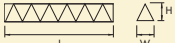
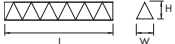
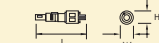
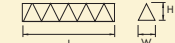
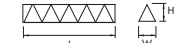
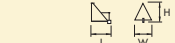
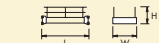
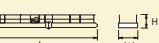
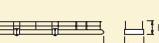
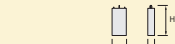
Service size: 200 Amperes

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	Description	Dimensions L x W x H	Weight
Tower Top ¹	 34'-3" x 5'-11" x 7'-3" 10.44m x 1.8m x 2.2m	15,540 lbs 7 050 kg	Jib Butt Section ① #611	 40'-5" x 6'-6" x 7'-10" 12.31m x 1.99m x 2.38m	14,770 lbs 6 700 kg
Slewing Assembly (Complete) ²	 21'-3" x 9'-9" x 10'-5" 6.47m x 2.98m x 3.17m	48,280 lbs 21 900 kg	Jib Section ② #621	 40'-3" x 5'-10" x 7'-4" 12.28m x 1.77m x 2.23m	9,040 lbs 4 100 kg
Slewing Assembly Upper Part ³	 15'-11" x 9'-10" x 9'-10" 4.85m x 3m x 3m	22,490 lbs 10 200 kg	Jib Section ③ #631	 40'-2" x 5'-10" x 6'-7" 12.25m x 1.77m x 1.99m	6,610 lbs 3 000 kg
Slewing Ring	 11" x 7'-3" x 7'-3" 0.28m x 2.22m x 2.22m	6,615 lbs 3 000 kg	Jib Section ④ #632	 40'-3" x 5'-10" x 6'-6" 12.27m x 1.77m x 1.97m	5,840 lbs 2 650 kg
Slewing Ring Support	 4'-11" x 9'-5" x 10'-4" 1.51m x 2.87m x 3.16m	14,550 lbs 6 600 kg	Jib Section ⑤ #633	 40'-3" x 5'-10" x 6'-6" 12.27m x 1.77m x 1.97m	6,060 lbs 2 750 kg
Slewing Gears (2) (each)	 6'-11" x 2'-0" x 2'-0" 2.12m x 0.6m x 0.6m	2,200 lbs 1 000 kg	Jib Section ⑥ #634	 33'-10" x 5'-10" x 6'-5" 10.3m x 1.77m x 1.96m	3,615 lbs 1 640 kg
Slewing Unit Access Platforms	 3'-3" x 3'-7" x 3'-7" 1.0m x 1.1m x 1.1m	880 lbs 400 kg	Jib Section ⑦ #635	 33'-8" x 5'-10" x 6'-4" 10.25m x 1.77m x 1.95m	2,625 lbs 1 190 kg
AC Hoist Unit (FC) ⁴ 147 hp (110 kW)	 9'-10" x 7'-8" x 8'-4" 2.99m x 2.33m x 2.54m	12,150 lbs 5 510 kg	Jib Tip Section ⑧ #641	 8'-5" x 6'-4" x 7'-5" 2.56m x 1.94m x 2.25m	1,190 lbs 540 kg
Counterjib Section 1 ⁵ (Inner)	 22'-8" x 6'-6" x 6'-5" 6.9m x 1.98m x 1.96m	7,720 lbs 3 500 kg	Jib Assembly (Part 1) ¹⁰ for 157-ft to 262-ft jibs	①② 79'-6" x 7'-2" x 7'-10" 24.22m x 2.19m x 2.38m	39,020 lbs 17 700 kg
Counterjib Section 2 ⁵ (Intermediate)	 17'-1" x 6'-3" x 6'-5" 5.2m x 1.9m x 1.96m	6,610 lbs 3 000 kg	Jib Assembly (Part 2) ¹¹ 262-ft (80.0m)	③④⑤⑥⑦⑧ 192'-1" x 6'-4" x 7'-5" 58.54m x 1.94m x 2.25m	29,100 lbs 13 200 kg
Counterjib Section 3 ⁵ (Outer)	 34'-5" x 7'-7" x 8'-2" 10.5m x 2.32m x 2.48m	13,230 lbs 6 000 kg	Jib Assembly (Part 2) ¹¹ 230-ft (70.0m)	③④⑤⑥⑧ 159'-3" x 6'-4" x 7'-5" 48.54m x 1.94m x 2.25m	26,010 lbs 11 800 kg
Counterjib A ⁶ (1-3)	 56'-5" x 9'-4" x 8'-2" 17.2m x 2.84m x 2.48m	26,240 lbs 11 900 kg	Jib Assembly (Part 2) ¹¹ 197-ft (60.0m)	③④⑤⑧ 126'-5" x 6'-4" x 7'-5" 38.54m x 1.94m x 2.25m	22,050 lbs 10 000 kg
Counterjib B ⁷ (1-2-3)	 72'-10" x 9'-4" x 8'-2" 22.2m x 2.84m x 2.48m	32,850 lbs 14 900 kg	Jib Assembly (Part 2) ¹¹ 157-ft (48.0m)	③⑤⑧ 87'-0" x 6'-4" x 7'-5" 26.54m x 1.94m x 2.25m	15,430 lbs 7 000 kg
Counterjib C ⁸ (1-2-2-3)	 89'-3" x 9'-4" x 8'-2" 27.2m x 2.84m x 2.48m	39,460 lbs 17 900 kg	Jib Assembly (Part 1A) ¹² for 118-ft (36.0m) jib	①② 79'-5" x 7'-2" x 7'-10" 24.22m x 2.19m x 2.38m	36,820 lbs 16 700 kg
Tower Section 550 HC (Pin/Pin)	 20'-7" x 8'-0" x 8'-0" 6.28m x 2.45m x 2.45m	14,300 lbs 6 485 kg	Jib Assembly (Part 2A) ¹³ 118-ft (36.0m)	③⑧ 47'-8" x 6'-4" x 7'-5" 14.54m x 1.94m x 2.25m	9,040 lbs 4 250 kg
Base Section 630 EC-H (P/B)	 40'-9" x 8'-10" x 8'-10" 12.42m x 2.68m x 2.68m	31,965 lbs 14 500 kg	Counterweight Block A	 4'-6" x 11" x 9'-10" 1.37m x 0.28 x 3m	6,350 lbs 2 880 kg
Top Climbing Unit ⁹ w/hydraulics	 40'-9" x 9'-1" x 10'-4" 12.42m x 2.77m x 3.16m	22,420 lbs 10 170 kg	Counterweight Block C	 4'-6" x 11" x 13'-7" 1.37m x 0.28 x 4.15m	8,730 lbs 3 960 kg
Trolley (2) each with hook block	 10'-8" x 6'-8" x 8'-5" 3.25m x 2.02m x 2.57m	3,440 lbs 1 560 kg	Hook Bar (4-pt) with hook	 9'-2" x 1'-8" x 2'-8" 2.8m x 0.5m x 0.8m	1,860 lbs 845 kg

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

¹ Tower Top includes ladder, service platforms and pendants.

² Slewing Assembly Complete includes operator's cab, 2 slewing gears, slewing ring, slewing ring support, 2 service platforms and 4 climbing shoes. To facilitate erection/dismantling process, the Slewing Assembly can be broken down into various components. See 630EC-H Operation Manual.

³ Slewing Assembly Upper Part includes operator's cab. Does not include slewing gears.

⁴ Includes hoist unit, electrical panel and handrails. Does not include wire rope.

⁵ Counterjib sections include handrails and hardware.

⁶ Counterjib A includes counterjib sections #1 & #3, handrails, hardware, D-block, and pendant bars.

⁷ Counterjib B includes counterjib sections 1, 2 and 3, handrails, hardware, D-block, and pendants.

⁸ Counterjib C includes counterjib sections 1, 2 (2) and 3, handrails, hardware, D-block, and pendants.

⁹ Can be broken down into two panels.

¹⁰ Jib Assembly (Part 1) includes jib sections, A-frame, pendant bars with pins & plates, and two (2) trolleys with hook pulley blocks.

¹¹ Jib Assemblies (Part 2) include jib sections, pendant bars with pins and plates.

¹² Jib Assembly (Part 1A) includes jib sections, pendant bars with pins & plates, and two (2) trolleys with hook pulley blocks.

¹³ Jib Assembly (Part 2A) includes jib sections, pendant bars with pins and plates.