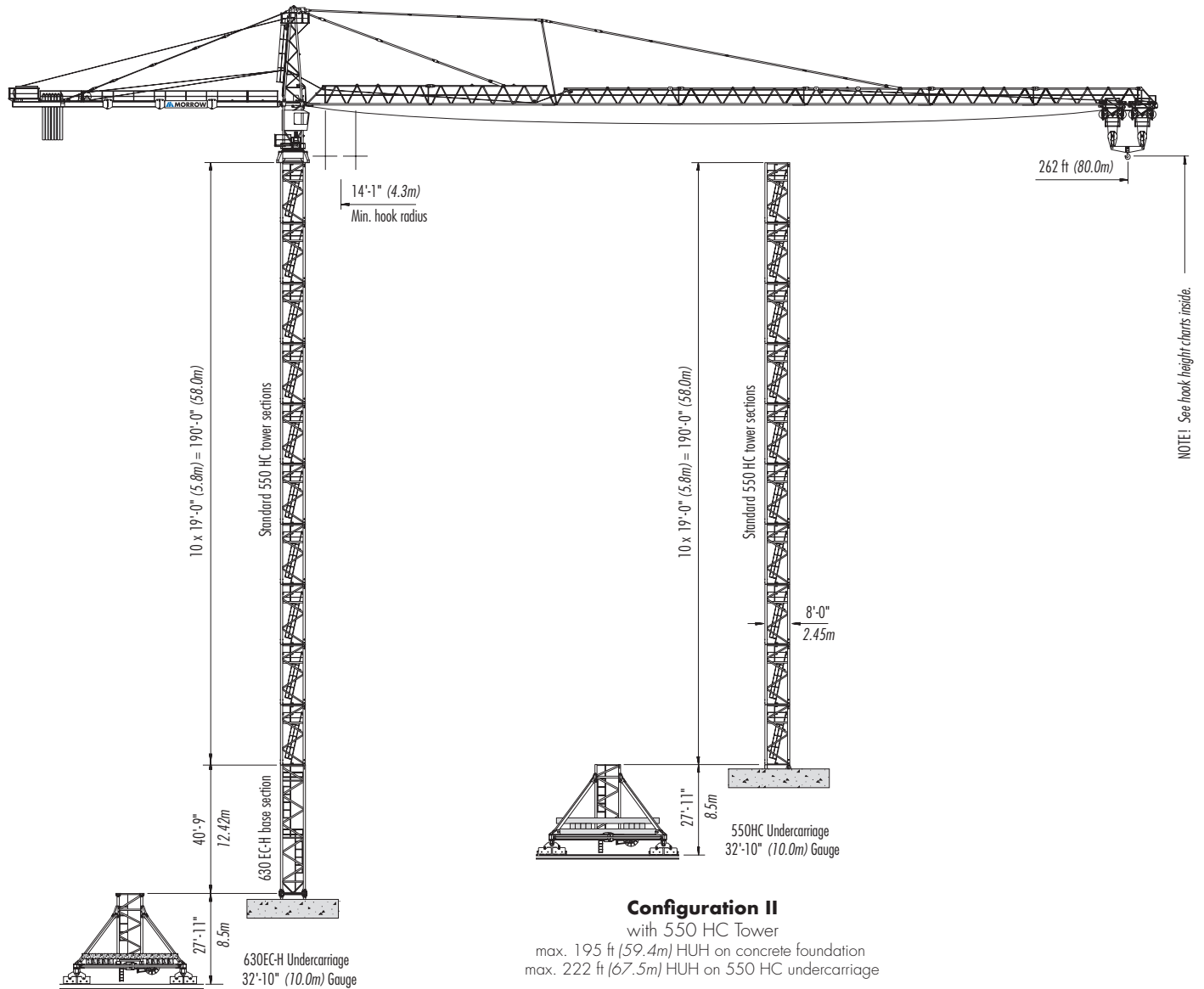
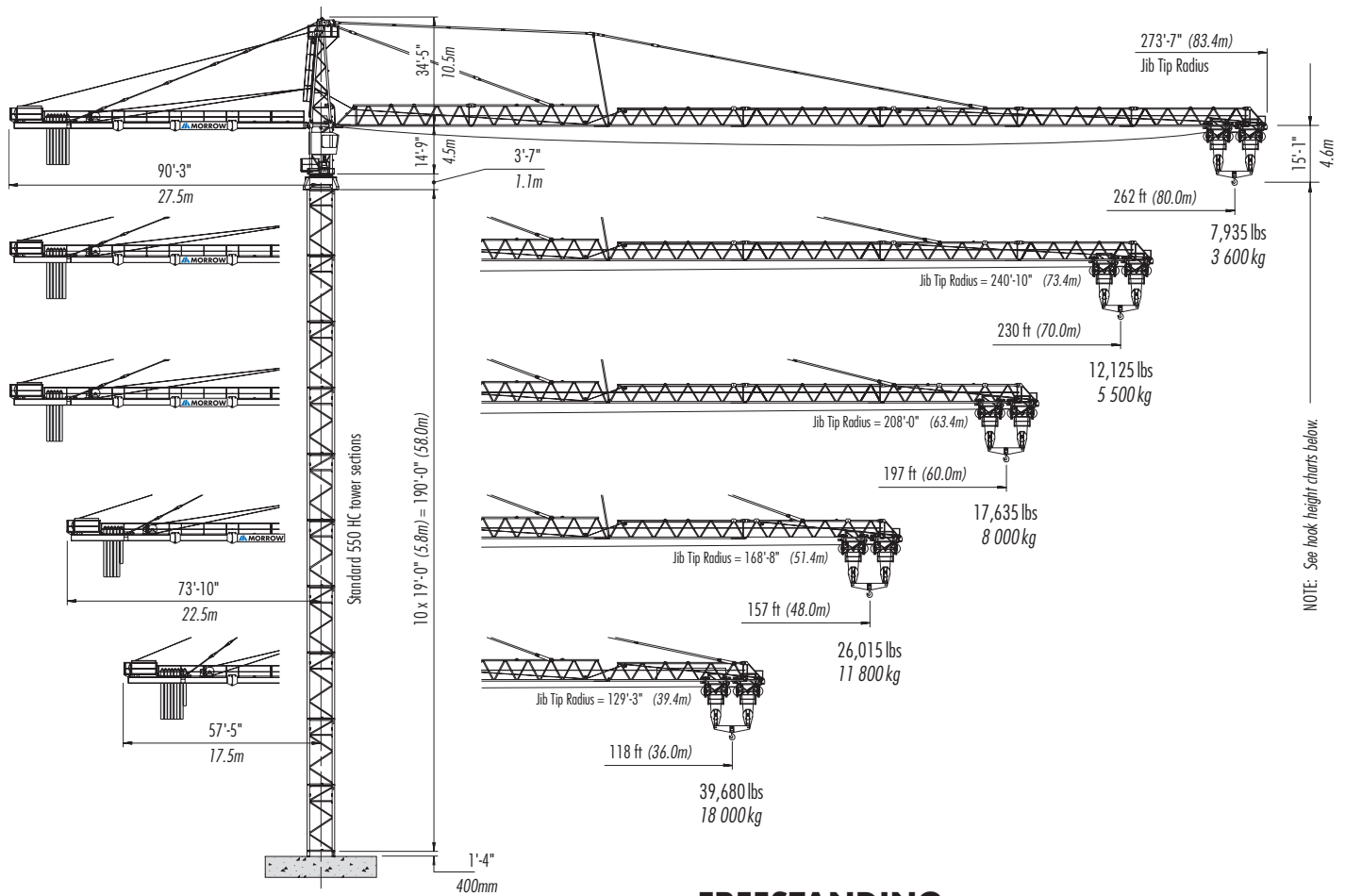


630 EC-H 40

LIEBHERR Hammerhead Tower Crane



FREESTANDING



FREESTANDING

Hook Heights

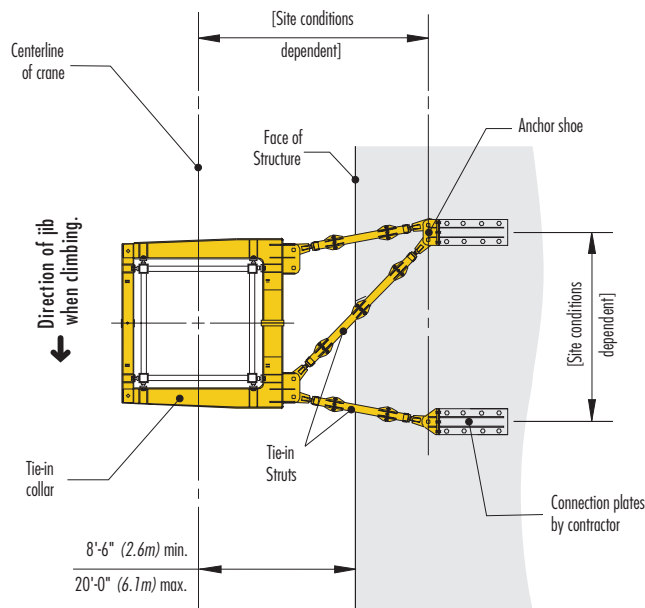
No. of Tower Elements	Tower Configuration I	Hook Height		Hook Height		No. of Tower Sections	Tower Configuration II	Hook Height		Hook Height	
		Concrete Foundation	10m Undercarriage	Concrete Foundation	10m Undercarriage			Concrete Foundation	10m Undercarriage	Concrete Foundation	10m Undercarriage
		ft	m	ft	m			ft	m	ft	m
1	630ECH BTS	45.3	13.8	71.9	21.9	1	550HC STS	23.6	7.2	50.2	15.3
2	550 HC STS	64.3	19.6	90.9	27.7	2	550HC STS	42.7	13.0	69.2	21.1
3	550 HC STS	83.3	25.4	109.9	33.5	3	550HC STS	61.7	18.8	88.3	26.9
4	550 HC STS	102.4	31.2	128.9	39.3	4	550HC STS	80.7	24.6	107.3	32.7
5	550 HC STS	121.4	37.0	148.0	45.1	5	550HC STS	99.7	30.4	126.3	38.5
6	550 HC STS	140.4	42.8	167.0	50.9	6	550HC STS	118.8	36.2	145.3	44.3
7	550 HC STS	159.4	48.6	186.0	56.7	7	550HC STS	137.8	42.0	164.4	50.1
8	550 HC STS	178.5	54.4	205.0	62.5	8	550HC STS	156.8	47.8	183.4	55.9
9	550 HC STS	197.5	60.2	224.1	68.3	9	550HC STS	175.9	53.6	202.4	61.7
10	550 HC STS	216.5	66.0	243.1	74.1	10 ¹	550HC STS	194.9	59.4	221.5	67.5
11 ¹	550 HC STS	235.6	71.8	262.1	79.9						

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

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

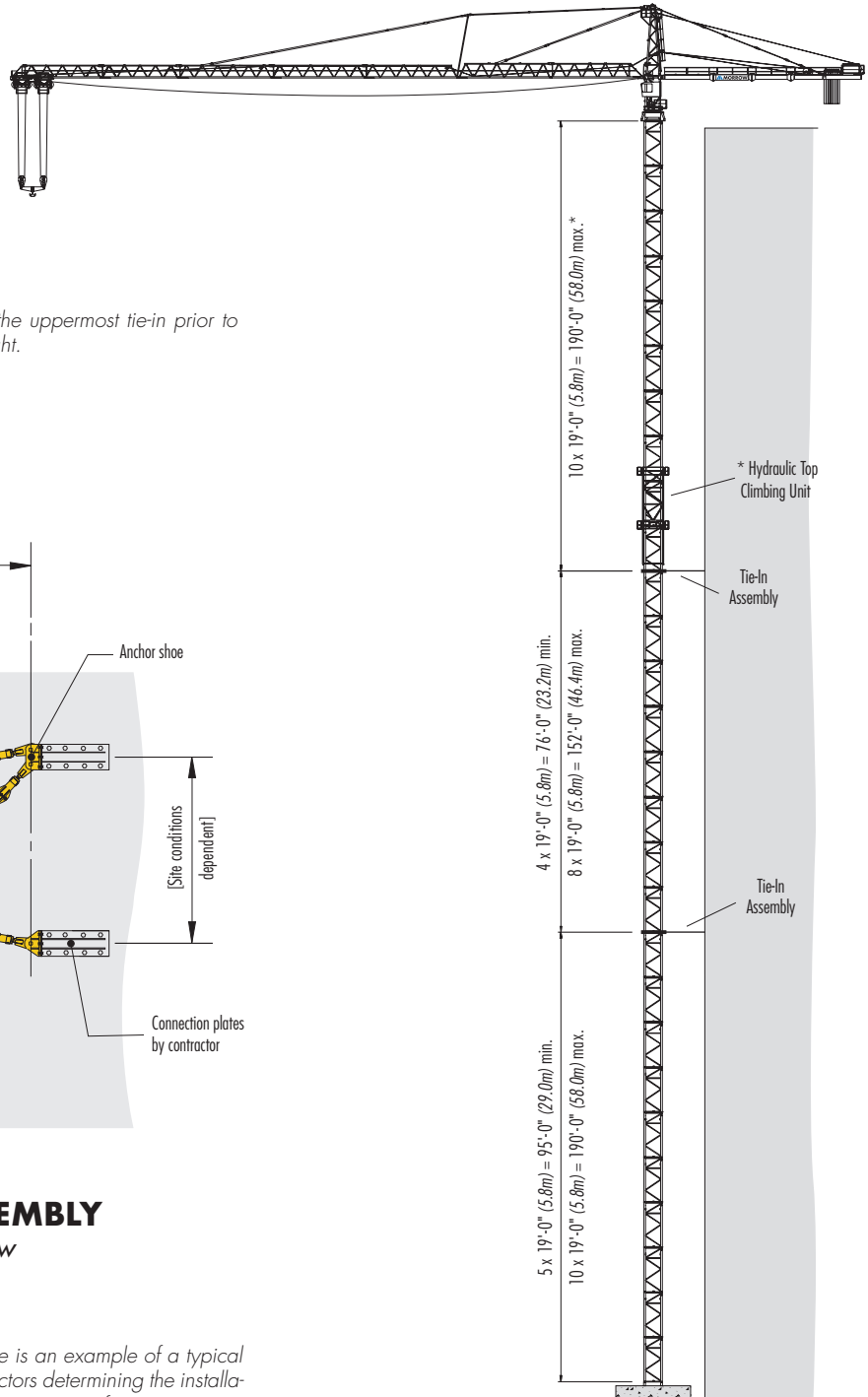
NOTE: Please consult 630 EC-H 40 Operations Manual before erecting, operating, servicing or dismantling crane.

* 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.

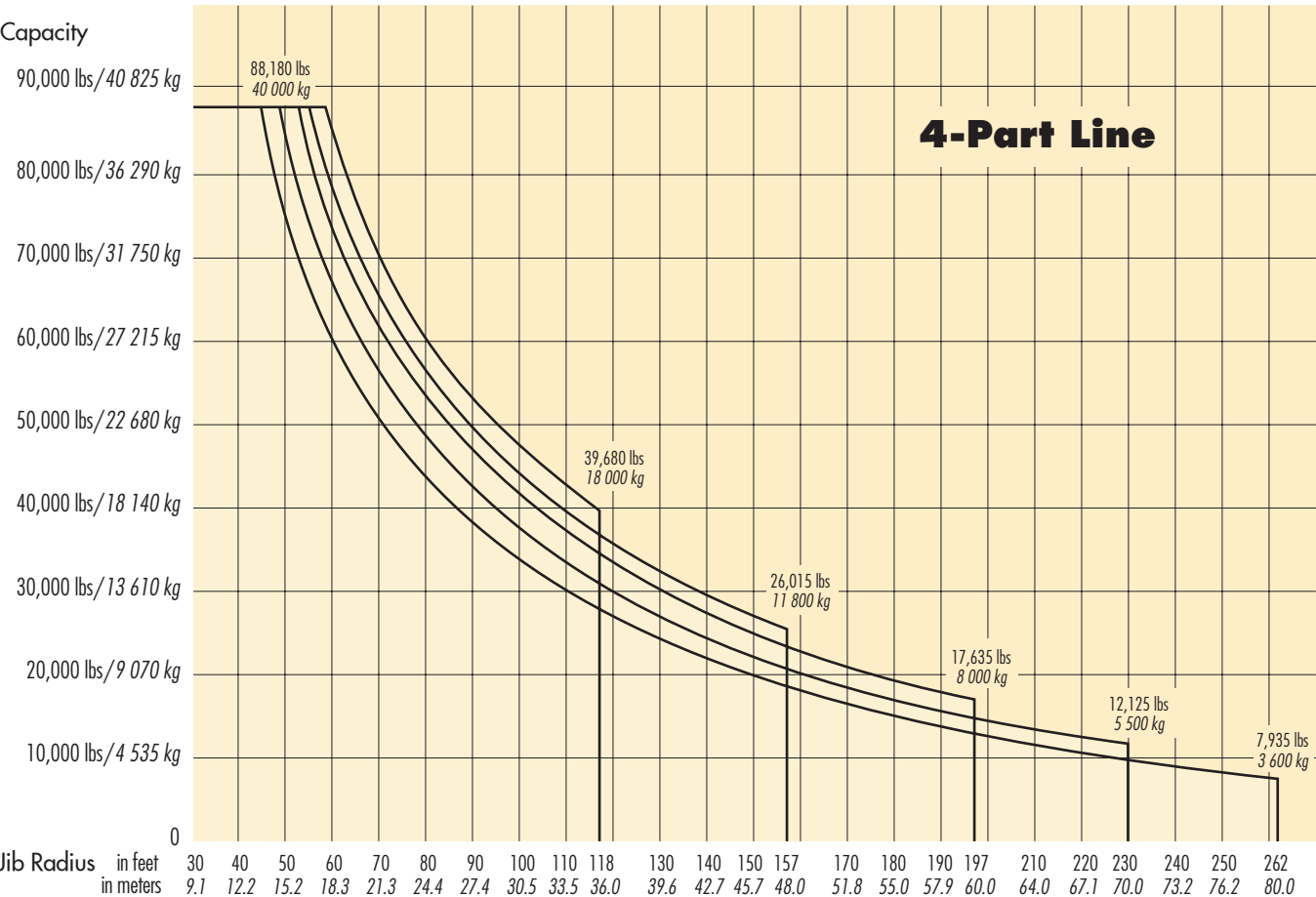


TOP CLIMBING
with 550 HC Tower Sections
Tied to Structure

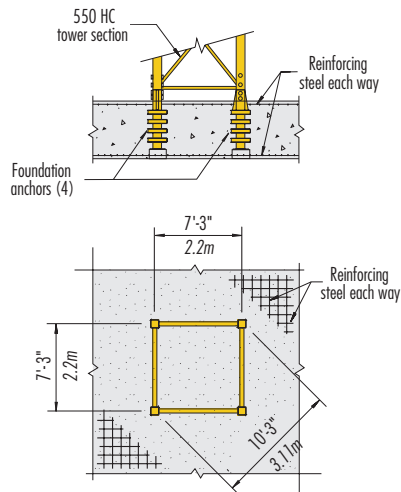
Radius and Capacities

Hook Radius	Maximum Capacity — Radius	ft m	14 4.3	20 6.0	30 9.0	39 12.0	49 15.0	66 20.0	82 25.0	98 30.0	118 36.0	131 40.0	157 48.0	180 55.0	197 60.0	213 65.0	230 70.0	246 75.0	262 80.0
262 ft 80.0m	88,180 lbs — 45 ft 40 000 kg — 13.8m	lbs kg	88,180 40 000	88,180 40 000	88,180 40 000	88,180 40 000	79,915 36 250	56,770 25 750	43,190 19 590	34,855 15 810	27,820 12 620	24,270 11 010	18,895 8 570	15,430 7 000	13,450 6 100	11,750 5 330	10,320 4 680	9,040 4 100	7,935 3 600
230 ft 70.0m	88,180 lbs — 49 ft 40 000 kg — 15.0m	lbs kg	88,180 40 000	88,180 40 000	88,180 40 000	88,180 40 000	88,180 40 000	62,965 28 560	48,105 21 820	39,000 17 690	31,305 14 200	27,405 12 430	21,515 9 760	17,745 8 050	15,565 7 060	13,715 6 220	12,125 5 500		
197 ft 60.0m	88,180 lbs — 53 ft 40 000 kg — 16.2m	lbs kg	88,180 40 000	88,180 40 000	88,180 40 000	88,180 40 000	88,180 40 000	69,050 31 320	52,930 24 010	43,055 19 530	34,700 15 740	30,490 13 830	24,095 10 930	19,995 9 070	17,635 8 000				
157 ft 48.0m	88,180 lbs — 56 ft 40 000 kg — 17.1m	lbs kg	88,180 40 000	88,180 40 000	88,180 40 000	88,180 40 000	88,180 40 000	73,545 33 360	56,505 25 630	46,055 20 890	37,235 16 890	32,780 14 870	26,015 11 800						
118 ft 36.0m	88,180 lbs — 59 ft 40 000 kg — 18.0m	lbs kg	88,180 40 000	88,180 40 000	88,180 40 000	88,180 40 000	88,180 40 000	77,890 35 330	59,945 27 190	48,965 22 210	39,680 18 000								

4-Part Line



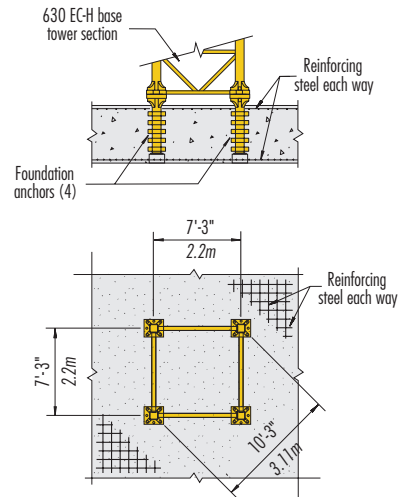
Foundation Details



with 550 HC Tower Section
on concrete slab

Elevation

Plan View



with 630 EC-H Base Section
on concrete slab

Hoist Speed and Capacity

Morrow offers the **LIEBHERR** 630 EC-H with a variety of alternative hoist units. For specific information regarding line speeds and lifting capacities, please contact a Morrow representative.

Motor Information

Drive Unit	Horsepower	Kilowatts	Speed	
Trolley (1st gear)	23.5 hp	17.5 kW	10 - 89 fpm	3 - 27 m/min
Trolley (2nd gear)			22 - 220 fpm	6.7 - 67 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	0 - 82 fpm	0 - 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.

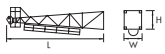
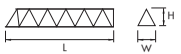
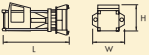
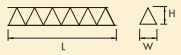
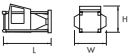
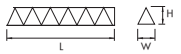
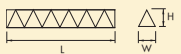
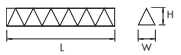
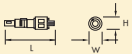
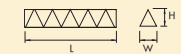
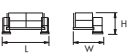
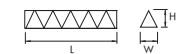
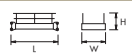
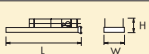
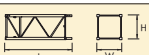
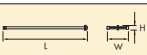
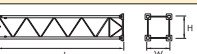
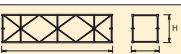
Service size: 300 Amperes with 147 hp (110 kW) 4-speed AC hoist.

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 500 kW.
- 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	13,450 lbs 6 100 kg	Jib Butt Section ① #611	 40'-5" x 6'-6" x 7'-8" 12.31m x 1.98m x 2.34m	10,140 lbs 4 600 kg
Slewing Assembly (Complete) ²	 21'-2" x 9'-9" x 10'-5" 6.45m x 2.98m x 3.17m	47,400 lbs 21 500 kg	Jib Section ② #621	 40'-5" x 5'-10" x 7'-4" 12.31m x 1.77m x 2.23m	9,040 lbs 4 100 kg
Slewing Assembly Upper Part ³	 15'-8" x 9'-10" x 9'-5" 4.77m x 3.0m x 2.86m	20,060 lbs 9 100 kg	Jib Section ③ #631	 40'-5" x 5'-10" x 6'-5" 12.31m x 1.77m x 1.96m	6,435 lbs 2 920 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'-5" 12.27m x 1.77m x 1.96m	5,975 lbs 2 710 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'-5" 12.27m x 1.77m x 1.96m	5,885 lbs 2 670 kg
Slewing Gears (2) (each)	 6'-11" x 2'-0" x 2'-0" 2.12m x 0.6m x 0.6m	2,645 lbs 1 200 kg	Jib Section ⑥ #634	 33'-9" x 5'-10" x 6'-5" 10.29m 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'-5" 10.25m x 1.77m x 1.96m	2,625 lbs 1 190 kg
AC Hoist Unit w/Frame ⁴ 147 hp (110 kW)	 11'-8" x 9'-4" x 8'-4" 3.56m x 2.84m x 2.54m	16,865 lbs 7 650 kg	Jib Tip Section ⑧ #641	 8'-5" x 5'-10" x 7'-5" 2.56m x 1.77m x 2.25m	1,190 lbs 540 kg
AC Hoist Unit w/Frame ⁴ 108 hp (80 kW)	 11'-8" x 9'-4" x 8'-4" 3.56m x 2.84m x 2.54m	16,865 lbs 7 650 kg	Jib Assembly (Part 1) ¹⁰ for 157-ft to 262-ft jibs	①② 78'-9" x 6'-6" x 7'-8" 24.0m x 1.98m x 2.34m	35,275 lbs 16 000 kg
Counterjib Section #1 ⁵ (Inner)	 22'-8" x 6'-6" x 6'-1" 6.9m x 1.98m x 1.85m	7,605 lbs 3 450 kg	Jib Assembly (Part 2) ¹¹ 262-ft (80.0m)	③④⑤⑥⑦⑧ 189'-4" x 5'-10" x 7'-5" 57.7m x 1.77m x 2.25m	30,865 lbs 14 000 kg
Counterjib Section #2 ⁵ (Intermediate)	 17'-1" x 6'-3" x 6'-1" 5.2m x 1.9m x 1.85m	5,950 lbs 2 700 kg	Jib Assembly (Part 2) ¹¹ 230-ft (70.0m)	③④⑤⑥⑧ 156'-6" x 5'-10" x 7'-5" 47.7m x 1.77m x 2.25m	25,795 lbs 11 700 kg
Counterjib Section #3 ⁵ (Outer)	 30'-3" x 8'-1" x 6'-1" 9.21m x 2.46m x 1.85m	14,990 lbs 6 800 kg	Jib Assembly (Part 2) ¹¹ 197-ft (60.0m)	③④⑤⑧ 123'-8" x 5'-10" x 7'-5" 37.7m x 1.77m x 2.25m	21,825 lbs 9 900 kg
Counterjib A ⁶ (1-3)	 53'-10" x 8'-1" x 6'-1" 16.4m x 2.46m x 1.85m	23,810 lbs 10 800 kg	Jib Assembly (Part 2) ¹¹ 157-ft (48.0m)	③⑤⑧ 84'-4" x 5'-10" x 7'-5" 25.7m x 1.77m x 2.25m	15,210 lbs 6 900 kg
Counterjib B ⁷ (1-2-3)	 70'-3" x 8'-1" x 6'-1" 21.4m x 2.46m x 1.85m	30,645 lbs 13 900 kg	Jib Assembly (Part 1A) ¹² for 118-ft jib	①② 78'-9" x 6'-6" x 7'-8" 24.0m x 1.98m x 2.34m	33,070 lbs 15 000 kg
Counterjib C ⁸ (1-2-2-3)	 86'-7" x 8'-1" x 6'-1" 26.4m x 2.46m x 1.85m	37,480 lbs 17 000 kg	Jib Assembly (Part 2A) ¹³ 118-ft (36.0m)	③⑧ 44'-11" x 5'-10" x 7'-5" 13.7m x 1.77m x 2.25m	8,600 lbs 3 900 kg
Standard Tower Section 550 HC (Pin/Pin)	 20'-7" x 7'-11" x 7'-11" 6.28m x 2.41m x 2.41m	14,155 lbs 6 420 kg	Jib A-frame for 157-ft to 262-ft jibs	 26'-11" x 4'-11" x 1'-0" 8.2m x 1.5m x 0.3m	1,785 lbs 810 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 10'-9" 1.37m x 0.28 x 3.27m	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 14'-7" 1.37m x 0.28 x 4.44m	8,730 lbs 3 960 kg
Trolley (2) (each)	 10'-8" x 6'-8" x 6'-0" 3.25m x 2.02m x 1.83m	1,875 lbs 850 kg	Hook Block (2) with hook bar and hook	 10'-6" x 1'-8" x 7'-7" 3.2m x 0.5m x 2.3m	4,410 lbs 2 000 kg

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

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. Climbing shoes are detachable; deduct 485 lbs (220 kg) each. Dimensions above are without climbing shoes. To facilitate erection/dismantlement process, the Slewing Assembly can be broken down into various components. See 630EC-H Operations 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 & hardware. Counterjib section #3 also includes trolley drive unit.

⁶ Counterjib A includes counterjib sections #1 and #3, handrails, hardware, trolley drive unit and pendant bars.

⁷ Counterjib B includes counterjib sections #1, #2 and #3, handrails, hardware, trolley drive & pendants.

⁸ Counterjib C includes counterjib sections #1, #2 (2) and #3, handrails, hardware, trolley drive & 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 40-ton hook assembly.

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 40-ton hook assembly.

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