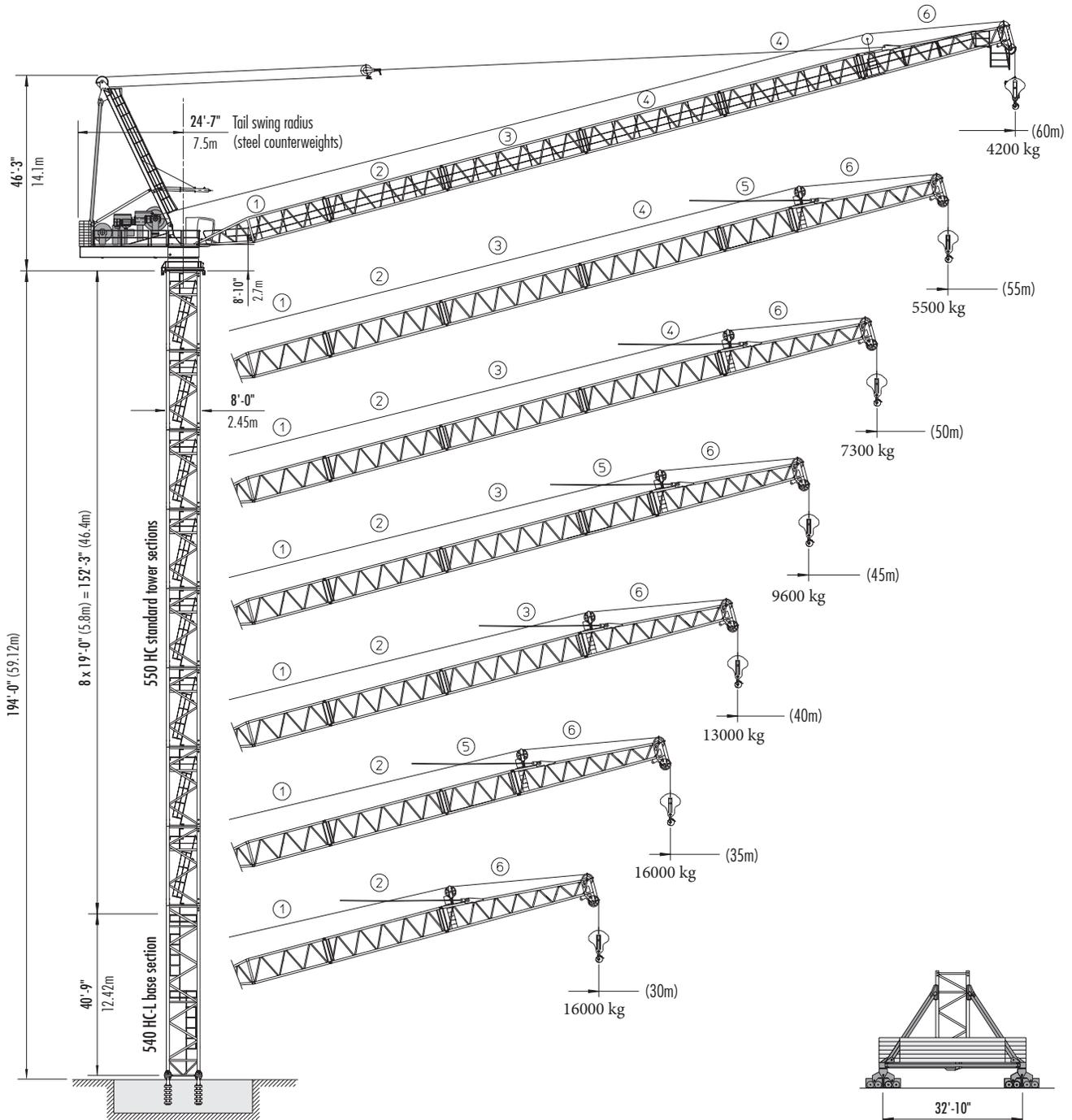


355 HC-L 16/32 Litronic® LIEBHERR Luffing Boom Tower Crane



Configuration I

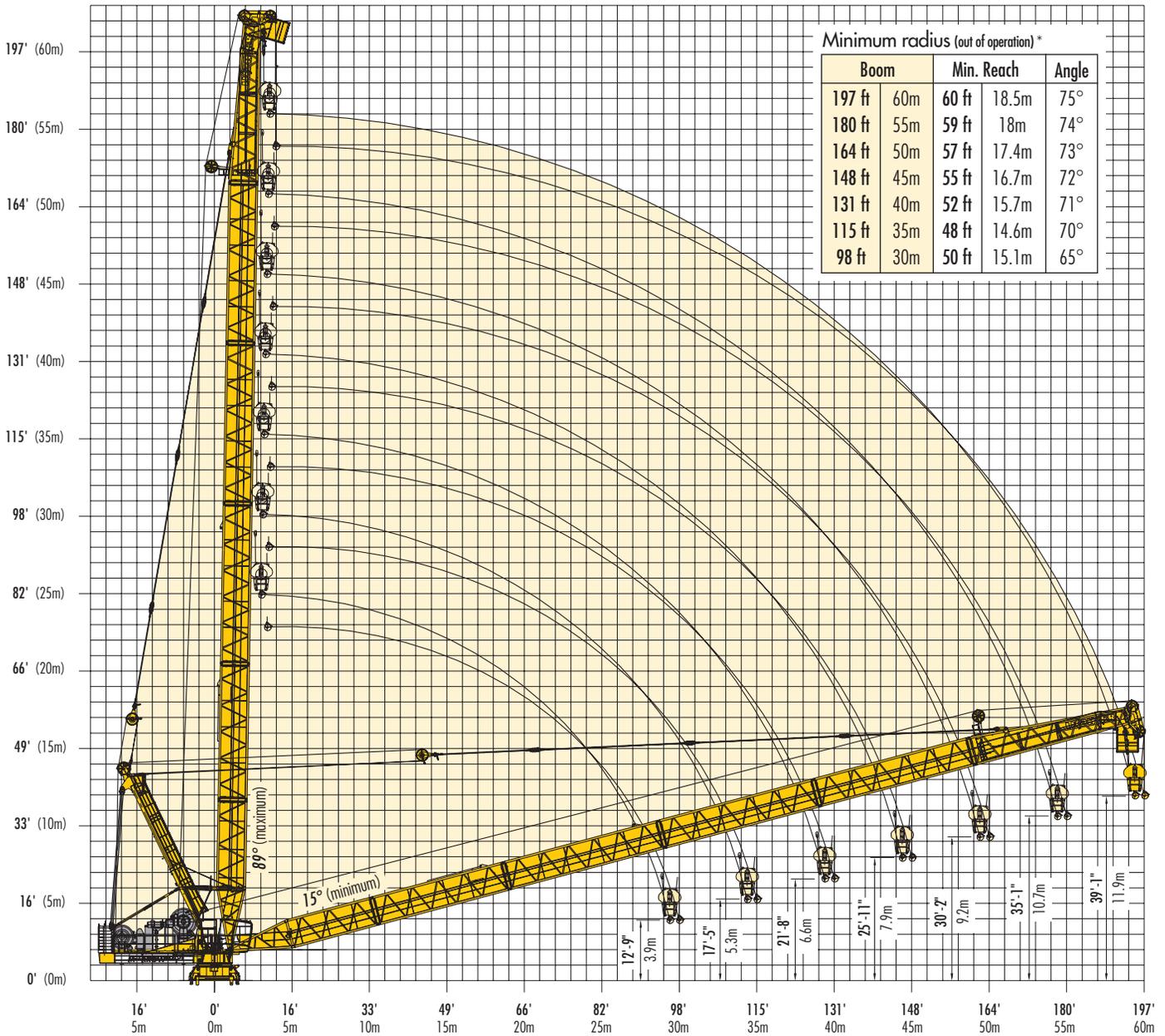
550 HC/540 HC-L Tower
194 ft (59.1 m) max. hook height
on concrete footing



6-8 Resolution Dr (P O Box 1396) Unanderra NSW 2526
Ph: 02 4271 4343 Fax: 02 4271 4746 Mobile: 0412 591 833
ABN: 50 095 255 628 ACN: 095 255 628

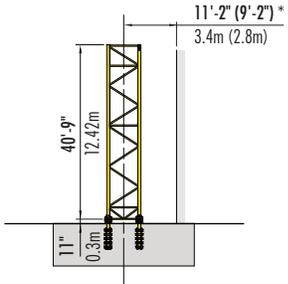
Radius and Hoisting Heights

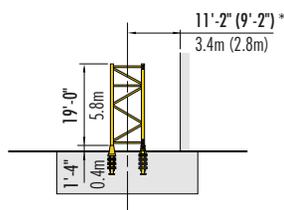
Grid: 1 meter x 1 meter



* NOTE: Out of operation boom position from 15° to 70°. Out of operation boom position dependent on boom length and number of tower sections installed.

Tower Heights

Configuration I							
Tower Base Components	540 HC-L on 40'-9" (12.42m) base section 						
No. of Tower Sections	Boom Length						
	98 ft → 131 ft	30m → 40m	148 ft → 164 ft	45m → 50m	180 ft → 197 ft	55m → 60m	
0	41.7 ft	12.7m	41.7 ft	12.7m	41.7 ft	12.7m	
1	60.7 ft	18.5m	60.7 ft	18.5m	60.7 ft	18.5m	
2	79.7 ft	24.3m	79.7 ft	24.3m	79.7 ft	24.3m	
3	98.8 ft	30.1m	98.8 ft	30.1m	98.8 ft	30.1m	
4	117.8 ft	35.9m	117.8 ft	35.9m	117.8 ft	35.9m	
5	136.8 ft	41.7m	136.8 ft	41.7m	136.8 ft	41.7m	
6	155.8 ft	47.5m	155.8 ft	47.5m	155.8 ft	47.5m	
7	174.9 ft	53.3m	174.9 ft	53.3m	174.9 ft	53.3m	
8	193.9 ft	59.1m	193.9 ft	59.1m	193.9 ft	59.1m	
9	212.9 ft	64.9m	212.9 ft	64.9m	—	—	
10	231.9 ft	70.7m	—	—	—	—	

Configuration II								
Tower Base Components	Std. 550 HC Tower section 							
No. of Tower Sections	Boom Length							
	98 ft → 115 ft	30m → 35m	131 ft → 148 ft	40m → 45m	164 ft → 180 ft	50m → 55m	197 ft	60m
0	1.3 ft	0.4m	1.3 ft	0.4m	1.3 ft	0.4m	1.3 ft	0.4m
1	20.3 ft	6.2m	20.3 ft	6.2m	20.3 ft	6.2m	20.3 ft	6.2m
2	39.4 ft	12m	39.4 ft	12m	39.4 ft	12m	39.4 ft	12m
3	58.4 ft	17.8m	58.4 ft	17.8m	58.4 ft	17.8m	58.4 ft	17.8m
4	77.4 ft	23.6m	77.4 ft	23.6m	77.4 ft	23.6m	77.4 ft	23.6m
5	96.5 ft	29.4m	96.5 ft	29.4m	96.5 ft	29.4m	96.5 ft	29.4m
6	115.5 ft	35.2m	115.5 ft	35.2m	115.5 ft	35.2m	115.5 ft	35.2m
7	134.5 ft	41m	134.5 ft	41m	134.5 ft	41m	134.5 ft	41m
8	153.5 ft	46.8m	153.5 ft	46.8m	153.5 ft	46.8m	153.5 ft	46.8m
9	172.6 ft	52.6m	172.6 ft	52.6m	172.6 ft	52.6m	—	—
10	191.6 ft	58.4m	191.6 ft	58.4m	—	—	—	—
11	210.6 ft	64.2m	—	—	—	—	—	—

NOTE: ¹Lower top climbing unit to base of tower prior to operating crane.

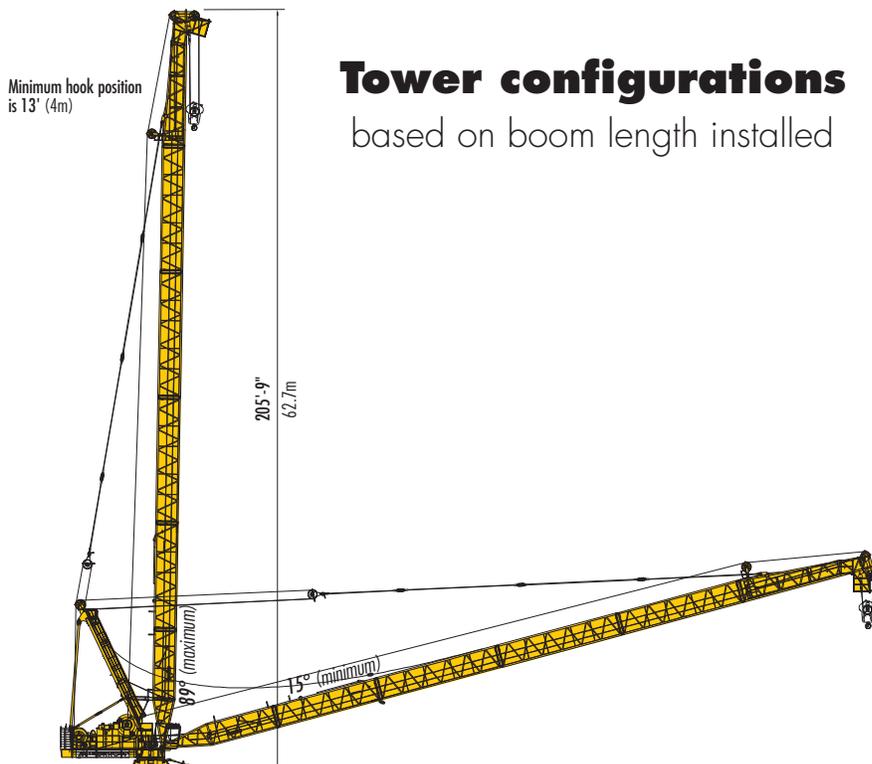
Alternate tower combinations are possible.

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

Specifications subject to change without prior notice.

Tower configurations

based on boom length installed



Boom at 15° (1-part operation)

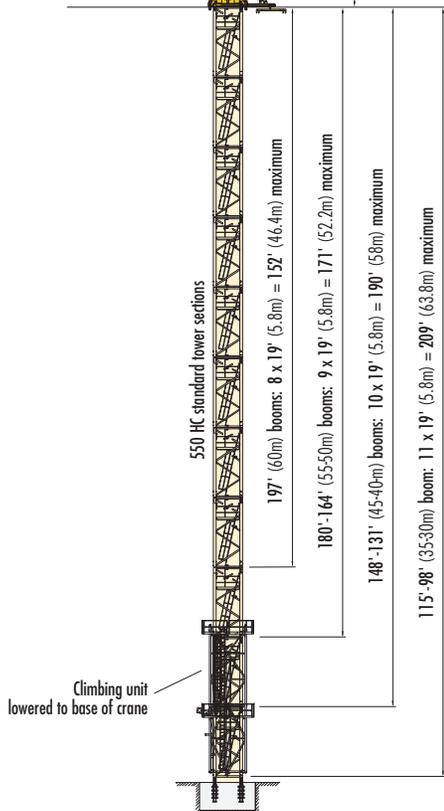
Boom	Hook Reach	Hoisting Height
197 ft 60m	197 ft 60m	39 ft 11.9m
180 ft 55m	180 ft 55m	35 ft 10.7m
164 ft 50m	164 ft 50m	30 ft 9.2m
148 ft 45m	148 ft 45m	26 ft 7.9m
131 ft 40m	131 ft 40m	22 ft 6.6m
115 ft 35m	115 ft 35m	17 ft 5.3m
98 ft 30m	98 ft 30m	13 ft 3.9m

Boom at 75° (1-part operation)

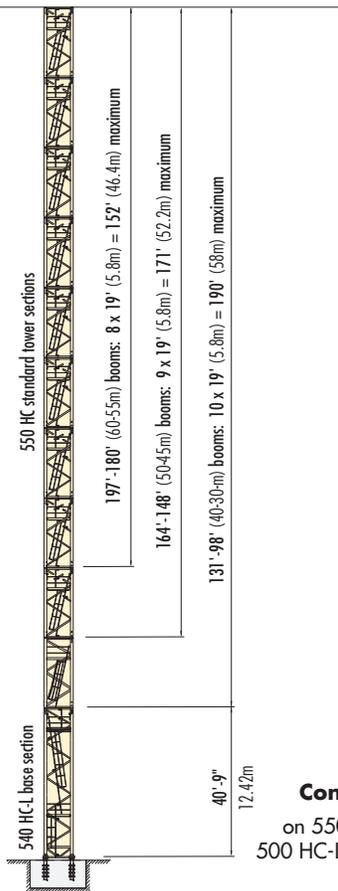
Boom	Hook Reach	Hoisting Height
197 ft 60m	48 ft 14.7m	174 ft 53m
180 ft 55m	44 ft 13.3m	157 ft 48m
164 ft 50m	39 ft 11.9m	141 ft 43m
148 ft 45m	35 ft 10.6m	125 ft 38m
131 ft 40m	30 ft 9.2m	108 ft 32.9m
115 ft 35m	26 ft 7.9m	91 ft 27.8m
98 ft 30m	21 ft 6.5m	75 ft 22.8m

Boom at 89° (1-part operation)

Boom	Hook Reach	Hoisting Height
197 ft 60m	13 ft 4m	177 ft 53.9m
180 ft 55m	12.8 ft 3.9m	160 ft 48.8m
164 ft 50m	12.5 ft 3.8m	143 ft 43.5m
148 ft 45m	12.1 ft 3.7m	126 ft 38.4m
131 ft 40m	11.8 ft 3.6m	108 ft 32.9m
115 ft 35m	11.5 ft 3.5m	92 ft 28m
98 ft 30m	11.1 ft 3.4m	75 ft 22.8m



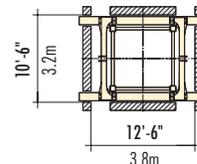
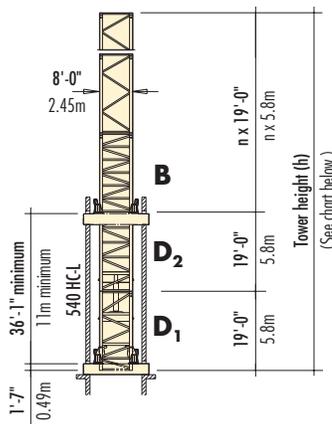
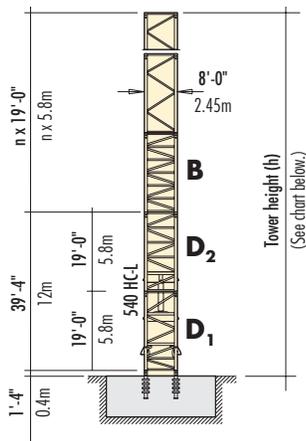
Configuration II
on 550 HC tower



Configuration I
on 550 HC tower with
500 HC-L or 540 HC-L Base

Climbing Inside Structure

550 HC tower on 540 HC-L climbing elements

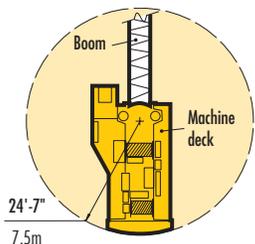


Key: **B** = Reinforced tower section - **D₁** = Bottom half of D section with hydraulics - **D₂** = Top half of D section

No. of Tower Sections (n)	Boom Length								Boom Length							
	98 ft	30m	115 ft → 131 ft	35m → 40m	148 ft → 180 ft	45m → 55m	197 ft → 213 ft	60m → 65m	98 ft	30m	115 ft → 131 ft	35m → 40m	148 ft → 180 ft	45m → 55m	197 ft → 213 ft	60m → 65m
0	39.4 ft	12m	39.4 ft	12m	39.4 ft	12m	39.4 ft	12m	38.1 ft	11.6m	38.1 ft	11.6m	38.1 ft	11.6m	38.1 ft	11.6m
1	58.4 ft	17.8m	58.4 ft	17.8m	58.4 ft	17.8m	58.4 ft	17.8m	57.1 ft	17.4m	57.1 ft	17.4m	57.1 ft	17.4m	57.1 ft	17.4m
2	77.4 ft	23.6m	77.4 ft	23.6m	77.4 ft	23.6m	77.4 ft	23.6m	76.1 ft	23.2m	76.1 ft	23.2m	76.1 ft	23.2m	76.1 ft	23.2m
3	96.5 ft	29.4m	96.5 ft	29.4m	96.5 ft	29.4m	96.5 ft	29.4m	95.1 ft	29m	95.1 ft	29m	95.1 ft	29m	95.1 ft	29m
4	115.5 ft	35.2m	115.5 ft	35.2m	115.5 ft	35.2m	115.5 ft	35.2m	114.2 ft	34.8m	114.2 ft	34.8m	114.2 ft	34.8m	114.2 ft	34.8m
5	135.5 ft	41m	135.5 ft	41m	135.5 ft	41m	135.5 ft	41m	133.2 ft	40.6m	133.2 ft	40.6m	133.2 ft	40.6m	133.2 ft	40.6m
6	153.5 ft	46.8m	153.5 ft	46.8m	153.5 ft	46.8m	153.5 ft	46.8m	152.2 ft	46.4m	152.2 ft	46.4m	152.2 ft	46.4m	152.2 ft	46.4m
7	172.6 ft	52.6m	172.6 ft	52.6m	172.6 ft	52.6m	—	—	171.3 ft	52.2m	171.3 ft	52.2m	171.3 ft	52.2m	171.3 ft	52.2m
8	191.6 ft	58.4m	191.6 ft	58.4m	—	—	—	—	190.3 ft	58m	190.3 ft	58m	190.3 ft	58m	—	—
9	210.6 ft	64.2m	—	—	—	—	—	—	209.3 ft	63.8m	209.3 ft	63.8m	—	—	—	—
10	—	—	—	—	—	—	—	—	228.3 ft	69.6m	—	—	—	—	—	—

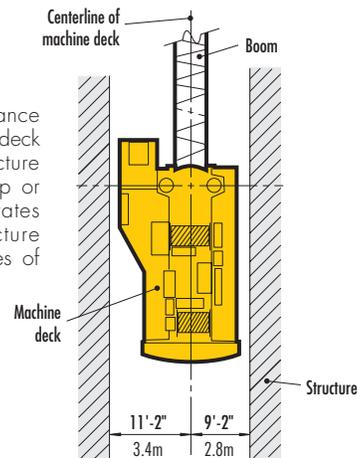
NOTE: The inside climbing views shown above are examples of a typical installation. Please note, however, that factors determining installation may vary due to job site specific conditions.

PLAN VIEW – showing tail swing radius for crane configuration using steel counterweights.



TAIL SWING RADIUS
(Steel counterweights)

***NOTE** Allow for clearance between crane machine deck and any adjacent structure when climbing crane up or down. This view illustrates minimum crane-to-structure clearances for both sides of machine deck.



CLEARANCE REQUIREMENTS
Plan view

Radius and capacities one-part operation

m	m/kg	m/kg													
		30,0	32,5	35,0	37,5	40,0	42,5	45,0	47,5	50,0	52,5	55,0	57,5	60,0	
60,0	4,0-28,2 16000	14600	12940	11530	10330	9290	8380	7580	6870	6230	5650	5130	4650	4200	
55,0	4,0-30,7 16000	16000	14640	13010	11600	10390	9330	8390	7560	6810	6130	5500			
50,0	4,0-32,9 16000	16000	16000	14450	12840	11450	10230	9150	8190	7300					
45,0	4,0-35,2 16000	16000	16000	16000	14200	12480	10970	9600							
40,0	4,0-37,2 16000	16000	16000	16000	15660	13000									
35,0	4,0-35,0 16000	16000	16000	16000											
30,0	4,0-30,0 16000	16000													

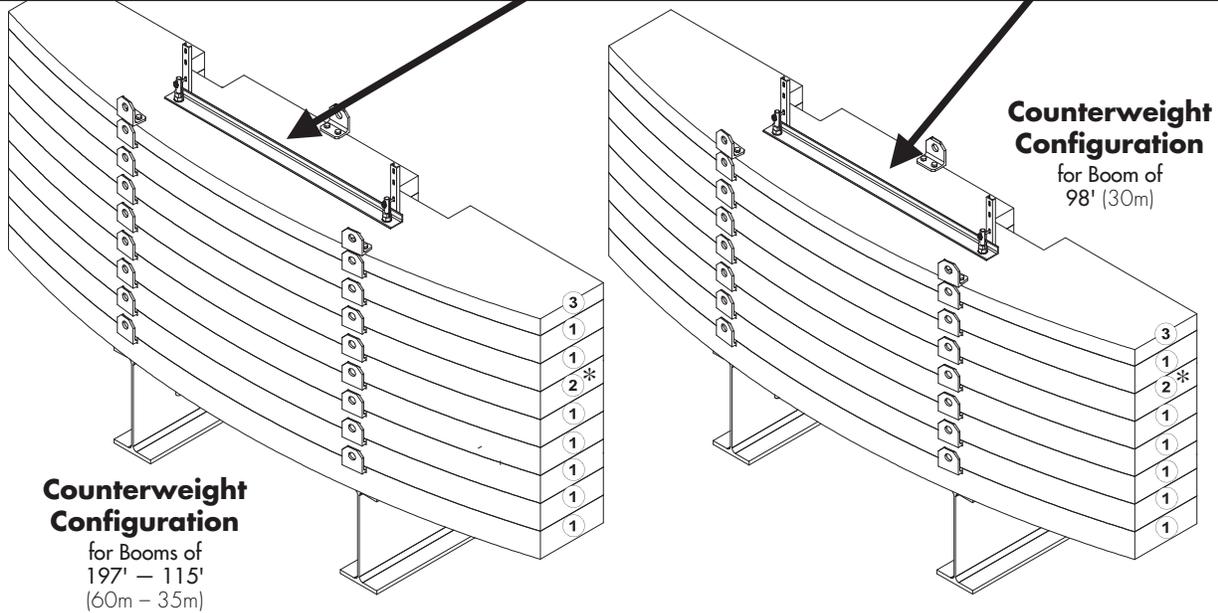
Radius and capacities two-part operation

m	m/kg	m/kg																
		15,0	18,0	21,0	24,0	27,0	30,0	32,0	35,0	37,0	40,0	42,0	45,0	47,0	50,0	52,0	55,0	
55,0	4,0-12,6 32000	25380	19990	16340	13720	11740	10190	9330	8240	7620	6810	6330	5710	5340	4840	4540	54,4 m	4200
50,0	4,0-13,7 32000	28410	22430	18390	15480	13280	11560	10600	9390	8700	7800	7280	6580	6160	49,4 m	5700		
45,0	4,0-14,9 32000	31730	25120	20650	17430	15000	13090	12040	10700	9930	8930	8340	44,4 m	7700				
40,0	4,0-15,8 32000	32000	27180	22460	19050	16480	14460	13340	11910	11080	39,4 m	10200						
35,0	4,0-16,6 32000	32000	28980	24040	20470	17770	15650	14460	34,4 m	13200								
30,0	4,0-17,5 32000	32000	30920	25650	21830	18920	29,4 m	17000										

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.

Counterweights (Steel)

Boom length	197' – 115' (60m – 35m)	98' (30m)
No. of counterweights required	7 x ① + 1 x ② + 1 x ③	6 x ① + 1 x ② + 1 x ③
Total weight	92,810 lbs	82,010 lbs
Total weight	42 100 kg	37 200 kg

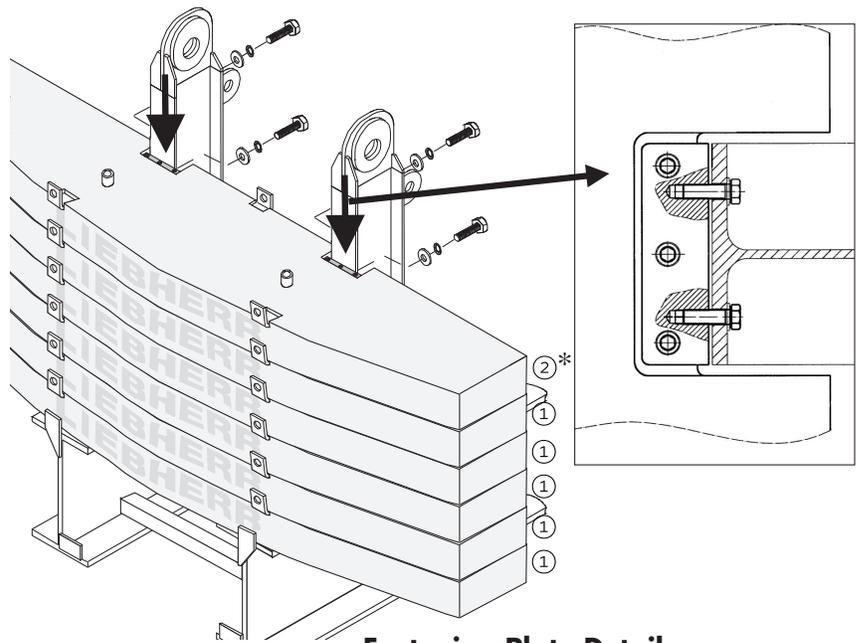


***IMPORTANT:** Six (6) counterweights must be installed and secured before the boom is attached. Ballast blocks ② with fastening plates secured in the openings shown must be in the sixth position.

NOTE: Weights of the steel counterweight blocks are: ①=10,800 lbs (4 900 kg), ②=10,800 lbs (4 900 kg) and ③=6,390 lbs (2 900 kg) each.

Block type 2 is installed after placing the first five type 1 blocks. Block type 2 has two fastening plates that bolt the six initial counterweight blocks to the gear platform prior to attaching the boom. Once the boom is installed, the rest of the counterweight blocks are to be added.

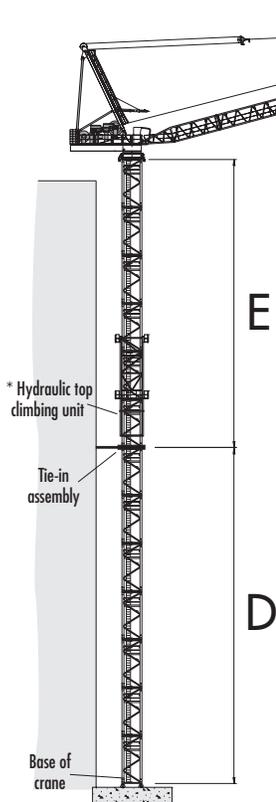
Counterweight figures displayed in the chart above are for crane with hoist unit WiW 300 VZ 412. If another hoist unit is installed, refer to the 355 HC-L 16 Operation Manual for information.



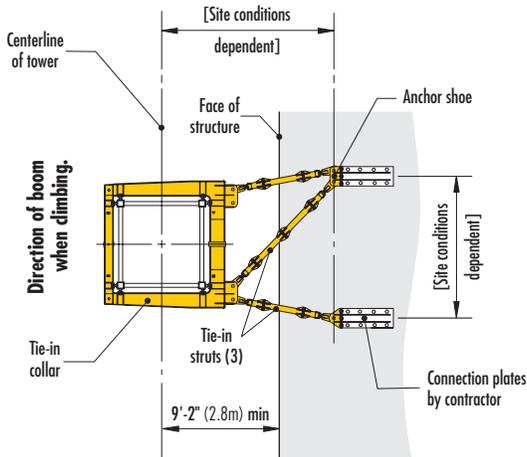
Tie-in details

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

* Lower the top climbing unit to the uppermost tie-in prior to operating crane at maximum tower configuration.

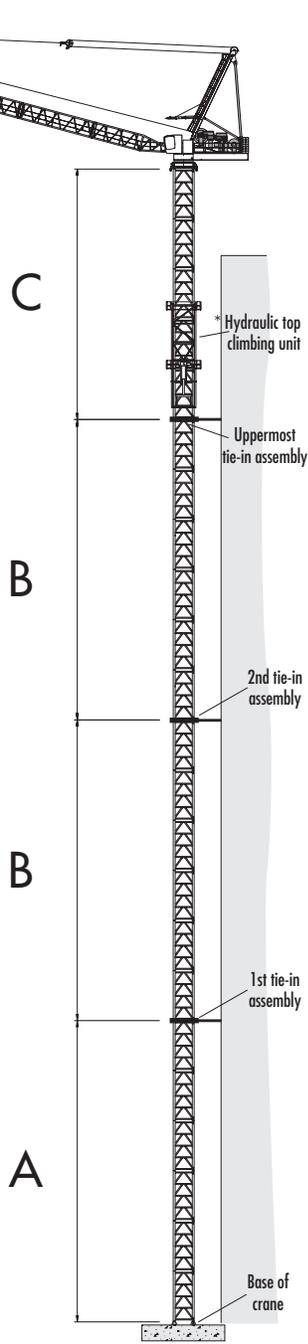


with 550 HC Tower
Tied to structure with 1 tie-in



TIE-IN ASSEMBLY
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 conditions.



with 550 HC tower
Tied to structure with two or more tie-ins

Tower sections permitted with 1 tie-in **

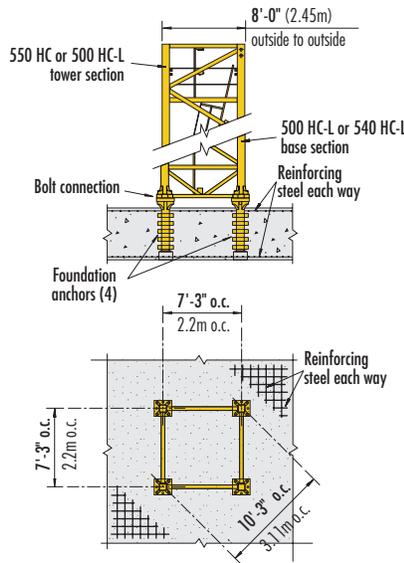
Boom Length	197' (60m)	180' (55m)	164' (50m)	148' (45m)	131' (40m)	115' (35m)	98' (30m)
Above top tie-in (E)	7 max-3 min	7 max-3 min	8 max-3 min	8 max-3 min	9 max-3 min	9 max-3 min	10 max-3 min
Base to 1st tie-in (D)	9 max-4 min						

Tower sections permitted with 2 or more tie-ins **

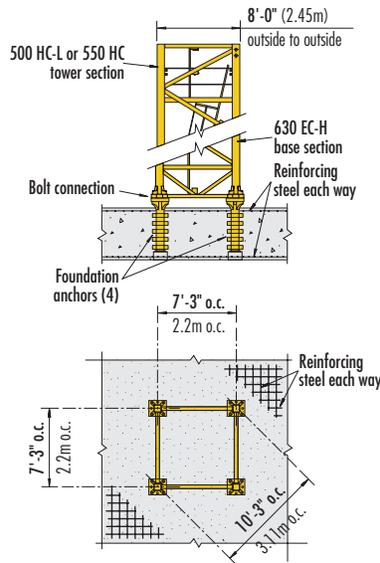
Boom Length	197' (60m)	180' (55m)	164' (50m)	148' (45m)	131' (40m)	115' (35m)	98' (30m)
Above top tie-in (C)	6 max-3 min	7 max-3 min	7 max-3 min	8 max-3 min	8 max-3 min	9 max-3 min	9 max-3 min
Between tie-ins (B)	9 max-4 min						
Base to 1st tie-in (A)							

**NOTE! Charts above apply only to 355 HC-L 16/32 configurations with 550 HC tower. Other configurations available. Restrictions may apply.

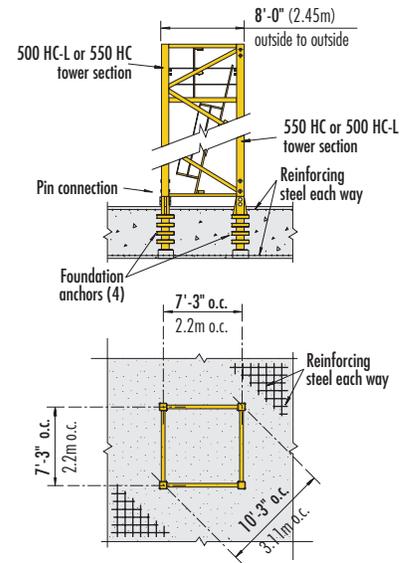
Foundation details on concrete footing



with 500 HC-L or 540 HC-L Base Section

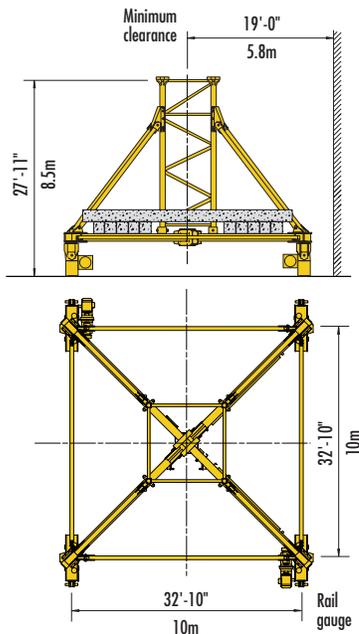


with 630 EC-H Base Section

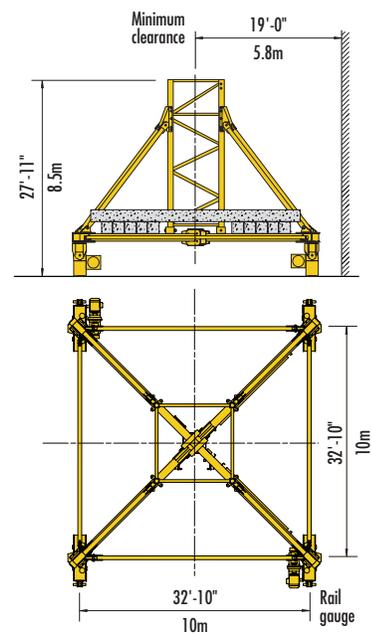


with 550 HC or 500 HC-L Tower Section

Undercarriage details on rail-travelling undercarriage



630 EC-H



550 HC

NOTE: For information regarding rail-travelling, static undercarriages and central ballast configurations, see 357 HC-L Litronic Operation Manual.

Hoist speed and capacity

Hoist Unit	WiW 300 VZ 412	1-Part Line		
147 hp (110 kW) AC hoist unit Variable frequency drive 3-speed gearbox Electromagnetic gear shifting 1P - 4L435 2P - 4L217	Speed	Capacity	Line Speed	
	1	up to 16,000 kg up to 7,500 kg	@ 34 m/min @ 62 m/min	
	2	up to 8,900 kg up to 3,600 kg	@ 58 m/min @ 106 m/min	
	3	up to 4,700 kg up to 1,000 kg	@ 97 m/min @ 171 m/min	
	2-Part Line			
	1	up to 32,000 kg up to 15,500 kg	@ 17 m/min @ 31 m/min	
	2	up to 18,300 kg up to 8,000 kg	@ 29 m/min @ 53 m/min	
	3	up to 10,000 kg up to 3,900 kg	@ 49 m/min @ 88 m/min	

NOTE: Capacities and line speeds indicated will vary depending on the amount of hoist rope installed. This crane model may be equipped with a hoist unit other than that specified in the data above. To verify, check the serial number of the crane and refer to the Liebherr 355 HC-L Operation Manual for additional information.

Motor information

Drive Unit	Horsepower	Kilowatts	Speed*
Luffing* (VFD)	147 hp	110 kW	1.7 min
Swing (VFD)	2 x 10 hp	2 x 7.5 kW	0.7 rpm
Rail travelling	Information available upon request		

* **NOTE:** Luffing speed shown is for a typical working range of 15° to 75° with load. Luffing speeds are variable. Factors such as hook load, boom length will affect speed.

Power requirements

Power supply: 3-phase; 3-wire plus ground; no Neutral.

480 V phase-phase, 277 V each phase to ground with 120° phase shift between phases.

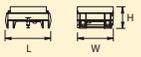
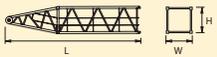
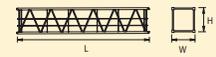
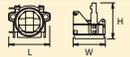
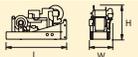
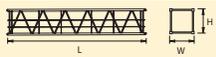
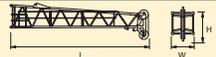
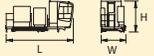
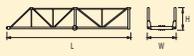
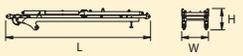
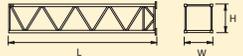
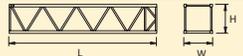
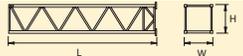
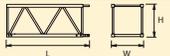
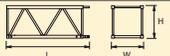
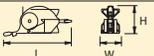
Service size: 300 Amperes

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 350 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.

Component List

Description	Dimensions L x W x H	Weight	Description	Dimensions L x W x H	Weight
Slewing Ring Support 	9'-6" x 8'-1" x 7'-1" 2.9m x 2.47m x 2.15m	9,410 lbs 4 270 kg	Butt Section ① 611 	32'-6" x 6'-3" x 6'-3" 9.91m x 1.9m x 1.9m	5,620 lbs 2 550 kg
Connection Brackets (4) (each) 	3'-8" x 2'-4" x 10" 1.13m x 0.7m x .25m	470 lbs 215 kg	Boom Section ② 612 	29'-4" x 6'-3" x 6'-11" 8.95m x 1.9m x 2.1m	4,670 lbs 2 120 kg
Slewing Platform ¹ plus swing motors 	9'-8" x 7'-5" x 6'-1" 2.95m x 2.27m x 1.85m	16,250 lbs 7 370 kg	Boom Section ③ 621 	34'-9" x 6'-3" x 6'-11" 10.6m x 1.9m x 2.1m	4,960 lbs 2 250 kg
Machine Deck with electrical panels 	22'-8" x 7'-3" x 8'-0" 6.9m x 2.22m x 2.45m	19,180 lbs 8 700 kg	Boom Section ④ 631 	34'-9" x 6'-3" x 6'-3" 10.6m x 1.9m x 1.9m	3,640 lbs 1 650 kg
Hoist Gear ² 147 hp (110 kW) 	10'-6" x 8'-0" x 5'-9" 3.2m x 2.45m x 1.75m	14,990 lbs 6 800 kg	Boom Section ⑤ 622 	18'-0" x 6'-3" x 6'-3" 5.5m x 1.9m x 1.9m	1,980 lbs 900 kg
Luffing Gear (w/wire rope) 147 hp (110 kW) 	9'-2" x 7'-3" x 5'-3" 2.8m x 2.2m x 1.6m	11 020 lbs 5 000 kg	Tip Section ⑥ 641 	36'-5" x 6'-7" x 6'-11" 11.1m x 2m x 2.1m	6,720 lbs 3 050 kg
Operator's Cab with access platform 	17'-5" x 6'-3" x 8'-5" 5.3m x 1.9m x 2.57m	3,640 lbs 1 650 kg	Top Climbing Unit ⁴ Panels (2) 	41'-4" x 9'-8" x 5'-9" 12.6m x 2.95m x 1.75m	17,415 lbs 7 900 kg
Platforms (3) for machine deck 	18'-1" x 3'-7" x 6'-1" 5.5m x 1.1m x 1.85m	1,650 lbs 750 kg	Top Climbing Unit ⁴ Hydraulics/etc. 	8'-6" x 4'-11" x 2'-0" 2.6m x 1.5m x 0.6m	6,830 lbs 3 100 kg
Gantry ³ (complete) 	39'-3" x 7'-7" x 4'-11" 11.97m x 2.3m x 1.5m	12,200 lbs 5 535 kg	Boom Assembly Part 1 ⁵ 197-ft (60m) boom 	95'-2" x 6'-3" x 6'-11" 29m x 1.9m x 2.1m	20,060 lbs 9 100 kg
Base Section 630 EC-H 	40'-9" x 8'-10" x 8'-10" 12.42m x 2.68m x 2.68m	31,010 lbs 14 065 kg	Boom Assembly Part 2 ⁶ 197-ft (60m) boom 	104'-4" x 6'-7" x 6'-11" 31.8m x 2m x 2.1m	16,090 lbs 7 300 kg
Base Section 500 HC-L 	40'-9" x 8'-10" x 8'-10" 12.42m x 2.68m x 2.68m	37,850 lbs 17 170 kg	Boom Assembly Part 1 ⁶ 180-ft (55m) – 98-ft (30m) booms 	61'-4" x 6'-3" x 6'-11" 18.7m x 1.9m x 2.1m	13,890 lbs 6 300 kg
Base Section 540 HC-L 	40'-9" x 8'-10" x 8'-10" 12.42m x 2.68m x 2.68m	31,880 lbs 14 460 kg	Boom Assembly Part 2 ⁶ 180-ft (55m) boom 	121'-5" x 6'-7" x 6'-11" 37m x 2m x 2.1m	19,840 lbs 9 000 kg
Std Tower Section 550 HC 	20'-7" x 8'-0" x 8'-0" 6.28m x 2.45m x 2.45m	14,280 lbs 6 480 kg	Boom Assembly Part 2 ⁶ 164-ft (50m) boom 	104'-4" x 6'-7" x 6'-11" 31.8m x 2m x 2.1m	17,420 lbs 7 900 kg
Long Section 550 HC 	39'-8" x 8'-0" x 8'-0" 12.1m x 2.45m x 2.45m	23,480 lbs 10 650 kg	Boom Assembly Part 2 ⁶ 148-ft (45m) boom 	87'-3" x 6'-7" x 6'-11" 26.6m x 2m x 2.1m	15,650 lbs 7 100 kg
Tower Section 500 HC-L 	20'-7" x 8'-0" x 8'-0" 6.28m x 2.45m x 2.45m	17,900 lbs 8 120 kg	Boom Assembly Complete ⁷ 131-ft (40m) boom 	131'-11" x 6'-7" x 6'-11" 40.2m x 2m x 2.1m	26,240 lbs 11 900 kg
Hook Block 	7'-10" x 4'-9" x 2'-8" 2.4m x 1.45m x 0.8m	3,420 lbs 1 550 kg	Boom Assembly Complete ⁷ 115-ft (35m) boom 	114'-10" x 6'-7" x 6'-11" 35m x 2m x 2.1m	23,150 lbs 10 500 kg
Luffing Rope Sheave Block 	4'-11" x 3'-11" x 3'-7" 1.5m x 1.2m x 1.1m	1,320 lbs 600 kg	Boom Assembly Complete ⁷ 98-ft (30m) boom 	97'-9" x 6'-7" x 6'-11" 29.8m x 2m x 2.1m	20,500 lbs 9 300 kg

NOTE: Weights and dimensions are approximate. Scale components before lifting. Consult operation manual before erecting, operating, servicing and dismantling crane.

¹ Slewing platform can be split into four parts i.e., slewing platform, slewing ring and two swing drives.

² Wire rope included. Typical rope installation; 985 feet (300m) at 2,315 lbs (1 050 kg).

³ Gantry (boom retaining frame) can be split into component parts.

⁴ Top climbing unit complete includes front and rear panel, hydraulic system, ladders and platforms with a total weight of 22,420 lbs (10 170 kg).

⁵ Boom assembly Part 1 includes boom sections 1, 2 and 3 and erection wire rope for the 197-ft (60m) boom. For all other booms, Part 1 includes boom sections 1 and 2 plus erection rope.

⁶ Boom assembly Part 2 includes boom sections and pendent bars.

⁷ Complete boom assemblies can be split into two parts.