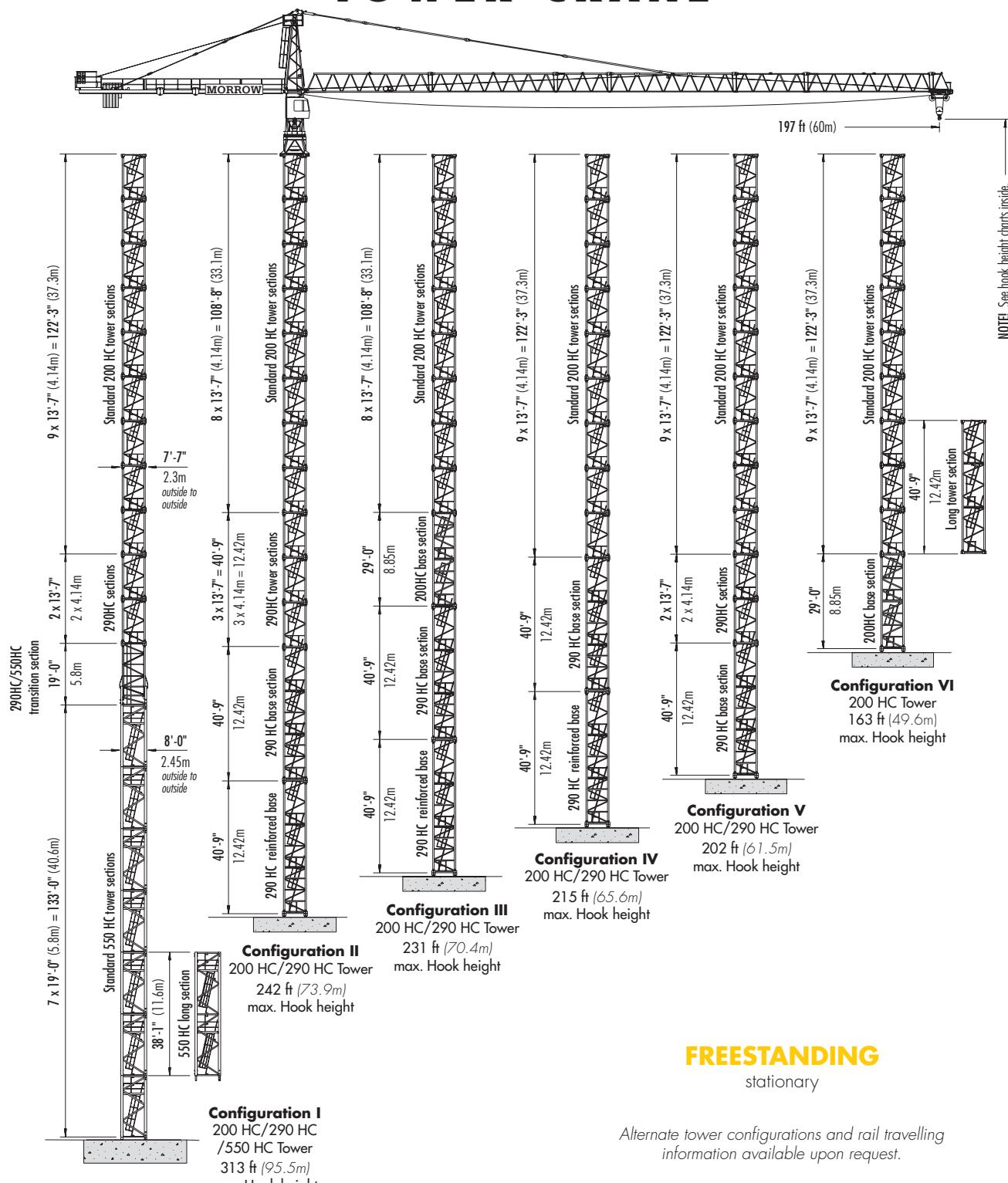


# LIEBHERR 200 HC

# **TOWER CRANE**



## **FREESTANDING** stationary

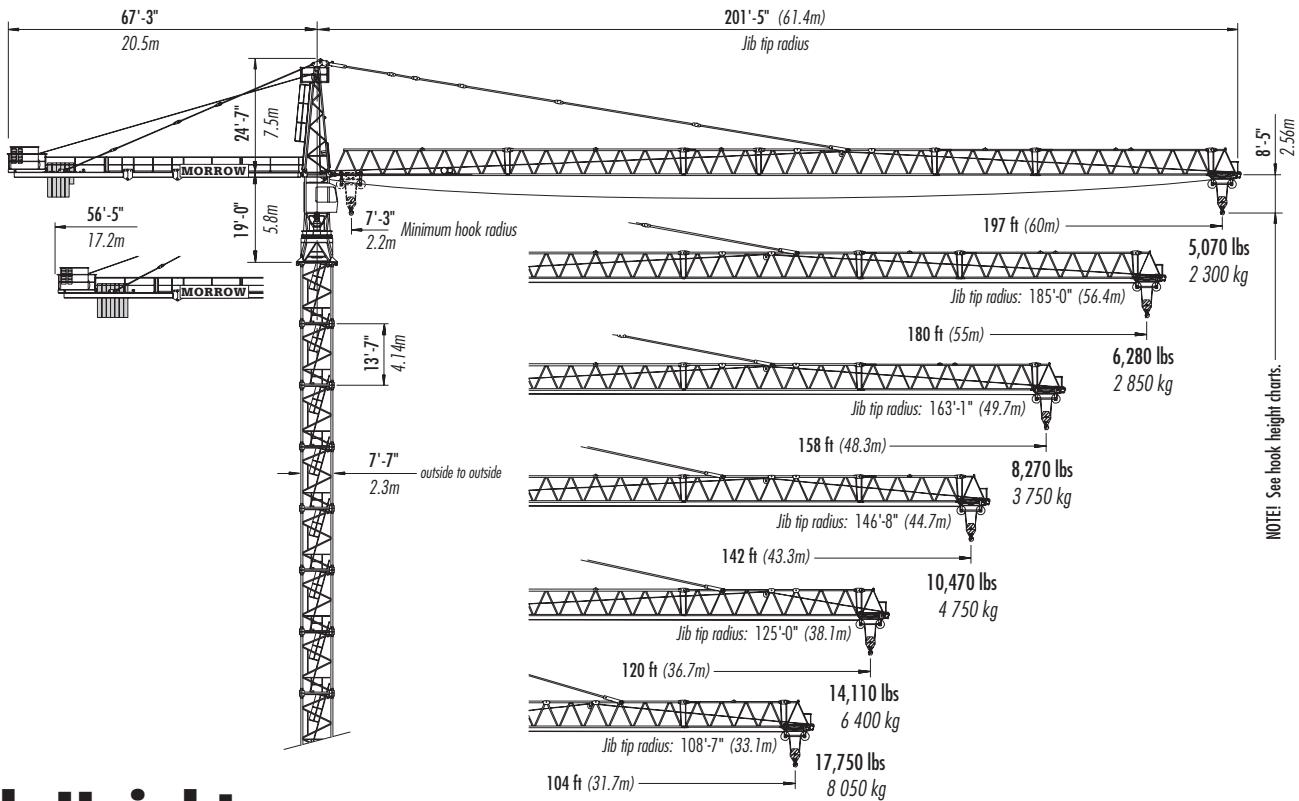
*Alternate tower configurations and rail travelling information available upon request.*

Rev 0506



# Morrow Equipment

# LIEBHERR 200 HC

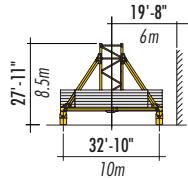
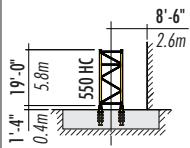


## Hook Heights

### Configuration I

#### 550 HC/290 HC /200 HC

on 19'-0" (5.8m)  
standard tower section



### Jib Layout

**NOTE!** The 197-ft (60m) jib requires installation of the 67'-3" (20.5m) counterjib. All jibs 180-ft (55m) or less require the 56'-5" (17.2m) counterjib.

Additional information regarding alternate tower configurations, counterweights, central ballast, foundation details, dimensions, reaction forces and slab opening requirements is available on request.

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

No. of Tower Elements	Tower Element Type	static concrete footing		rail-travelling undercarriage	
		feet	meters	feet	meters
1	550HC STS	31	9.3	58	17.5
2	550HC STS	50	15.1	77	23.3
3	550HC STS	69	20.9	96	29.1
4	550HC STS	88	26.7	115	34.9
5	550HC STS	107	32.5	134	40.7
6	550HC STS	126	38.3	153	46.5
7	550HC STS	145	44.1	172	52.3
8	Transition	164	49.9	191	58.1
9	290HC STS	177	54.1	204	62.3
10	290HC STS	191	58.2	218	66.4
11	200HC STS	205	62.4	232	70.6
12	200HC STS	218	66.5	245	74.7
13	200HC STS	232	70.6	259	78.8
14	200HC STS	245	74.8	272	83
15	200HC STS	259	78.9	286	87.1
16	200HC STS	273	83.1	299	91.3
17	200HC STS	286	87.2	313	95.4
18	200HC STS	300	91.3	327	99.5
19 <sup>1</sup>	200HC STS	313	95.5	340	103.7

<sup>1</sup> Remove top climbing unit prior to operating crane at specified hook height.

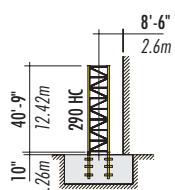
<sup>2</sup> Lower top climbing unit to base of crane prior to operating crane at specified hook height.

# LIEBHERR 200 HC

## Hook Heights

### Configuration II

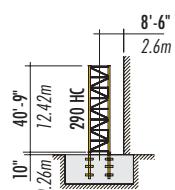
**290 HC/200 HC**  
on 40'-9" (12.42m)  
reinforced base section



No. of Tower Elements	Tower Element Type	static concrete footing	
		feet	meters
1	290HC RBS-40	52	15.9
2	290HC BS-40	93	28.4
3	290HC STS	107	32.5
4	290HC STS	120	36.6
5	290HC STS	134	40.7
6	200HC STS	147	44.9
7	200HC STS	161	49
8	200HC STS	175	53.2
9	200HC STS	188	57.4
10	200HC STS	202	61.5
11 <sup>1</sup>	200HC STS	215	65.6
12 <sup>2</sup>	200HC STS	229	69.7
13 <sup>2</sup>	200HC STS	243	73.9

### Configuration III

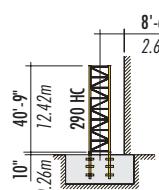
**290 HC/200 HC**  
on 40'-9" (12.42m)  
reinforced base section



No. of Tower Elements	Tower Element Type	static concrete footing	
		feet	meters
1	290HC RBS-40	52	15.9
2	290HC BS-40	93	28.4
3	200HC BS-29	122	37.3
4	200HC STS	136	41.4
5	200HC STS	149	45.5
6	200HC STS	163	49.7
7	200HC STS	177	53.8
8	200HC STS	190	58
9	200HC STS	204	62.1
10 <sup>2</sup>	200HC STS	217	66.2
11 <sup>2</sup>	200HC STS	231	70.4

### Configuration IV

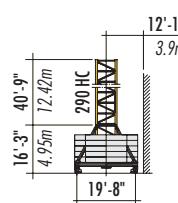
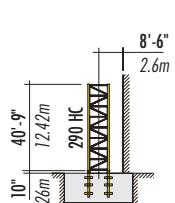
**290 HC/200 HC**  
on 40'-9" (12.42m)  
reinforced base section



No. of Tower Elements	Tower Element Type	static concrete footing	
		feet	meters
1	290HC RBS-40	52	15.9
2	290HC BS-40	93	28.4
3	200HC STS	107	32.5
4	200HC STS	120	36.6
5	200HC STS	134	40.7
6	200HC STS	147	44.9
7	200HC STS	161	49
8	200HC STS	175	53.2
9	200HC STS	188	57.4
10 <sup>2</sup>	200HC STS	202	61.5
11 <sup>2</sup>	200HC STS	215	65.6

### Configuration V

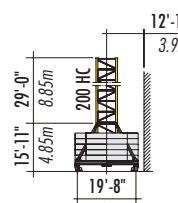
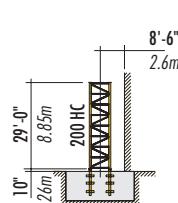
**290 HC/200 HC**  
on 40'-9" (12.42m)  
standard base section



No. of Tower Elements	Tower Element Type	static concrete footing		rail-travelling undercarriage	
		feet	meters	feet	meters
1	290HC BS-40	52	15.9	67	20.5
2	290HC STS	66	20.1	81	24.7
3	290HC STS	79	24.2	95	28.8
4	200HC STS	93	28.3	108	32.9
5	200HC STS	107	32.5	122	37.1
6	200HC STS	120	36.6	135	41.2
7	200HC STS	134	40.8	149	45.4
8	200HC STS	147	44.9	162	49.5
9	200HC STS	161	49.0	176	53.6
10	200HC STS	175	53.2	190	57.8
11	200HC STS	188	57.3	203	61.9
12 <sup>2</sup>	200HC STS	206	61.5	217	66.1

### Configuration VI

**200 HC**  
on 29'-0" (8.85m)  
standard base section



No. of Tower Elements	Tower Element Type	static concrete footing		rail-travelling undercarriage	
		feet	meters	feet	meters
1	200HC BS-29	40	12.3	55	16.9
2	200HC STS	54	16.5	69	21.1
3	200HC STS	68	20.6	83	25.2
4	200HC STS	81	24.8	97	29.4
5	200HC STS	95	28.9	110	33.5
6	200HC STS	108	33	123	37.6
7	200HC STS	122	37.2	137	41.8
8	200HC STS	136	41.3	151	45.9
9	200HC STS	149	45.5	164	50.1
10 <sup>2</sup>	200HC STS	163	49.6	178	54.2

<sup>1</sup> Remove top climbing unit prior to operating crane at indicated hook height(s).

<sup>2</sup> Lower top climbing unit to base of crane prior to operating crane at indicated hook height(s).

**NOTE!** Alternate tower combinations possible. Contact Morrow for additional information.

**Morrow Equipment Co., L.L.C.**

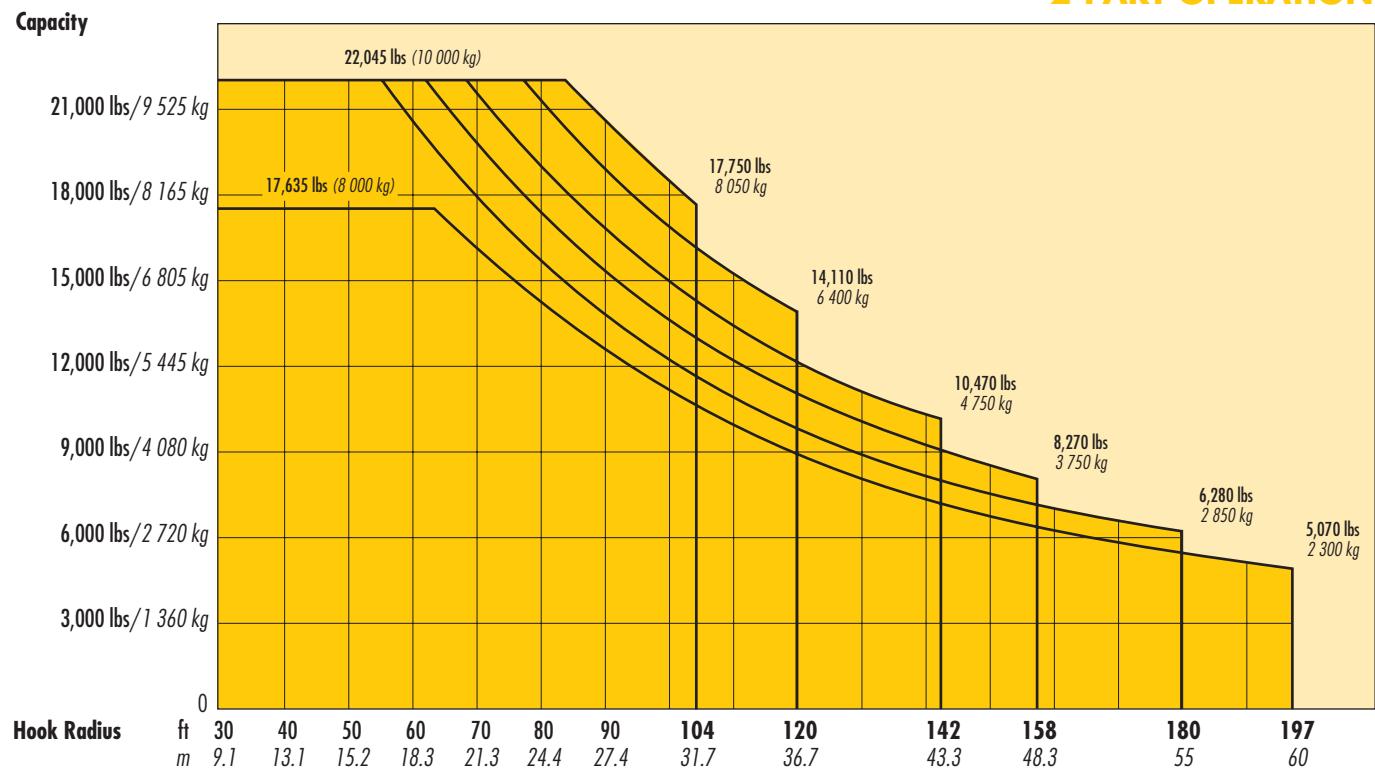
# LIEBHERR 200 HC

## Radius and Capacities

### 2-PART OPERATION

Hook Radius	Maximum Capacity – Radius	ft	60	70	80	90	98	104	110	120	130	142	150	158	164	170	180	187	197
		m	18.3	21.3	24.4	27.4	30	31.7	33.5	36.7	39.6	43.3	45.7	48.3	50	51.8	55	57	60
197 ft 60m	17,635 lbs – 63.3 ft 8 000 kg – 19.3m	lbs	17,635	16,525	14,795	13,120	11,355	10,715	10,140	9,125	8,445	7,560	7,130	6,660	6,370	6,140	5,665	5,425	5,070
		kg	8 000	7 495	6 710	5 950	5 150	4 860	4 600	4 140	3 830	3 430	3 235	3 020	2 890	2 785	2 570	2 460	2 300
180 ft 55m	22,045 lbs – 55.1 ft 10 000 kg – 16.8m	lbs	20,770	18,000	15,790	14,180	12,500	11,800	11,090	10,050	9,190	8,360	7,810	7,360	7,055	6,790	6,280		
		kg	9 420	8 170	7 160	6 430	5 670	5 350	5 030	4 560	4 170	3 790	3 540	3 340	3 200	3 080	2 850		
158 ft 48.3m	22,045 lbs – 61.7 ft 10 000 kg – 18.8m	lbs	22,045	20,000	17,570	15,660	13,930	13,140	12,300	11,250	10,250	9,370	8,750	8,270					
		kg	10 000	9 070	7 970	7 100	6 320	5 960	5 580	5 100	4 650	4 250	3 970	3 750					
142 ft 43.3m	22,045 lbs – 68.6 ft 10 000 kg – 20.9m	lbs	22,045	21,960	19,450	17,330	15,475	14,640	13,650	12,350	11,420	10,470							
		kg	10 000	9 960	8 820	7 860	7 020	6 640	6 190	5 600	5 180	4 750							
120 ft 36.7m	22,045 lbs – 77.1 ft 10 000 kg – 23.5m	lbs	22,045	22,045	21,630	19,400	17,370	16,430	15,280	14,110									
		kg	10 000	10 000	9 810	8 800	7 880	7 450	6 930	6 400									
104 ft 31.7m	22,045 lbs – 83.7 ft 10 000 kg – 25.5m	lbs	22,045	22,045	22,045	20,930	18,760	17,750											
		kg	10 000	10 000	10 000	9 490	8 510	8 050											

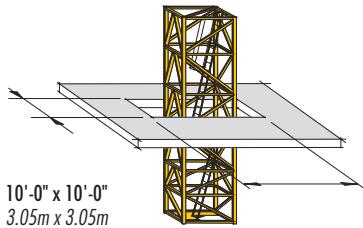
### 2-PART OPERATION



# LIEBHERR 200 HC

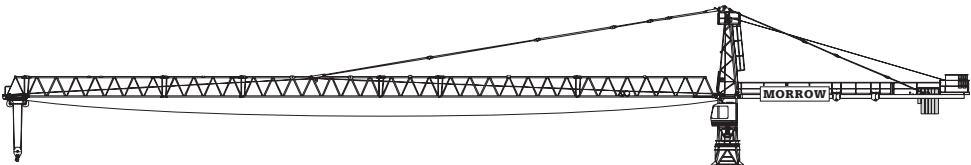
## Tie-in Details

**NOTE!** Recommended slab opening for erection and dismantlement. For other factors including deflection, contact Morrow engineering.



### SLAB OPENING

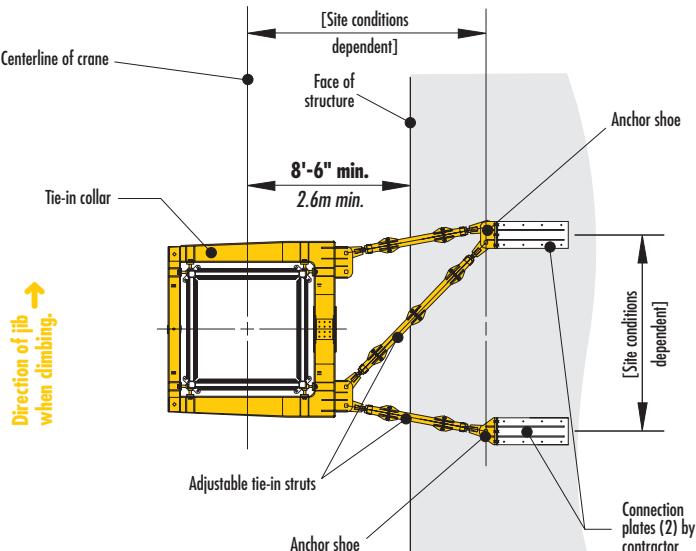
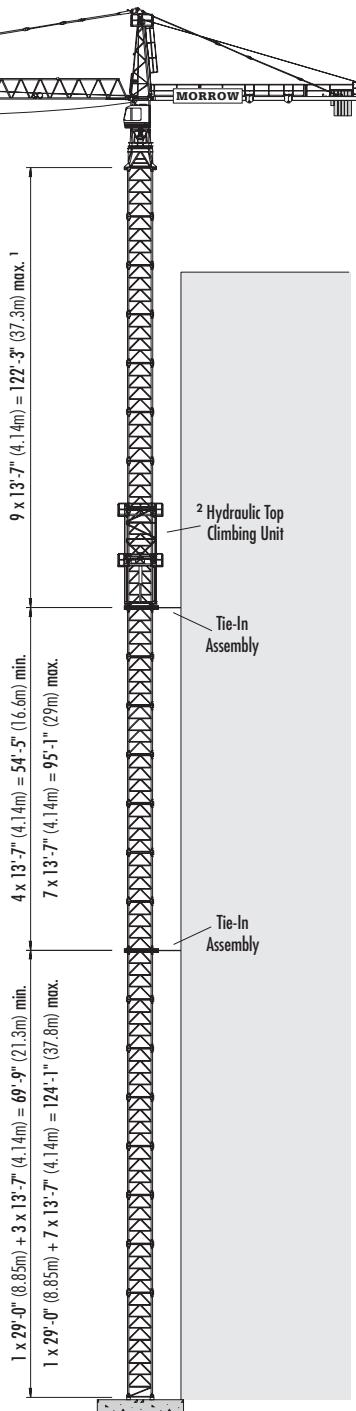
Recommended



<sup>1</sup> Restrictions may apply; please consult Operation Manual or Morrow Equipment.

<sup>2</sup> Lower top climbing unit to upper tie-in assembly prior to operating crane.

Tie-in collars to be installed at tower connections. For alternative tie-in locations, contact Morrow.



### TIE-IN ASSEMBLY

plan view

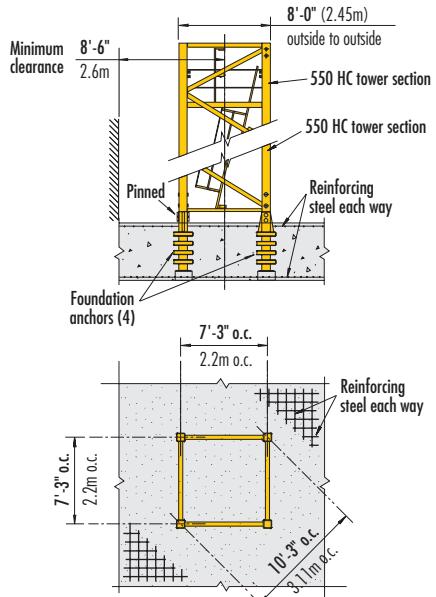
**NOTE!** The tie-in assembly shown is an example of a typical installation using 200 HC tower. Please note, however, that factors determining the installation of tie-in assemblies may vary due to job site requirements.

Verify all dimensions. Contact Morrow for additional information regarding dimensions, alternate tower configurations, reactions forces, tie-in installation and slab opening requirements. Consult Operation Manual before erecting, operating, servicing or dismantling crane.

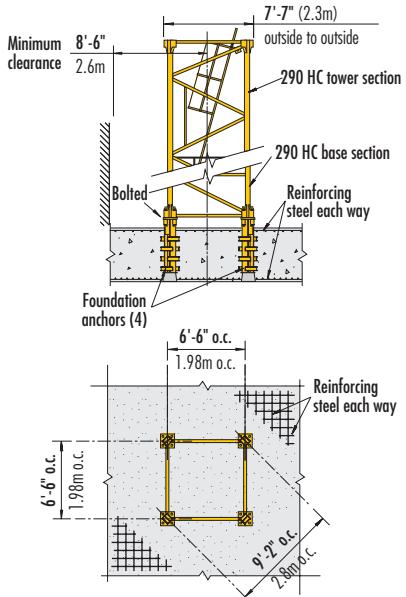
**TOP CLIMBING  
with 200 HC Tower**  
tied to structure

# LIEBHERR 200 HC

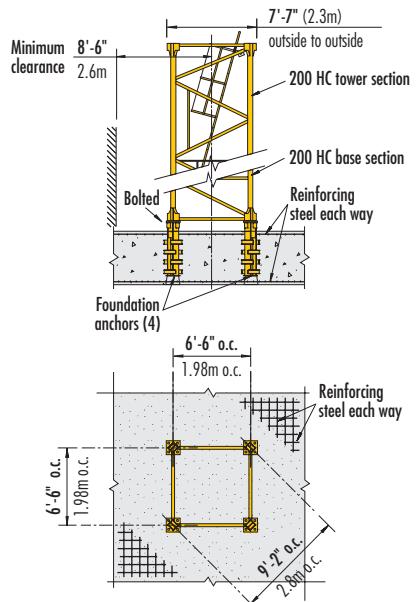
## Foundation Details *on concrete footing*



**with 550 HC Tower**



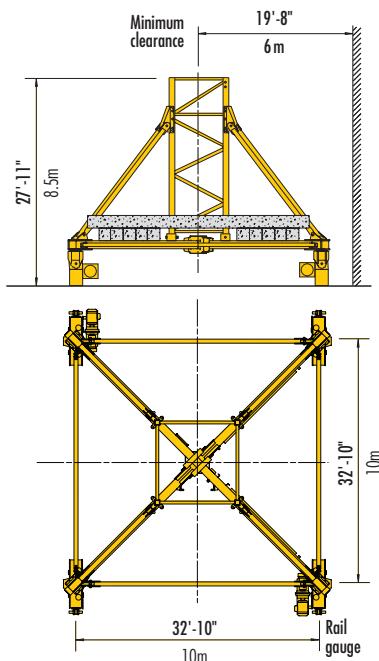
**with 290 HC Tower**



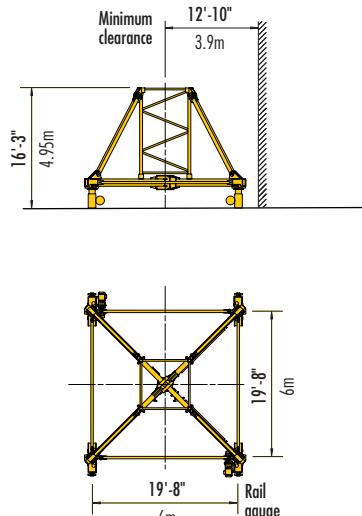
**with 200 HC Tower**

## Undercarriage Details

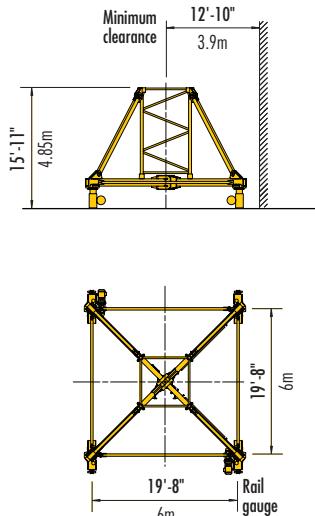
**NOTE!** For information regarding rail-travelling, static undercarriages and centralballast configurations, refer to the 200 HC Operation Manual.



**550 HC**  
rail-travelling undercarriage



**290 HC**  
rail-travelling undercarriage



**200 HC**  
Rail-travelling undercarriage

# LIEBHERR 200 HC

## Hoist Speed and Capacity

Hoist Unit	WiW 281 RX 057	2-Part Line				
		Gear	Capacity	Hook Speed	Capacity	Hook Speed
108 hp (80 kW) AC hoist unit 3-speed gearbox Electromagnetic gear shifting Eddy current brake  2L-142	1	up to 22,045 lbs	@ 108 fpm	up to 10 000 kg	@ 33 m/min	
	2	up to 9,920 lbs	@ 292 fpm	up to 4 500 kg	@ 89 m/min	
	3	up to 3,970 lbs	@ 587 fpm	up to 1 800 kg	@ 179 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 200 HC Operation Manual for additional information.

## Motor Information

Drive Unit	Horsepower	Kilowatts	Speed	
Trolley	6.4 hp	4.8 kW	40 - 131 - 262 fpm	12 - 40 - 80 m/min
Swing (fluid coupling)	2 x 6.7 hp	2 x 5 kW	0.8 rpm	
Travelling	Information available upon request			

## Power Requirements

- 480 V phase-phase, 277 V each phase to ground with 120° phase shift between phases. Do not use an Open-Delta supply.
- 3-phase, 60 Hz power supply plus ground wire.
- Static: 200 Amperes
- Travelling: (Information available upon request.)

## Counterweights

Counterjib type	67-ft (20.5m)	56-ft (17.2m)				
Jib length	197-ft (60m)	180-ft (55m)	158-ft (48.3m)	142-ft (43.3m)	120-ft (36.7m)	104-ft (31.7m)
No. of blocks	5A + 1B	7A	6A	5A + 1B	5A	4A
Weight in lbs	23,920 lbs	29,790 lbs	25,530 lbs	23,920 lbs	21,270 lbs	17,020 lbs
Weight in kg	10 850 kg	13 510 kg	11 580 kg	10 850 kg	9 650 kg	7 720 kg

**NOTE!** Weight of the A Block is 4,255 lbs (1 930 kg); the B Block is 2,645 lbs (1 200 kg). Counterweights must be installed from rear to front, i.e. towards the tower. It is recommended that the weight of each counterweight be verified before installation. Counterweight figures displayed in the chart above are for crane with hoist unit WiW 281 RX 057. If another hoist unit is installed, refer to the Liebherr 200 HC Operation Manual or contact Morrow Equipment for additional information.

Specifications subject to change without prior notice. For additional information, contact Morrow Equipment.

# LIEBHERR 200 HC

Description	Dimensions L x W x H	Weight	Description	Dimensions L x W x H	Weight		
Tower Top		25'-2" x 6'-0" x 5'-5" 7.67m x 1.83m x 1.65m	4,400 lbs 1 995 kg	Jib Section ① #611		39'-6" x 6'-0" x 6'-5" 12.03m x 1.84m x 1.95m	4,870 lbs 2 210 kg
Slewing Assembly (Complete) <sup>1</sup>		20'-2" x 9'-0" x 8'-6" 6.15m x 2.74m x 2.59m	17,600 lbs 7 985 kg	Jib Section ② #621		39'-3" x 5'-4" x 6'-0" 11.97m x 1.63m x 1.84m	3,590 lbs 1 630 kg
Slewing Assembly Upper Part <sup>2</sup>		14'-0" x 9'-0" x 8'-2" 4.26m x 2.74m x 2.49m	10,800 lbs 4 900 kg	Jib Section ③ #633		17'-8" x 5'-4" x 6'-2" 5.38m x 1.63m x 1.88m	1,150 lbs 520 kg
Slewing Assembly Lower Part <sup>3</sup>		6'-3" x 7'-7" x 7'-2" 1.9m x 2.3m x 2.18m	6,800 lbs 3 085 kg	Jib Section ④ #622		39'-2" x 5'-4" x 6'-0" 11.94m x 1.63m x 1.84m	3,370 lbs 1 530 kg
Hoist Unit with Frame <sup>4</sup> 108 hp (80 kW)		7'-11" x 15'-2" x 6'-7" 2.41m x 4.62m x 2.0m	11,860 lbs 5 380 kg	Jib Section ⑤ #631		22'-10" x 5'-4" x 6'-0" 6.97m x 1.63m x 1.84m	1,600 lbs 725 kg
Counterjib Section #1 (Inner)		27'-3" x 5'-8" x 4'-5" 8.31m x 1.73m x 1.35m	3,800 lbs 1 725 kg	Jib Section ⑥ #632		39'-3" x 5'-4" x 6'-0" 11.97m x 1.63m x 1.84m	2,170 lbs 985 kg
Counterjib Section #2 (Intermediate)		11'-5" x 5'-8" x 4'-5" 3.48m x 1.73m x 1.35m	2,120 lbs 960 kg	Jib Section ⑦ #641		6'-11" x 6'-0" x 6'-1" 2.1m x 1.84m x 1.86m	620 lbs 280 kg
Counterjib Section #3 (Outer)		25'-0" x 7'-10" x 5'-4" 7.62m x 2.4m x 1.62m	4,200 lbs 1 905 kg	Jib Assembly <sup>7</sup> 197-ft (60m)		198'-9" x 6'-0" x 6'-5" 60.6m x 1.84m x 1.95m	20,290 lbs 9 205 kg
Counterjib A <sup>5</sup>		52'-0" x 7'-10" x 5'-4" 15.85m x 2.4m x 1.62m	9,040 lbs 4 100 kg	Jib Assembly <sup>7</sup> 180-ft (55m)		182'-4" x 6'-0" x 6'-5" 55.6m x 1.84m x 1.95m	18,960 lbs 8 600 kg
Counterjib B <sup>6</sup>		62'-10" x 7'-10" x 5'-4" 19.15m x 2.4m x 1.62m	11,350 lbs 5 150 kg	Jib Assembly <sup>7</sup> 158-ft (48.3m)		160'-4" x 6'-0" x 6'-5" 48.9m x 1.84m x 1.95m	17,200 lbs 7 800 kg
Reinforced Base Sect. 290 HC		40'-9" x 7'-7" x 7'-7" 12.42m x 2.3m x 2.3m	16,400 lbs 7 440 kg	Jib Assembly <sup>7</sup> 142-ft (43.3m)		144'-0" x 6'-0" x 6'-5" 43.9m x 1.84m x 1.95m	16,310 lbs 7 400 kg
Reinforced Tower Section 290 HC		13'-7" x 7'-7" x 7'-7" 4.14m x 2.3m x 2.3m	6,500 lbs 2 950 kg	Jib Assembly <sup>7</sup> 120-ft (36.7m)		122'-4" x 6'-0" x 6'-5" 37.3m x 1.84m x 1.95m	14,770 lbs 6 700 kg
Base Tower Section 200 HC		29'-0" x 7'-7" x 7'-7" 8.85m x 2.3m x 2.3m	8,960 lbs 4 065 kg	Jib Assembly <sup>7</sup> 104-ft (31.7m)		105'-11" x 6'-0" x 6'-5" 32.3m x 1.84m x 1.95m	12,350 lbs 5 600 kg
Long Tower Section 200 HC		40'-9" x 7'-7" x 7'-7" 12.42m x 2.3m x 2.3m	11,240 lbs 5 100 kg	Top Climbing Unit w/hydraulics		27'-7" x 9'-2" x 8'-10" 8.42m x 2.79m x 2.69m	16,530 lbs 7 500 kg
Standard Tower Section 200 HC		13'-7" x 7'-7" x 7'-7" 4.14m x 2.3m x 2.3m	4,520 lbs 2 050 kg	Bottom Climbing Unit w/hydraulics		13'-7" x 7'-10" x 8'-1" 4.14m x 2.4m x 2.46m	9,150 lbs 4 150 kg
Base Tower Section 290 HC		40'-9" x 7'-7" x 7'-7" 12.42m x 2.3m x 2.3m	17,500 lbs 7 940 kg	Counterweight Block A		4'-4" x 11" x 7'-10" 1.31m x 0.28m x 2.4m	4,255 lbs 1 930 kg
Standard Tower Section 290 HC		13'-7" x 7'-7" x 7'-7" 4.14m x 2.3m x 2.3m	5,070 lbs 2 300 kg	Counterweight Block B		4'-4" x 11" x 5'-3" 1.31m x 0.28m x 1.6m	2,645 lbs 1 200 kg
Standard Tower Section 550 HC		20'-7" x 8'-0" x 8'-0" 6.28m x 2.45m x 2.45m	14,290 lbs 6 480 kg	Transition Section 550 HC/290 HC		20'-7" x 8'-5" x 8'-5" 6.28m x 2.57m x 2.57m	13,050 lbs 5 920 kg
Long Tower 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	Trolley 2-part		6'-4" x 6'-0" x 3'-6" 1.92m x 1.83m x 1.07m	830 lbs 375 kg

**NOTE!** Weights and dimensions are approximate. Scale components before lifting. Consult Operation Manual before erecting, operating, servicing or dismantling crane.

<sup>1</sup> Includes operator's cab, swing motors, slewing ring, slewing ring support and climbing shoes. Two climbing shoes are detachable; deduct 100 lbs (45 kg) each. Dimensions are without shoes.

<sup>2</sup> Includes operator's cab and swing motors.

<sup>3</sup> Includes slewing ring, slewing ring support and climbing shoes. Two climbing shoes are detachable; deduct 100 lbs (45 kg) each. Dimensions shown are without detachable climbing shoes.

<sup>4</sup> Includes 108 hp (80 kW) hoist unit, electrical panel and handrails. Does not include wire rope.

<sup>5</sup> Includes counterjib sections #1, #3, pendant bars and handrails. Counterjib A is required for jibs 180 ft (55m) and shorter.

<sup>6</sup> Includes counterjib sections #1, #2, #3, pendant bars and handrails. Counterjib B is required for the 197 ft (60m) jib.

<sup>7</sup> Jib Assemblies include jib sections, pendant bars, pendant bar connecting pins and plates, trolley drive unit, trolley wire rope & trolley (830 lbs/375 kg). If hook block included, add (970 lbs/440 kg).



## Morrow Equipment

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