

# LIEBHERR 1800 C 60

# LIEBHERR 1800 C 60

## TOWER CRANE

Description	Dimensions L x W x H	Weight	Description	Dimensions L x W x H	Weight
Outer Tower Section 1 (Reinforced) #323	32'-8" x 16'-5" x 16'-5" 10.0m x 5.0m x 5.0m	50,000 lbs 22 680 kg	Counterweight 6 #C024.001-718.300	6'-8" x 2'-2" x 8'-5" 2.04m x 0.67m x 3.66m	19,300 lbs 8 755 kg
Outer Tower Section 2 (Normal) #321	32'-8" x 16'-5" x 16'-5" 10.0m x 5.0m x 5.0m	46,500 lbs 21 090 kg	Counterweight 7 #C024.002-718.100	6'-8" x 1'-10" x 8'-5" 2.04m x 0.55m x 3.66m	16,440 lbs 7 455 kg
Bottom Climbing Unit 3 with Hydraulics	32'-0" x 11'-10" x 11'-10" 9.75m x 3.6m x 3.6m	62,200 lbs 28 200 kg	Counterweight 7 #C024.002-718.200	6'-8" x 1'-10" x 8'-5" 2.04m x 0.55m x 3.66m	16,440 lbs 7 455 kg
Inner Tower Section (A-section) #331	32'-0" x 11'-10" x 11'-10" 9.75m x 3.6m x 3.6m	36,375 lbs 16 500 kg	Counterweight 7 #C024.002-718.300	6'-8" x 1'-10" x 8'-5" 2.04m x 0.55m x 3.66m	16,440 lbs 7 455 kg
Inner Tower Section (C-section) #333	5'-1" x 11'-10" x 11'-10" 4.6m x 3.6m x 3.6m	30,865 lbs 14 000 kg	Jib Section ① #611	37'-10" x 10'-1" x 11'-0" 11.53m x 3.07m x 3.35m	14,700 lbs 6 670 kg
Slewing Assembly 4	14'-4" x 11'-6" x 12'-0" 4.37m x 3.5m x 3.66m	62,100 lbs 28 170 kg	Jib Section ② #621	37'-9" x 10'-1" x 10'-0" 11.5m x 3.07m x 3.05m	14,400 lbs 6 530 kg
Tower Top	48'-0" x 11'-0" x 10'-2" 14.6m x 3.35m x 3.1m	22,500 lbs 10 205 kg	Jib Section ③ #622	37'-9" x 10'-1" x 11'-0" 11.5m x 3.07m x 3.35m	14,600 lbs 6 625 kg
Operator's Cab	10'-6" x 5'-6" x 8'-2" 3.2m x 1.68m x 2.49m	4,000 lbs 1 815 kg	Jib Section ④ #631	37'-9" x 10'-1" x 8'-4" 11.5m x 3.07m x 2.54m	12,100 lbs 5 490 kg
Counterjib Section (Inner) #711	37'-9" x 9'-11" x 9'-5" 11.5m x 3.02m x 2.87m	8,500 lbs 3 855 kg	Jib Section ⑤ #632	37'-9" x 10'-1" x 8'-11" 11.5m x 3.07m x 2.72m	11,400 lbs 5 170 kg
Counterjib Section (Intermediate) #712	37'-11" x 10'-0" x 9'-6" 11.56m x 3.05m x 2.9m	9,350 lbs 4 240 kg	Jib Section ⑥ #633	28'-5" x 10'-1" x 8'-4" 8.66m x 3.07m x 2.54m	8 400 lbs 3 810 kg
Counterjib Section (Outer) #714 5	22'-3" x 13'-0" x 12'-0" 6.78m x 3.96m x 3.66m	72,000 lbs 32 660 kg	Jib Section ⑦ #641	37'-6" x 10'-1" x 9'-0" 11.43m x 3.07m x 2.74m	8,150 lbs 3 695 kg
Trolley	11'-2" x 10'-8" x 6'-0" 3.4m x 3.25m x 1.82m	4,500 lbs 2 040 kg	Jib Assembly Part 1 8 for 218-ft and 246-ft Jibs	112'-3" x 10'-1" x 11'-0" 34.2m x 3.07m x 3.35m	64,050 lbs 29 050 kg
Hook Block (4-part)	7'-0" x 4'-0" x 2'-6" 2.13m x 1.2m x 0.76m	5,500 lbs 2 495 kg	Jib Assembly Part 2 9 for 246-ft (75.0m) jib	139'-6" x 10'-1" x 9'-0" 42.5m x 3.07m x 2.74m	44,300 lbs 20 095 kg
Counterweight 6 #C024.001-718.100	6'-8" x 2'-2" x 8'-5" 2.04m x 0.67m x 3.66m	19,300 lbs 8 755 kg	Jib Assembly Part 2 9 for 218-ft (66.5m) jib	112'-0" x 10'-1" x 9'-0" 34.1m x 3.07m x 2.74m	35,900 lbs 16 285 kg
Counterweight 6 #C024.001-718.200	6'-8" x 2'-2" x 8'-5" 2.04m x 0.67m x 3.66m	19,300 lbs 8 755 kg	Foundation Anchor (each) (4 per set)	6'-7" x 2'-0" x 2'-0" 2.0m x 0.6m x 0.6m	1,800 lbs 815 kg

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

1 Outer Tower Section (Reinforced) includes access ladders, platform and 4 panels. Each #323 panel weighs 12,125 lbs (5 500 kg).

2 Outer Tower Section (Normal) includes access ladders, platform and 4 panels. Each #321 panel weighs 11,245 lbs (5 100 kg).

3 Bottom Climbing Unit with Hydraulics can be reduced to 41,225 lbs (18 700 kg) by removing hydraulics.

4 Slewing Assembly includes slewing ring, slewing ring support and 6 swing motors.

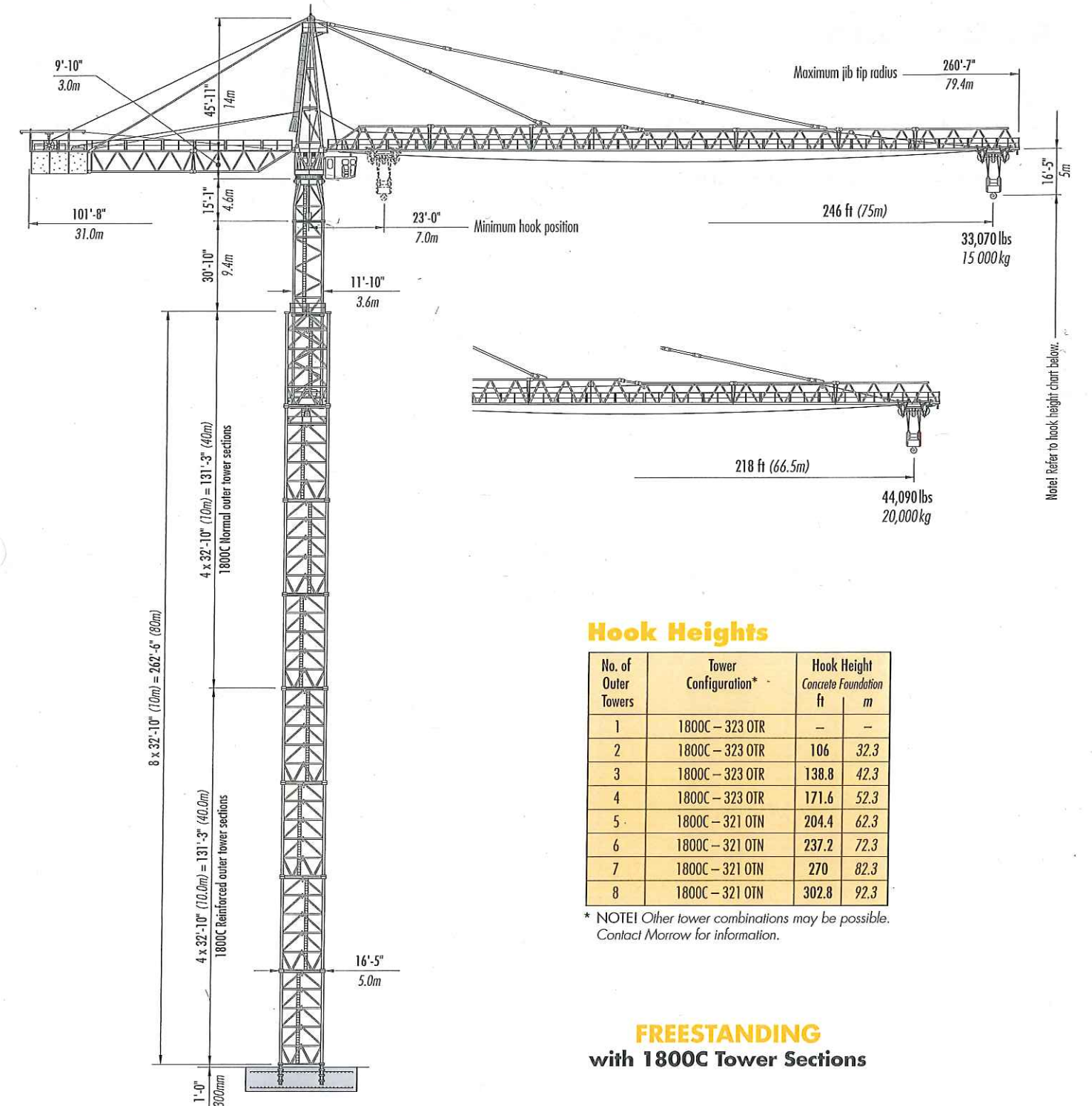
5 Counterjib Section #714 includes machine deck and a hoist unit with 2 x 200 hp (2 x 150 kW) DC motors and generator set. Does not include hoist wire rope.

6 Includes handrails. With the 246-ft (75.0m) jib assembly installed, six (6) counterweights blocks are required, i.e., C024.001-718.100 (x2), C024.001-718.200 (x2) and C024.001-718.300 (x2).

7 Includes handrails. With the 218-ft (66.5m) jib assembly installed, six (6) counterweights blocks are required, i.e., C024.002-718.100 (x2), C024.002-718.200 (x2) and C024.002-718.300 (x2).

8 Jib Assembly Part 1 includes jib sections ①, ② and ③, pendant bars, pendant bar connecting pins and plates, trolley drive unit and trolley.

9 Jib Assembly Part 2 includes jib sections, pendant bars and pendant bar connecting pins and plates.



### Hook Heights

No. of Outer Towers	Tower Configuration*	Hook Height	
		Concrete Foundation	
		ft	m
1	1800C - 323 OTR	-	-
2	1800C - 323 OTR	106	32.3
3	1800C - 323 OTR	138.8	42.3
4	1800C - 323 OTR	171.6	52.3
5	1800C - 321 OTN	204.4	62.3
6	1800C - 321 OTN	237.2	72.3
7	1800C - 321 OTN	270	82.3
8	1800C - 321 OTN	302.8	92.3

\* NOTE! Other tower combinations may be possible. Contact Morrow for information.

**FREESTANDING**  
with 1800C Tower Sections



## Morrow Equipment

COMPANY, L. L. C.

3218 Pringle Road SE • P O Box 3306 • Salem, Oregon 97302-0306 USA  
503.585.5721 • Fax 503.363.1172 • www.morrow.com • info@morrow.com

The American home of  
**LIEBHERR**  
TOWER CRANES

Atlanta, GA • Charlotte, NC • Chicago, IL • Dallas, TX • Denver, CO • Honolulu, HI • Houston, TX • Los Angeles, CA  
Las Vegas, NV • Millwood, NY • Pensacola, FL • St. Louis, MO • San Francisco, CA • Salem, OR • Seattle, WA • Miami, FL • Tampa, FL  
Washington, DC • Sydney, Australia • Wellington, New Zealand • Vancouver, BC, Canada • Toronto, ON, Canada • Mexico City, Mexico



# Morrow Equipment



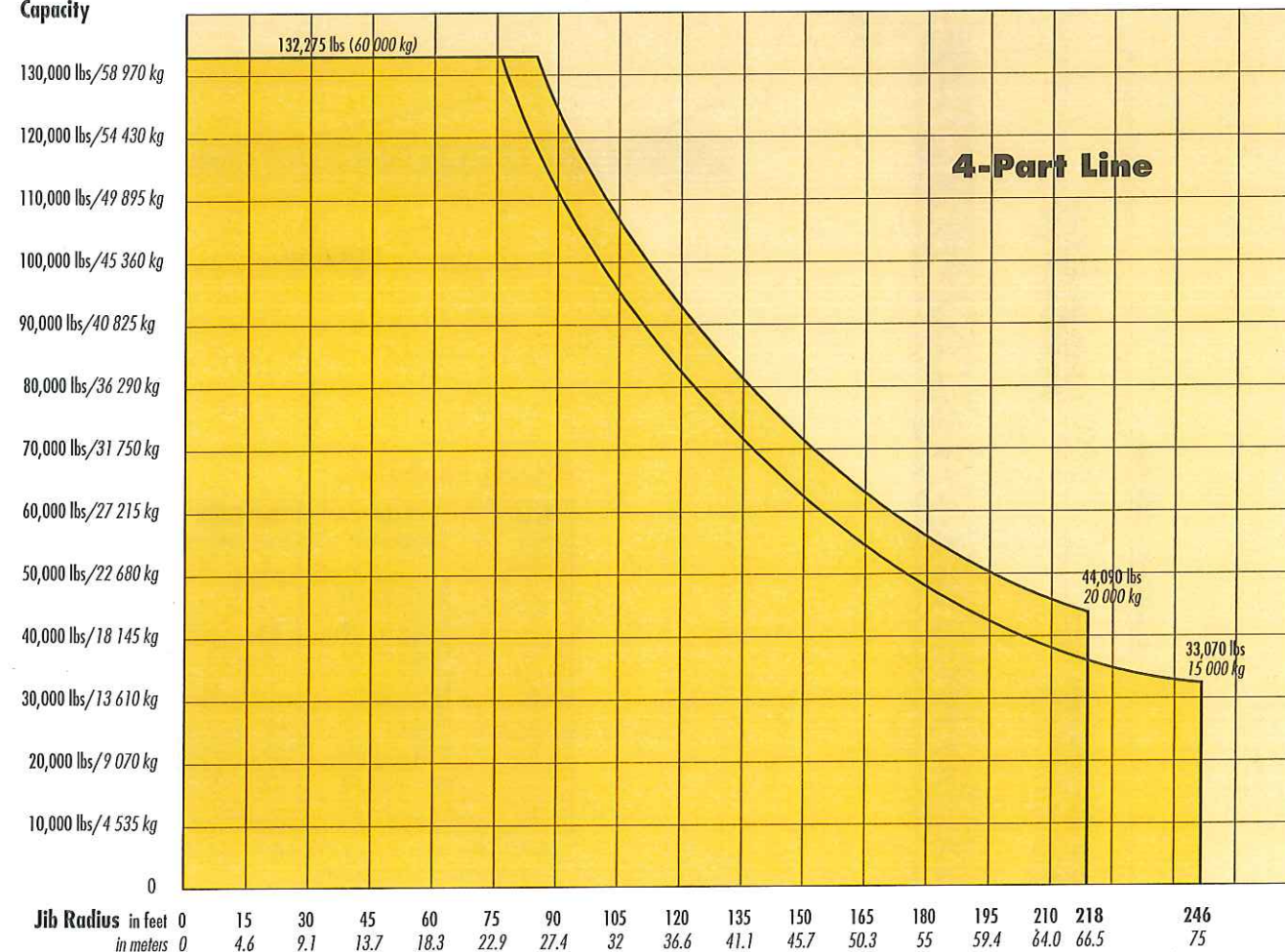
# LIEBHERR 1800 C 60

# LIEBHERR 1800 C 60

## Radius and Capacities

Hook Radius	4-Part Line Max Capacity - Radius	ft m	55 16.8	70 21.3	95 29	110 33.5	125 38.1	140 42.7	155 47.2	170 51.8	185 56.4	200 61	210 64	218 66.5	225 68.6	235 71.6	246 75
246 ft 75m	132,275 lbs - 75 ft 60 000 kg - 22.9m	lbs kg	132,275 60 000	132,275 60 000	105,000 47 630	90,000 40 825	78,500 35 610	68,200 30 935	59,000 26 760	51,500 23 360	45,000 20 410	40,200 18 235	37,500 17 010	36,350 16 490	35,100 15 920	34,000 15 420	33,070 15 000
218 ft 66.5m	132,275 lbs - 84 ft 60 000 kg - 25.6m	lbs kg	132,275 60 000	132,275 60 000	116,000 52,615	101,000 45 815	87,500 39 690	76,500 34 700	67,500 30 620	59,000 26 760	52,500 23 815	48,000 21 770	45,500 20 640	44,090 20 000			

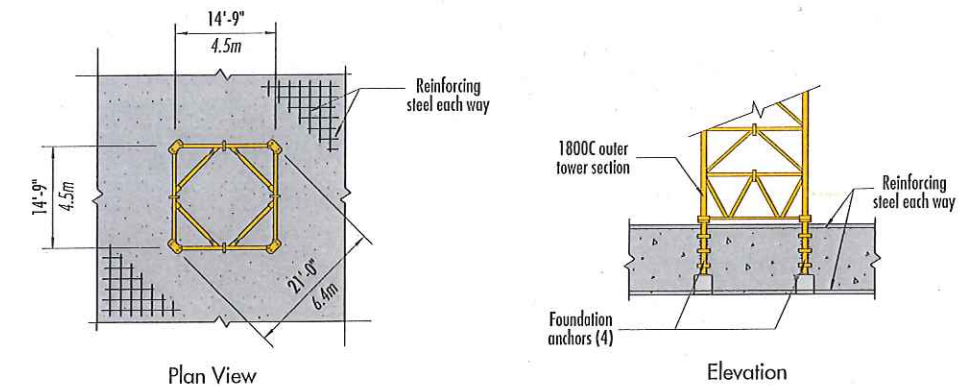
### Capacity



Note! Contact Morrow for information regarding site preparation, dimensions, reaction forces, alternate configurations and other specific recommendations.

Please consult 1800 C 60 Operation Manual before erecting, operating, servicing or dismantling crane.

IMPORTANT: This data applies only to cranes with serial numbers #1274 and #1275



**FOUNDATION DETAILS**  
with 1800C Tower Sections  
concrete slab

## Hoist Speed and Capacity

Hoist Unit	WiW 340 RX 001	4-Part Line				
		Gear	Capacity	Line Speed	Capacity	Line Speed
2 x 200 hp (2 x 150 kW) DC hoist motors Ward Leonard 2-speed gearbox Electromagnetic gear shifting	LS105	1	up to 132,275 lbs	@ 62 fpm	up to 60 000 kg	@ 19 m/min
		2	up to 33,070 lbs	@ 256 fpm	up to 15 000 kg	@ 78 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 1800 C 60 Operation Manual for additional information.

## Motor Information

Drive Unit	Horsepower	Kilowatts	Speed	
Swing	6 x 20 hp	6 x 15 kW	0.5 rpm	
Trolley (2-speed)	29.5 hp	22 kW	0 - 250 fpm	0 - 76.2m/min

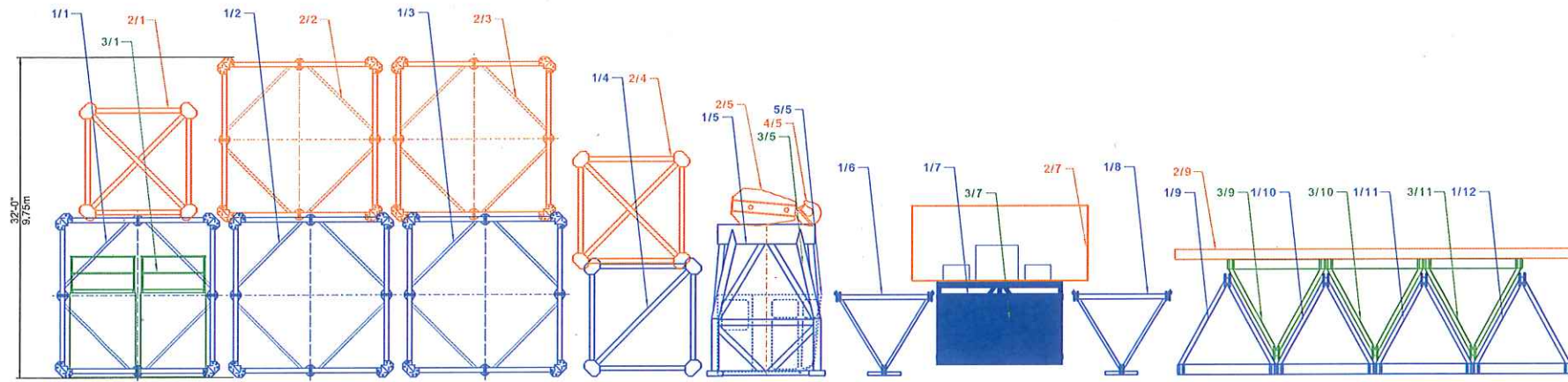
IMPORTANT! This crane model may be equipped with drive units other than that specified in the data shown above. To verify, check serial number and refer to 1800 C 60 Operation Manual for additional information.

## Power Requirements

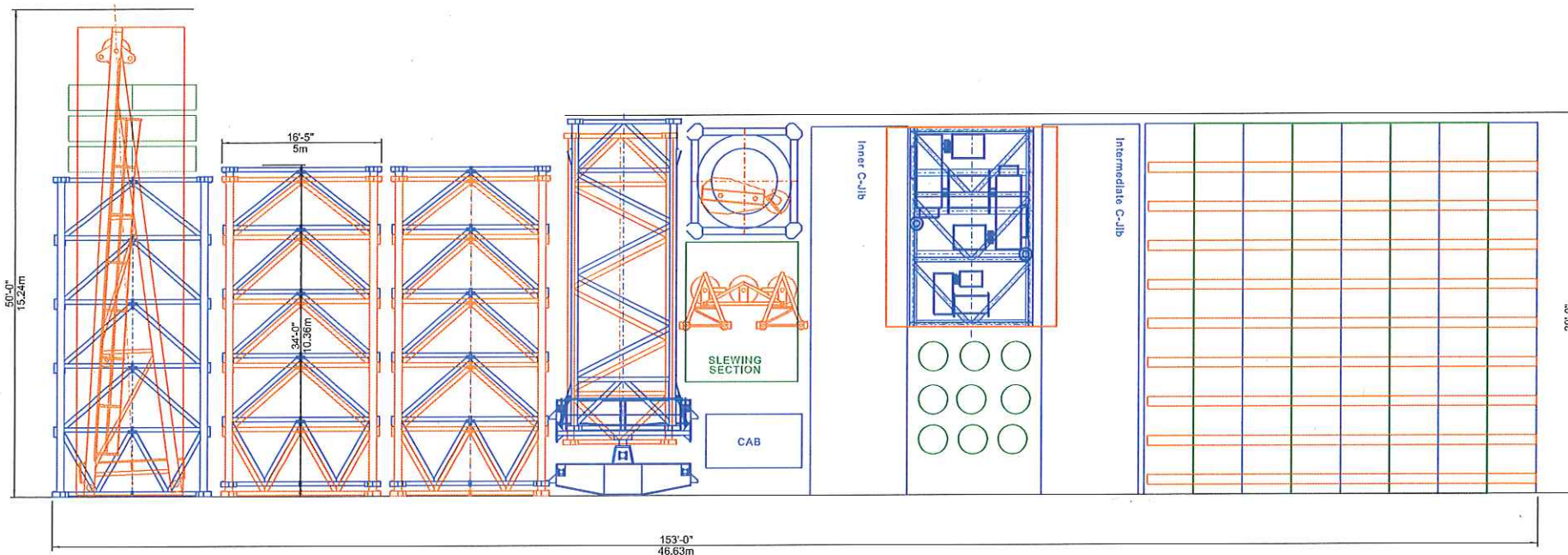
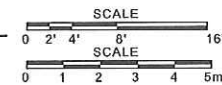
480 Volts — 3-phase — 60 Hz — 650 Amperes — 540 kVA

Specifications subject to change without notice. For other configurations and specifications, contact Morrow Equipment.

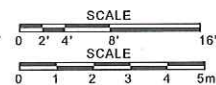




**B**  
**1** ELEVATION OF LIEBHERR 1800 C  
STORAGE STACKING



**B**  
**1** PLAN OF LIEBHERR 1800 C  
STORAGE STACKING



Item#	Qty	Description	Dimension	Wt. lb.
1/1	1	Reinforced Outer Tower (325)	32'-10" x 16'-5" x 16'-5"	50,000
2/1	1	Tower Top	48'-0" x 11'-0" x 10'-2"	22,500
3/1	6	Counterweights	8'-5" x 6'-8" x 2'-2"	115,800
1/2	1	Outer Tower (321)	32'-10" x 16'-5" x 16'-5"	50,000
2/2	1	Outer Tower (321)	32'-10" x 16'-5" x 16'-5"	50,000
1/3	1	Outer Tower (321)	32'-10" x 16'-5" x 16'-5"	50,000
2/3	1	Outer Tower (321)	32'-10" x 16'-5" x 16'-5"	50,000
1/4	1	Bottom Climbing Section "D" (334)	32'-0" x 11'-10" x 11'-10"	62,200
2/4	1	Inner Tower Section "A" (331)	32'-0" x 11'-10" x 11'-10"	36,375
1/5	1	Inner Tower Section "C" (333)	15'-1" x 11'-10" x 11'-10"	30,865
2/5	1	Hook Block	4'-0" x 7'-0" x 2'-5"	5,500
3/5	1	Slewing Assembly	14'-4" x 11'-8" x 12'-0"	72,000
4/5	1	Trolley	11'-2" x 10'-8" x 6'-0"	4,500
5/5	1	Cab	10'-6" x 5'-6" x 8'-2"	4,000
1/6	1	Inner Counterjib Section (711)	37'-9" x 9'-11" x 9'-5"	8,500
1/7	1	Outer Counterjib Section (714)	22'-3" x 13'-0" x 12'-0"	85,000
2/7	1	Cold Weather House	21'-0" x 18'-0" x 8'-0"	3,000
3/7	1	Miscellaneous Hardware	15'-0" x 1'-0" x 1'-0"	20,000
1/8	1	Intermediate Counterjib Section (712)	37'-11" x 10'-0" x 9'-6"	9,350
1/9	1	Jib Section (611)	37'-10" x 9'-10" x 11'-0"	14,700
2/9	9	Pendant Bars	39'-0" x 2'-0" x 2'-0"	-
3/9	1	Jib Section (621)	37'-9" x 9'-10" x 10'-0"	14,400
1/10	1	Jib Section (622)	37'-9" x 9'-10" x 11'-0"	14,600
3/10	1	Jib Section (631)	37'-9" x 9'-4" x 8'-4"	12,100
1/11	1	Jib Section (632)	37'-9" x 9'-4" x 8'-11"	11,400
3/11	1	Jib Section (633) for 246 ft jib	28'-5" x 9'-4" x 8'-11"	8,400
1/12	1	Jib Section (641)	37'-6" x 10'-2" x 9'-0"	8,400

**Morrow Equipment**  
The American Home of  
**LIEBHERR**  
C O M P A N Y, L. L. C.  
P.O. Box 3303  
3218 Pinalo Road SE  
Salem Oregon 97302-0306  
Tel: (503) 585-5721  
Fax: (503) 315-1279  
E-Mail: engineering@morrow.com

Customer:  
Shell  
Debottlenecking Project Phase 3  
Jack Pine  
Albian Mine, Alberta, Canada

**MEC**

Dr. by: / Ck. by:  
WJS / BAM

Title:  
Liebherr 1800 C  
Storage Stacking  
Layout

Issue Purpose:  
FOR CONSTRUCTION

Date:  
02-20-2013

Rev. No: / Rev. Date: / Rev. By: / Ck. By:

Job number:  
1301-027  
Sheet:

1 of 1

