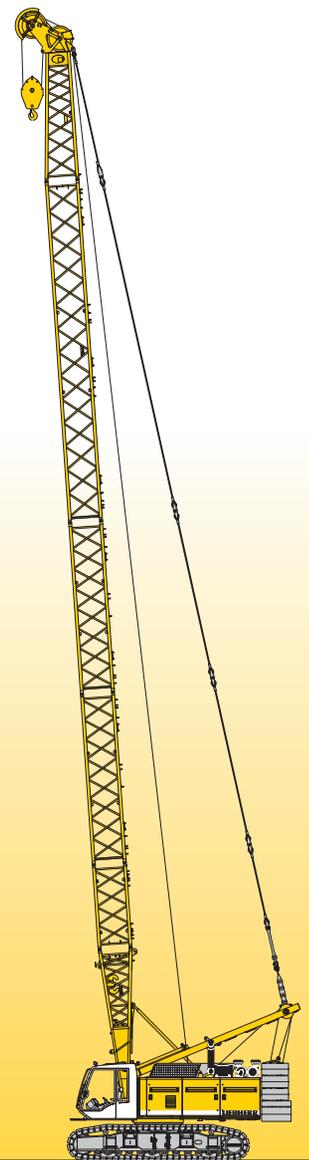


**Technical data**  
**Hydraulic crawler crane**

**HS 855 HD**  
Litronic®

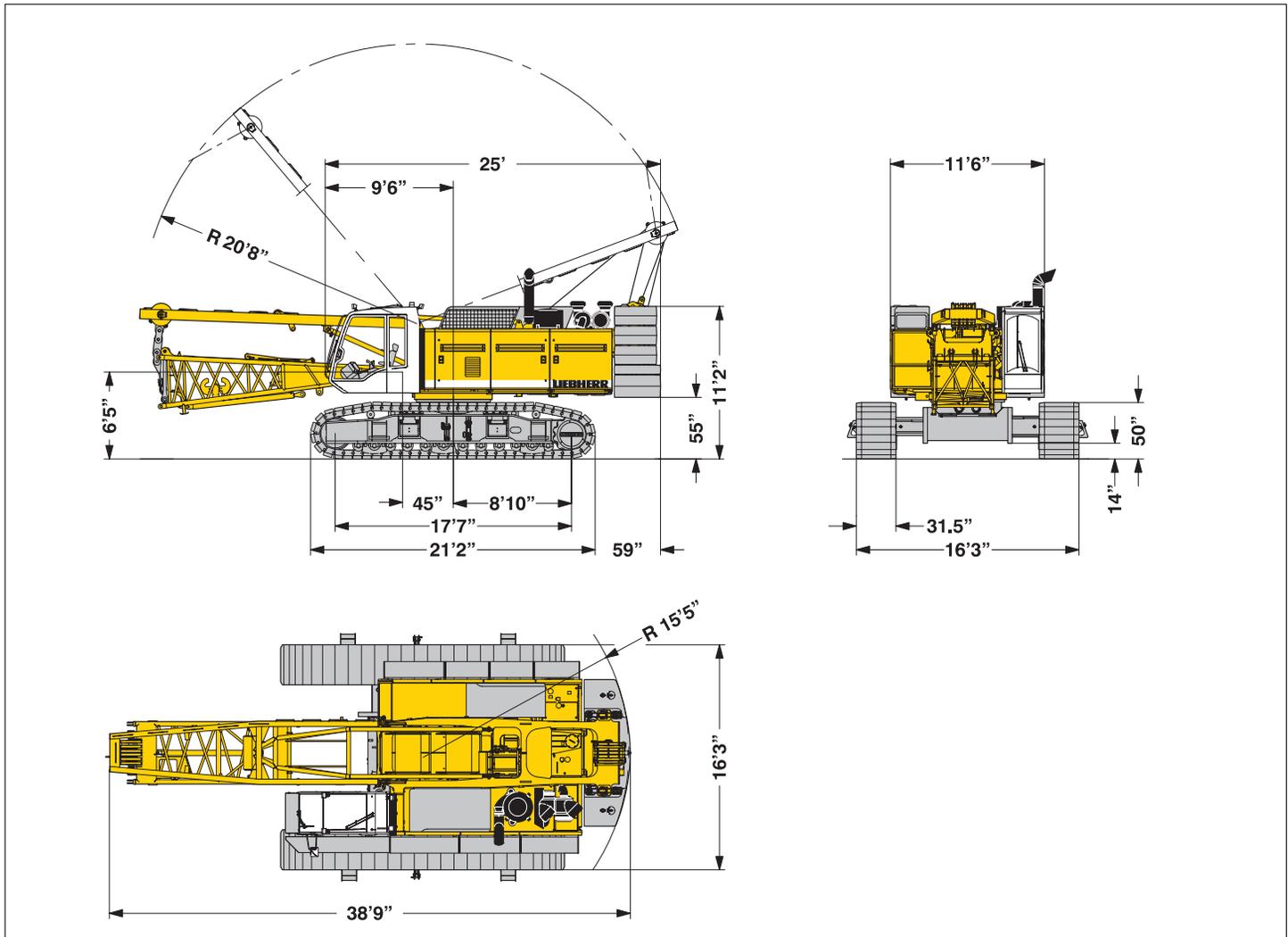
**Complies with ANSI B 30.5**



**LIEBHERR**

# Dimensions

## Basic machine with undercarriage



## Operating weight

The operating weight includes the basic machine with HD undercarriage, 2 main winches 55,200 lbs including wire ropes (295 ft) and 36 ft main boom, consisting of A-frame, boom foot (18 ft) and boom head (18 ft), 58,000 lbs basic counterweight, 31.5 inch triple grouser track shoes and 110,250 lbs hook block.

Total weight \_\_\_\_\_ approx. 192,000 lbs

## Ground pressure

Ground bearing pressure \_\_\_\_\_ 14 PSI

## Equipment

Main boom (No. 1311.xx) max. length \_\_\_\_\_ 223 ft  
 Fixed jib (No. 0806.xx) \_\_\_\_\_ 36 ft – 105 ft  
 Modular designed equipment for operation as crane, with dragline or clamshell.

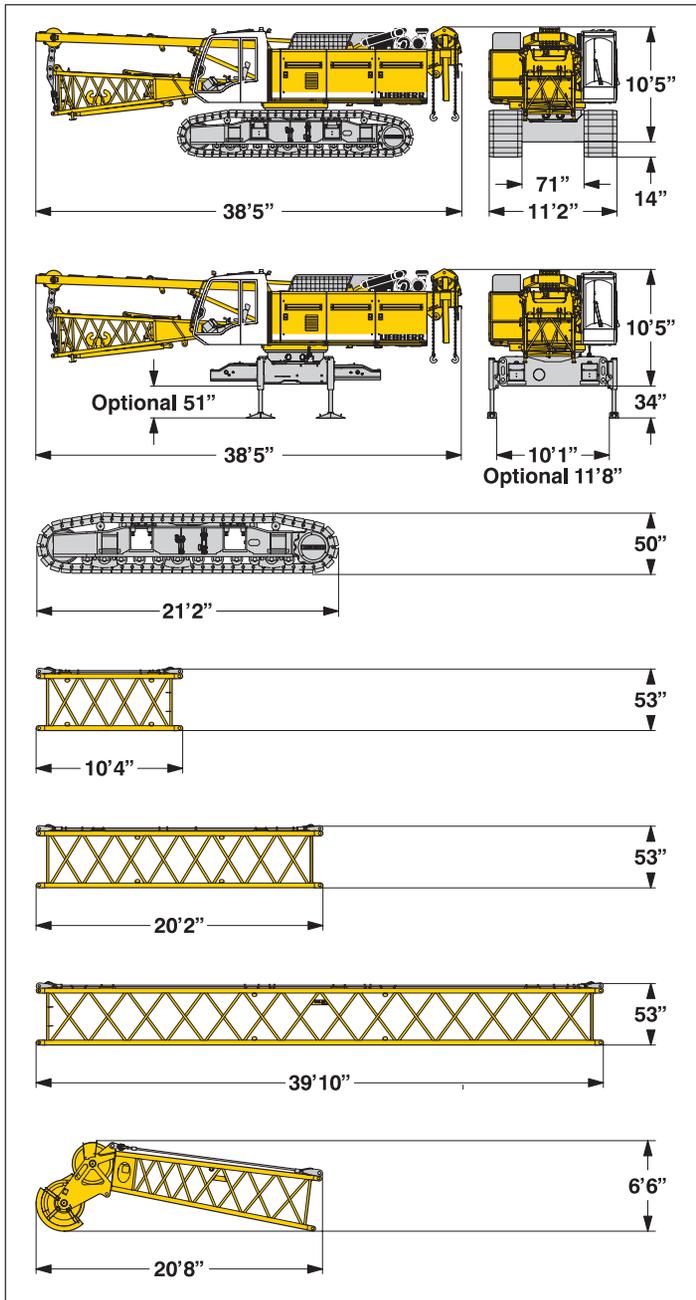
For dragline operation, a rotating fairlead is fitted into the boom foot. This minimizes the rope angle to drum, which results in lower rope wear.

## Remarks

1. The lifting capacities stated are valid for lifting operation only (corresponds with crane classification according to F.E.M. 1.001, crane group A1)
2. Crane standing on firm, horizontal ground.
3. The weight of the lifting device (hoisting ropes, hook block, shackle etc.) must be deducted from the gross lifting capacity to obtain a net lifting value.
4. Additional equipment on boom (e.g. boom walkways, auxiliary jib) must be deducted to get the net lifting capacity.
5. For max. wind speed please refer to lift chart in operator's cab or manual.
6. Working radii are measured from centre of swing and under load.
7. The lifting capacities are valid for 360 degrees of swing.
8. Calculation of stability under load is based on DIN 15019 / part 2 / chart 1 and ISO 4305 Table 1 + 2, tipping angle 4°.
9. The structures are calculated according to F.E.M. 1.001 – 1998 (EN 13001-2 / 2004).
10. ANSI B 30.5

# Transport dimensions and weights

## Basic machine and boom (No. 1311.xx)



\*) Including pendant ropes

### Basic machine

with HD undercarriage, boom foot (No. 1311.xx), A-frame, 2x 55,200 lbs winches including wire ropes (295 ft), without basic counterweight

Width \_\_\_\_\_ 11'6"  
Weight in lbs \_\_\_\_\_ 129,400

### Basic machine

with boom foot (No. 1311.xx), A-frame, 2x 55,200 lbs winches including wire ropes (295 ft), without basic counterweight and crawlers

Width \_\_\_\_\_ 11'6"  
Weight in lbs \_\_\_\_\_ 86,900

### Crawler

**2x**

Triple grouser track shoes \_\_\_\_\_ 31.5"  
Width \_\_\_\_\_ 36"  
Weight in lbs \_\_\_\_\_ 21,300

### Boom section (No. 1311.xx)

**10 ft**

Width \_\_\_\_\_ 55"  
Weight in lbs\* \_\_\_\_\_ 1,100

### Boom section (No. 1311.xx)

**20 ft**

Width \_\_\_\_\_ 55"  
Weight in lbs\* \_\_\_\_\_ 1,800

### Boom section (No. 1311.xx)

**40 ft**

Width \_\_\_\_\_ 55"  
Weight in lbs\* \_\_\_\_\_ 2,800

### Boom head (No. 1311.xx)

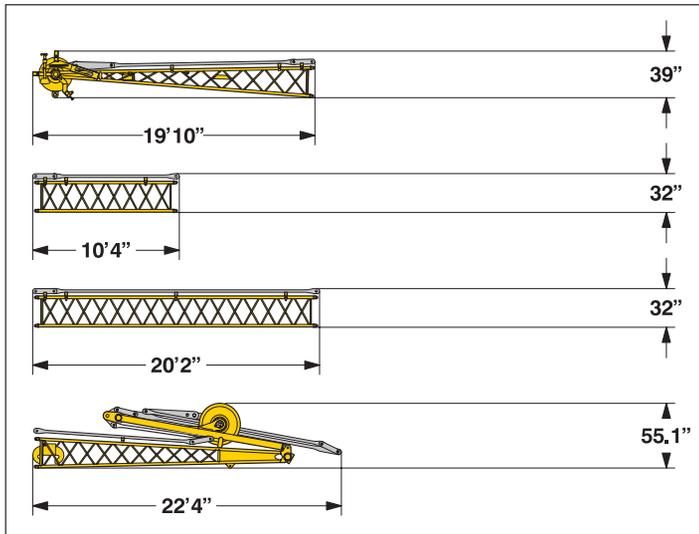
Width \_\_\_\_\_ 55"  
Weight in lbs\* \_\_\_\_\_ 4,350

### Boom transport option

Length \_\_\_\_\_ 39'10"  
Weight in lbs\* \_\_\_\_\_ 11,110

# Transport dimensions and weights

## Fixed jib (No. 0806.xx)



\*) Including pendant straps

### Fixed jib head (No. 0806.16)

Width	45"
Weight in lbs*	980

### Fixed jib section (No. 0806.15) **10 ft**

Width	38"
Weight in lbs*	245

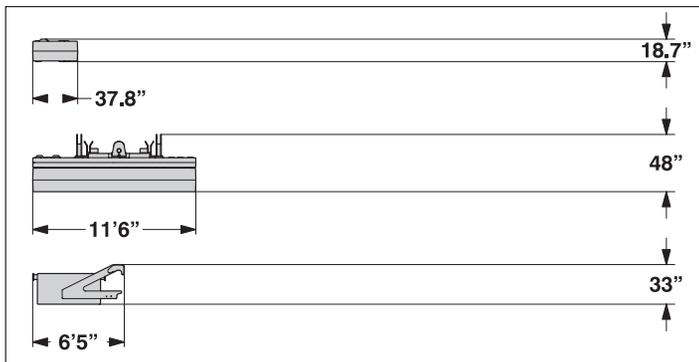
### Fixed jib section (No. 0806.15) **20 ft**

Width	38"
Weight in lbs*	430

### Fixed jib foot with A-frame (No. 0806.16)

Width	59"
Weight in lbs*	2,050

## Counterweight



### Counterweight **10x**

Width	33.5"
Weight in lbs	3,300

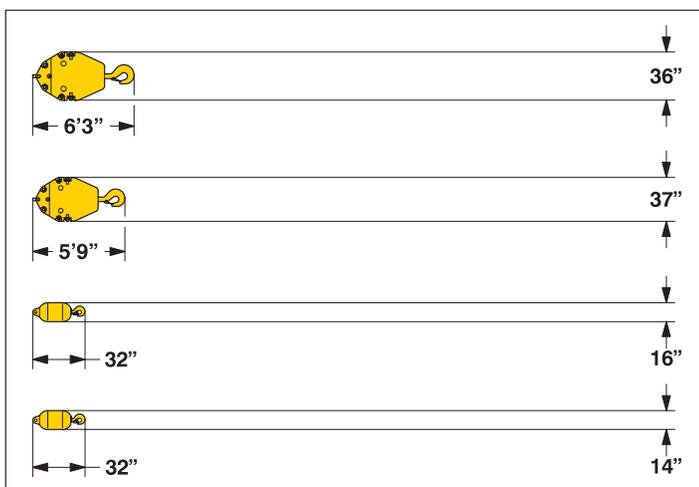
### Counterweight **1x**

Width	41.3"
Weight in lbs	38,150

### Carbody counterweight **2x**

Width	5'5"
Weight in lbs	16,500

## Hooks



### **110,230 lbs hook block - 1 sheave**

Width	12"
Weight in lbs	1,650

### **88,200 lbs hook block - 1 sheave**

Width	12"
Weight in lbs	1,135

### **55,120 lbs single hook**

Width	16"
Weight in lbs	880

### **44,100 lbs single hook**

Width	14"
Weight in lbs	660

# Technical description



## Engine

Power rating according to ISO 9249, 450 kW (603 hp) at 1900 rpm  
Engine type \_\_\_\_\_ Liebherr D 9508 A7  
Fuel tank \_\_\_\_\_ 211 gal capacity with continuous level indicator and reserve warning  
Engine complies with NRMM exhaust certification EPA / CARB Tier 3 and 97/68 EC Stage III



## Hydraulic system

The main pumps are operated by a distributor gearbox. Axial piston displacement pumps work in closed and open circuits supplying oil only when needed (flow control on demand). To minimize peak pressure an automatically working pressure cut off is integrated. This spares pumps and saves energy. The hydraulic oil is cleaned through electronically controlled pressure and return filters.  
Possible contamination is signalled in the cabin. The use of synthetic environmentally friendly oils is possible.  
Ready made hydraulic retrofit kits are available to customize requirements e. g. powering casing oscillators, VM vibrators, hydraulic grabs, hanging leads etc.  
Working pressure \_\_\_\_\_ max. 5076 psi  
Oil tank capacity \_\_\_\_\_ 216 gal



## Boom winch

Line pull \_\_\_\_\_ max. 23,200 lbs  
Rope diameter \_\_\_\_\_ 20 mm  
Boom up \_\_\_\_\_ 44 sec. from 15° to 86°



## Swing

Consists of rollerbearing with external teeth for lower tooth flank pressure, fixed axial piston hydraulic motor, spring loaded and hydraulically released multi-disc holding brake, planetary gearbox and pinion.  
Swing speed from 0 – 4.9 rpm continuously variable, selector for 3 speed ranges to increase swing precision.  
Option:  
Second swing drive



## Noise emission

Noise emissions correspond with 2000/14/EC directive on noise emission by equipment used outdoors.



## Main winches

Winch options:  
Line pull (nom. load) \_\_\_\_\_ 35,300 lbs – 44,100 lbs – 55,200 lbs  
Rope diameter \_\_\_\_\_ 26 mm \_\_\_\_\_ 30 mm \_\_\_\_\_ 34 mm  
Drum diameter \_\_\_\_\_ 22,8" \_\_\_\_\_ 24,8" \_\_\_\_\_ 29,5"  
Rope speed ft/min \_\_\_\_\_ 0-443 \_\_\_\_\_ 0-302 \_\_\_\_\_ 0-236  
Rope capacity 1st layer \_\_\_\_\_ 170 ft \_\_\_\_\_ 152 ft \_\_\_\_\_ 158 ft  
The winches are outstanding in their compact design and easy assembly. Clutch and braking functions on the free fall system are provided by a compact designed, low wear and maintenance free multi-disc brake. The drag and hoist winches use pressure controlled, variable flow hydraulic motors.  
This system features sensors that automatically adjust oil flow to provide max. winch speed depending on load.  
Option:  
Auxiliary winch \_\_\_\_\_ 15,500 lbs in boom foot  
Tagline winch \_\_\_\_\_ 6,600 lbs with free fall



## Crawlers

The track width of the undercarriage is changed hydraulically. Propulsion through axial piston motor, hydraulically released spring loaded multi-disc brake, maintenance free crawler tracks, hydraulic chain tensioning device.  
Flat or triple grouser track shoes 31.5 inch  
Drive speed \_\_\_\_\_ 0 – 0.8 mph  
Option:  
● 2 speed hydraulic motor for higher travel speed  
● Self assembly system, jack up system

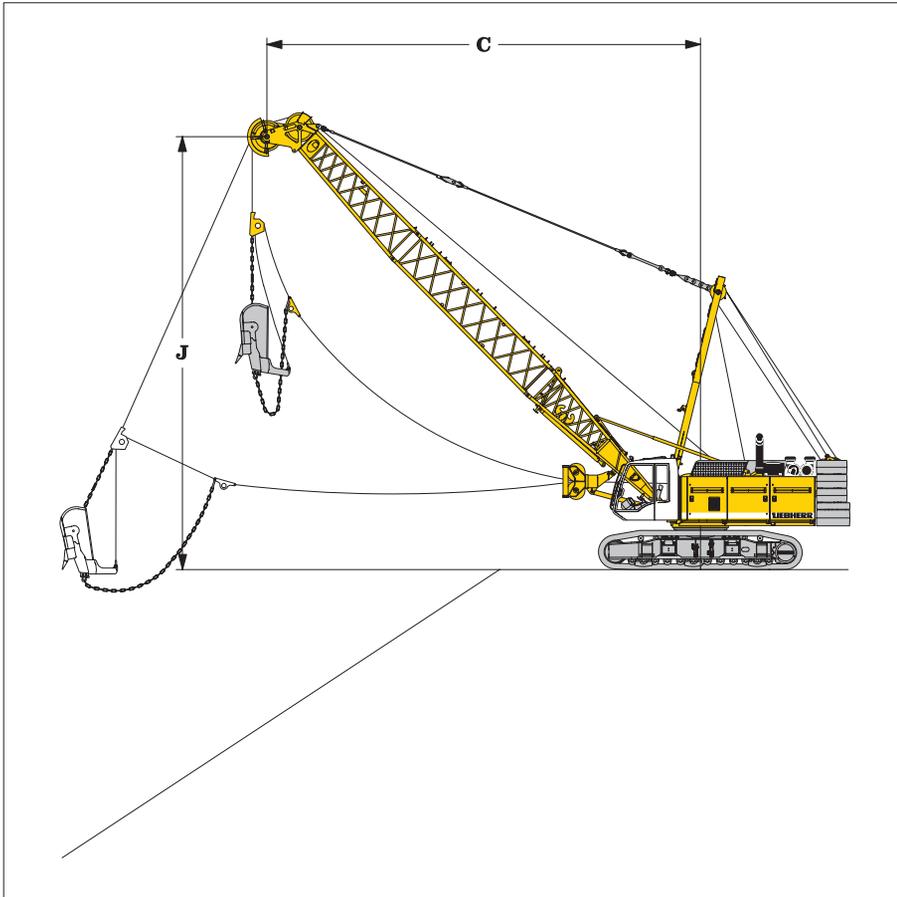


## Control

The control system – developed and manufactured by Liebherr – is designed to withstand extreme temperature changes and the rough heavy duty tasks common in the construction industry. Complete machine operating data are shown on a high resolution display. The crane is equipped with proportional control for all movements, which can be carried out simultaneously.  
Dragline operation: A special "Interlock" control system is an option available. It is designed for power lifting of the dragline bucket without using the drag winch brake.  
An additional option is the "Redundant Control System", which allows restricted operation of the machine in the event of a failure on the electronic base control or its sensors.  
On request, Liebherr also offers special custom designed control systems for free fall winches.  
Operation: Left joy stick for boom winch and swing, right two directional levers for winch I and II. Crawler control is actuated with the two central foot pedals. Additionally, hand levers can be attached to the pedals.  
Options:  
● Special demolition control system  
● MDE: Machine data recording  
● PDE: Process data recording  
● GSM modem

# Dragline equipment

## 58,000 lbs counterweight



### Working diagram

C = Radius / dumping radius  
 J = Height of boom head sheave centre above ground level

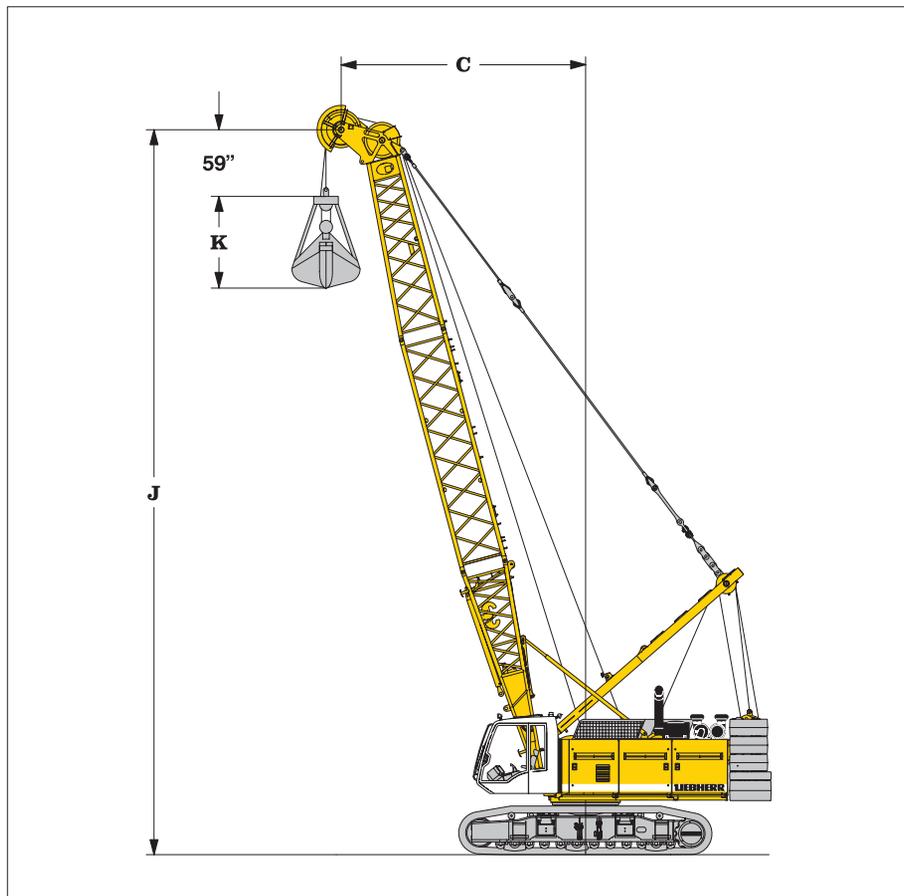
Capacities in 1000 lbs for boom lengths (46 ft – 95 ft) counterweight 58,000 lbs

$\alpha$	46 ft			56 ft			66 ft			75 ft			85 ft			95 ft		
	C ft	J ft	lbs															
45	39.0	37.4	37,9	45.9	44.3	30,6	53.1	51.2	25,1	60.0	58.0	22,3	66.9	19.8	19,0	73.8	72.2	16,5
40	41.6	34.4	34,6	49.2	40.7	28,7	56.8	47.2	23,8	64.3	53.5	20,5	71.8	18.2	17,4	79.4	65.9	15,0
35	43.9	31.5	30,0	52.2	37.1	26,9	60.0	42.7	22,3	68.2	48.2	18,7	76.1	16.5	15,9	84.3	59.7	13,9
30	45.9	28.2	24,9	54.5	33.1	24,5	63.0	38.1	20,3	71.5	43.0	17,2	80.1	14.6	14,6	88.6	52.8	12,6
25	47.6	24.9	23,6	56.4	28.9	22,0	65.6	33.1	18,5	74.4	37.4	15,6	83.3	12.6	13,2	92.2	45,6	11,2

Max. capacities in 1000 lbs do not exceed 75% of tipping load.

# Clamshell equipment

## 58,000 lbs counterweight



### Working diagram

- C = Radius / dumping radius
- J = Height of boom head sheave centre above ground level
- K = Length of clamshell (depending on type and capacity of bucket)

Capacities in 1000 lbs for boom lengths (46 ft – 95 ft)										counterweight 58,000 lbs									
$\alpha$	46 ft			56 ft			66 ft			75 ft			85 ft			95 ft			
	C	J	lbs	C	J	lbs	C	J	lbs	C	J	lbs	C	J	lbs	C	J	lbs	
65	26.6	45.9	56,2	30.5	54.8	48,9	34.8	64.0	41,4	39.0	72.8	35,3	43.0	81.7	28,4	47.2	90.6	26,9	
60	29.8	44.3	49,6	34.8	52.8	42,8	39.7	61.4	35,7	44.6	69.9	30,4	49.5	78.4	26,2	54.5	86.9	23,6	
55	33.1	42.3	46,1	38.7	50.2	37,3	44.6	58.4	31,3	50.2	66.3	26,9	55.8	74.5	23,2	61.4	82.3	20,5	
50	36.4	39.7	41,9	42.7	47.2	33,5	48.9	54.8	27,8	55.1	62.3	24,0	61.7	69.9	20,5	67.9	77.4	17,8	
45	39.0	37.4	37,5	45.9	44.3	30,4	53.1	51.2	24,9	60.0	58.1	21,6	66.9	65.0	18,3	73.8	72.2	15,7	
40	41.7	34.4	34,2	49.2	40.7	28,0	56.8	47.2	22,9	64.3	53.5	19,4	71.8	59.7	16,5	79.4	65.9	14,1	
35	44.0	31.5	29,1	52.1	37.1	26,0	60.0	42.7	21,2	68.2	48.2	17,9	76.1	54.1	15,0	84.3	59.7	12,8	
30	45.9	28.2	24,9	54.5	33.1	24,3	63.0	38.1	19,8	71.5	43.0	16,7	80.0	47.9	13,9	88.6	52.8	11,9	
25	47.6	24.9	23,6	56.4	28.9	22,0	65.6	33.1	18,3	74.5	37.4	15,7	83.3	41.3	13,2	92.2	45.6	11,0	

Max. capacities in 1000 lbs do not exceed 66.7 % of tipping load.

Load diagram restricted by safety factors of standard ropes:

Winches ————— 44,100 lbs ——— 55,200 lbs

Rope diameter ————— 30 mm ——— 34 mm

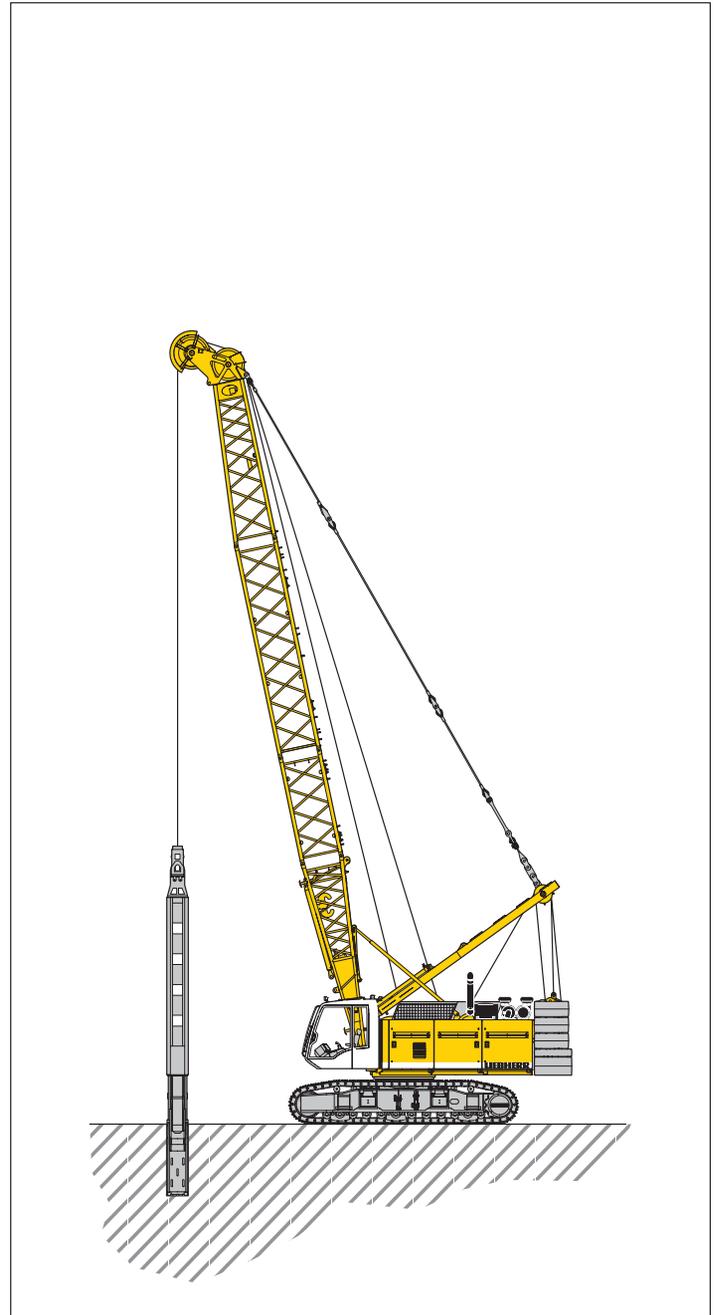
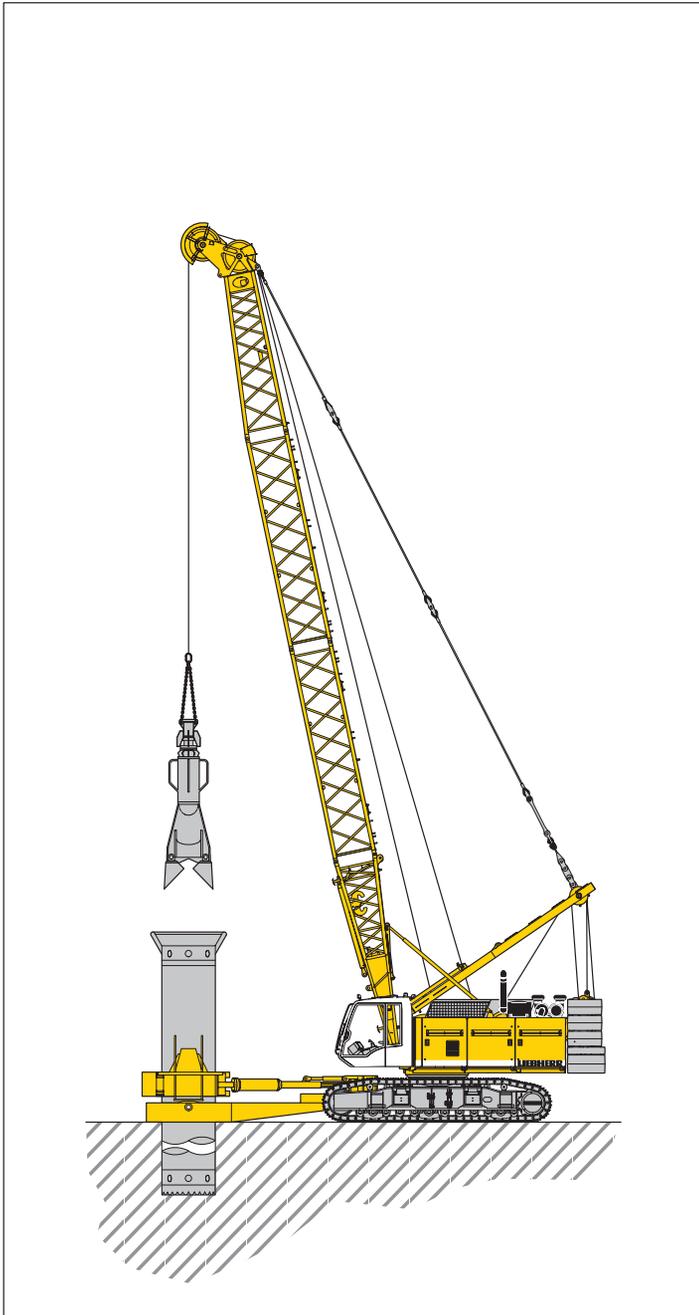
Min. breaking load ——— 182,095 lbf ——— 231,800 lbf

1-rope clamshell ——— 36,400 lbs ——— 46,300 lbs

2-rope clamshell ——— 48,500 lbs ——— 61,750 lbs

# Equipment

## Casing oscillator and slurry wall grab



### Casing oscillator

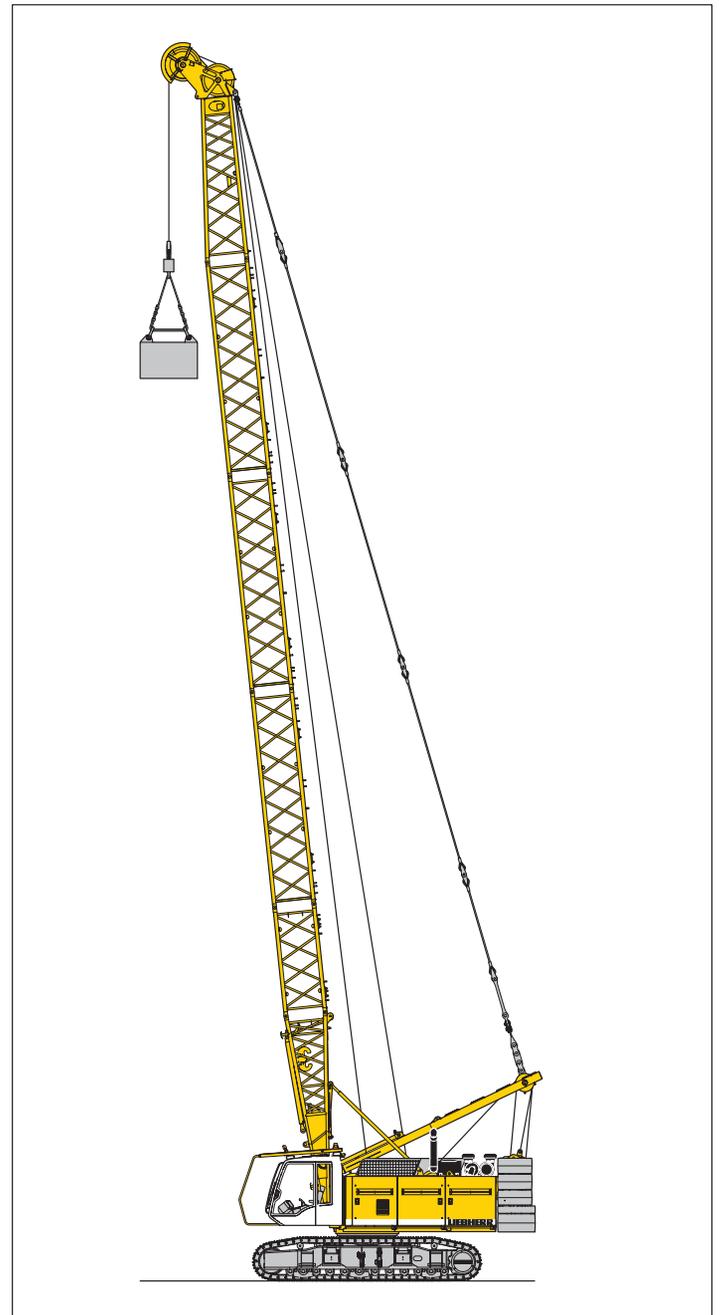
Winch options ————— 2x 44,100 lbs ——— 2x 55,200 lbs  
 Line speed 1st layer (ft/min) ————— 0-302 ————— 0-236  
 Drilling diameter ————— 6'7" ————— 6'7"  
 Maximum allowable weight in  
 two rope operation ————— 48,500 lbs ——— 61,750 lbs

### Slurry wall grab

Winch options ————— 2x 44,100 lbs ——— 2x 55,200 lbs  
 Line speed 1st layer (ft/min) ————— 0-302 ————— 0-236  
 Max. chisel weight ————— 26,500 lbs ——— 35,300 lbs  
 Maximum allowable weight in  
 two rope operation ————— 48,500 lbs ——— 61,750 lbs

# Equipment

## Dynamic soil compaction



Capacities in 1000 lbs for boom lengths (66 ft – 105 ft)

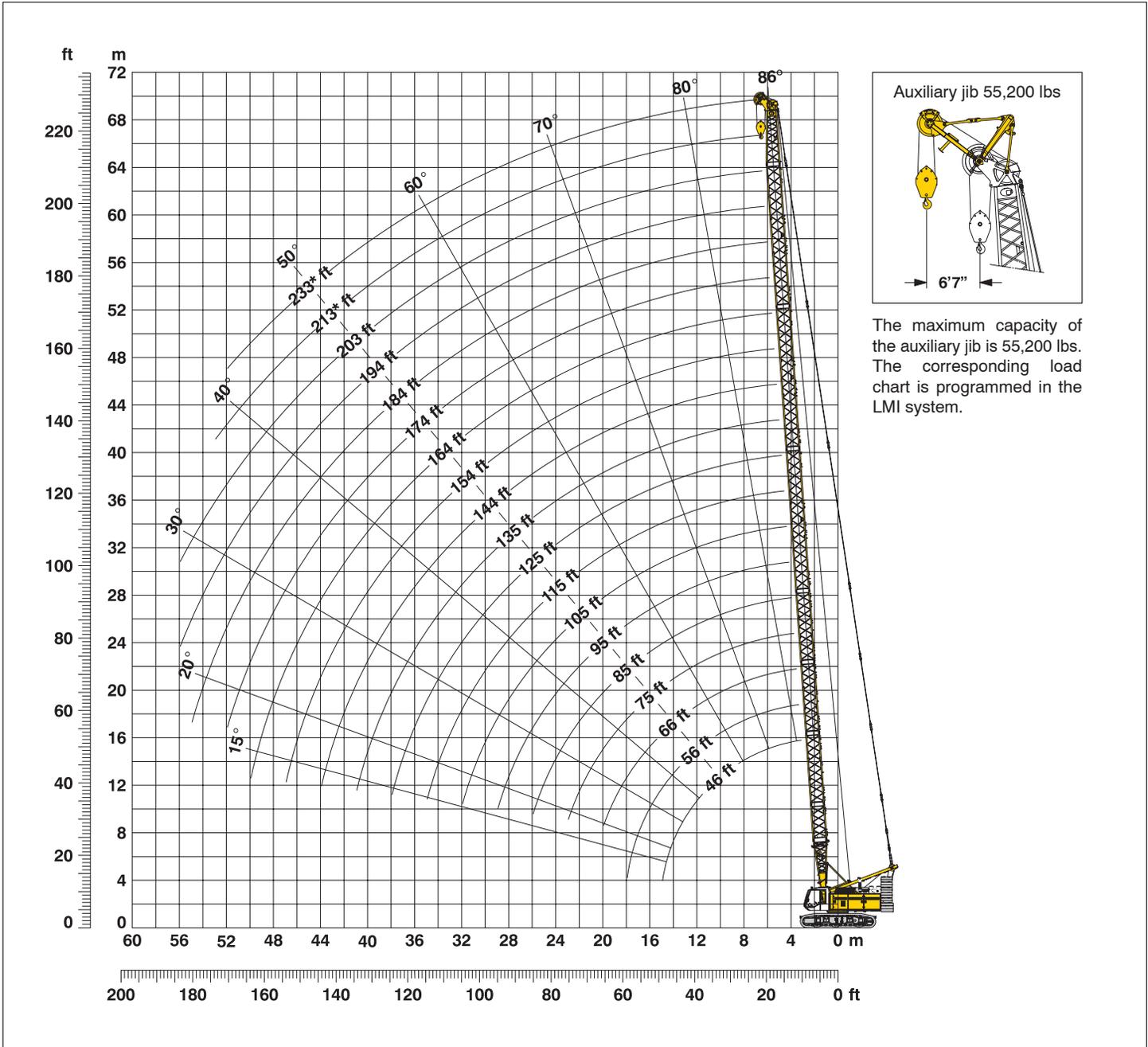
Radius in (ft)	Boom length				
	66 ft	75 ft	85 ft	95 ft	105 ft
	lbs	lbs	lbs	lbs	lbs
27	55,2	55,2	44,1	44,1	41,9
30	44,1	41,9	41,9	39,7	37,5

Max. capacities in 1000 lbs do not exceed 75% of tipping load.

All loads given are max. values and must not be exceeded. They are only permitted in 2 rope automatic operation and are valid for work on a surface with max. inclination of 1 %. Lifting heights must not exceed 82 ft.

# Working range - main boom (No. 1311.xx) 86° - 15°

58,000 lbs counterweight



## Main boom configuration (table 1 - No. 1311.xx)

Configuration for boom lengths (36 ft – 223 ft)		Amount of boom extensions																			
Length		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Boom foot	18 ft	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Boom insert	10 ft**		1		1		1		1		1		1		1		1		1		
Boom insert	20 ft**			1	1	2	2	3	3	2	2	3	3	2	2	3	3	2	2	3	
Boom insert	40 ft**								1	1	1	1	2	2	2	2	3	3	3	3	
Boom head	18 ft	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Boom length (ft)		36	46	56	66	75	85	95	105	115	125	135	144	154	164	174	184	194	203	213*	223*

\* Additional counterweight allows self erection of boom up to 223 ft.

\*\*Actual lengths of boom sections are metric (e.g. 3 m, 6 m, 12 m). The figures shown above are approximate conversions to feet.

# Lift chart for main boom (No. 1311.xx)

## 58,000 lbs counterweight

Capacities in 1000 lbs for boom lengths (36 ft – 203 ft) – with 55,200 lbs winches  
58,000 lbs counterweight

Radius	Boom length in (ft)																Radius		
	36	46	66	75	85	95	105	115	125	135	144	154	164	174	184	194		203	
(ft)	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	(ft)
10.5			200.0																10.5
15	200.0	200.0	193.8	188.3	178.1	157.7	137.6	115.1	99.4										15
20	120.4	120.9	121.2	121.2	121.2	119.2	116.7	114.5	99.4	80.2	67.1	62.1	54.8	48.3	40.4	33.9			20
25	85.4	85.8	86.0	86.0	85.9	85.8	85.7	85.9	84.4	76.7	66.2	62.1	54.8	48.3	40.4	33.9	29.4		25
30	65.6	66.0	66.2	66.1	66.0	65.9	65.7	65.9	65.8	65.6	62.6	58.2	51.9	46.5	40.3	33.9	29.4		30
35	52.8	53.2	53.4	53.3	53.2	53.1	52.9	53.1	52.9	52.7	52.6	52.6	48.8	42.3	37.7	31.9	28.1		35
40		44.5	44.7	44.6	44.5	44.4	44.2	44.4	44.2	44.0	43.8	43.9	43.6	39.7	35.5	30.1	26.5		40
45		37.9	38.1	38.0	37.9	37.7	37.5	37.8	37.6	37.4	37.2	37.2	37.0	36.8	33.6	28.4	24.7		45
50			33.0	33.0	32.8	32.7	32.4	32.7	32.5	32.3	32.1	32.1	31.9	31.7	31.5	27.1	23.4		50
55			29.0	28.9	28.8	28.6	28.4	28.7	28.4	28.2	28.0	28.1	27.9	27.6	27.4	26.2	22.5		55
60			25.7	25.7	25.5	25.3	25.1	25.4	25.2	25.0	24.7	24.8	24.6	24.3	24.1	24.1	21.8		60
65			22.9	22.9	22.8	22.6	22.4	22.7	22.5	22.2	22.0	22.1	21.8	21.6	21.4	21.4	21.1		65
70				20.6	20.5	20.3	20.1	20.4	20.2	20.0	19.7	19.8	19.6	19.3	19.1	19.1	18.8		70
75				18.6	18.5	18.4	18.2	18.4	18.2	18.0	17.7	17.8	17.6	17.4	17.1	17.1	16.9		75
80					16.8	16.7	16.5	16.8	16.5	16.3	16.1	16.1	15.9	15.7	15.4	15.4	15.2		80
85					15.3	15.2	15.0	15.3	15.1	14.8	14.6	14.7	14.4	14.2	13.9	13.9	13.7		85
90						13.9	13.7	14.0	13.8	13.5	13.3	13.4	13.1	12.9	12.6	12.6	12.4		90
95						12.7	12.5	12.8	12.6	12.4	12.1	12.2	12.0	11.8	11.5	11.5	11.2		95
100							11.4	11.8	11.6	11.4	11.1	11.2	11.0	10.7	10.5	10.5	10.2		100
105								10.8	10.6	10.4	10.2	10.3	10.0	9.8	9.5	9.5	9.3		105
110								10.0	9.8	9.6	9.3	9.4	9.2	9.0	8.7	8.7	8.5		110
115									9.0	8.8	8.6	8.7	8.4	8.2	7.9	7.9	7.7		115
120									8.3	8.1	7.9	8.0	7.7	7.5	7.2	7.3	7.0		120
125										7.5	7.2	7.3	7.1	6.9	6.6	6.6	6.4		125
130										6.8	6.6	6.8	6.5	6.3	6.0	6.0	5.8		130
135											6.1	6.2	6.0	5.7	5.5	5.5	5.2		135
140											5.5	5.7	5.5	5.2	5.0	5.0	4.7		140
145												5.2	5.0	4.8	4.5	4.5	4.3		145
150												4.8	4.6	4.3	4.1	4.1	3.8		150
155													4.1	3.9	3.7	3.7	3.4		155
160														3.7	3.5	3.3	3.1		160
165															3.2	2.9	2.7		165
170															2.8	2.6	2.4		170
175															2.2	2.3			175

Above lift chart is for reference only. For actual lift duty please refer to lift chart in operator's cab or manual.

# Lift chart for main boom (No. 1311.xx)

## 71,200 lbs counterweight and 33,100 lbs carbody counterweight

Capacities in 1000 lbs for boom lengths (36 ft – 223 ft) – with 55,200 lbs winches  
71,200 lbs counterweight and 33,100 lbs carbody counterweight

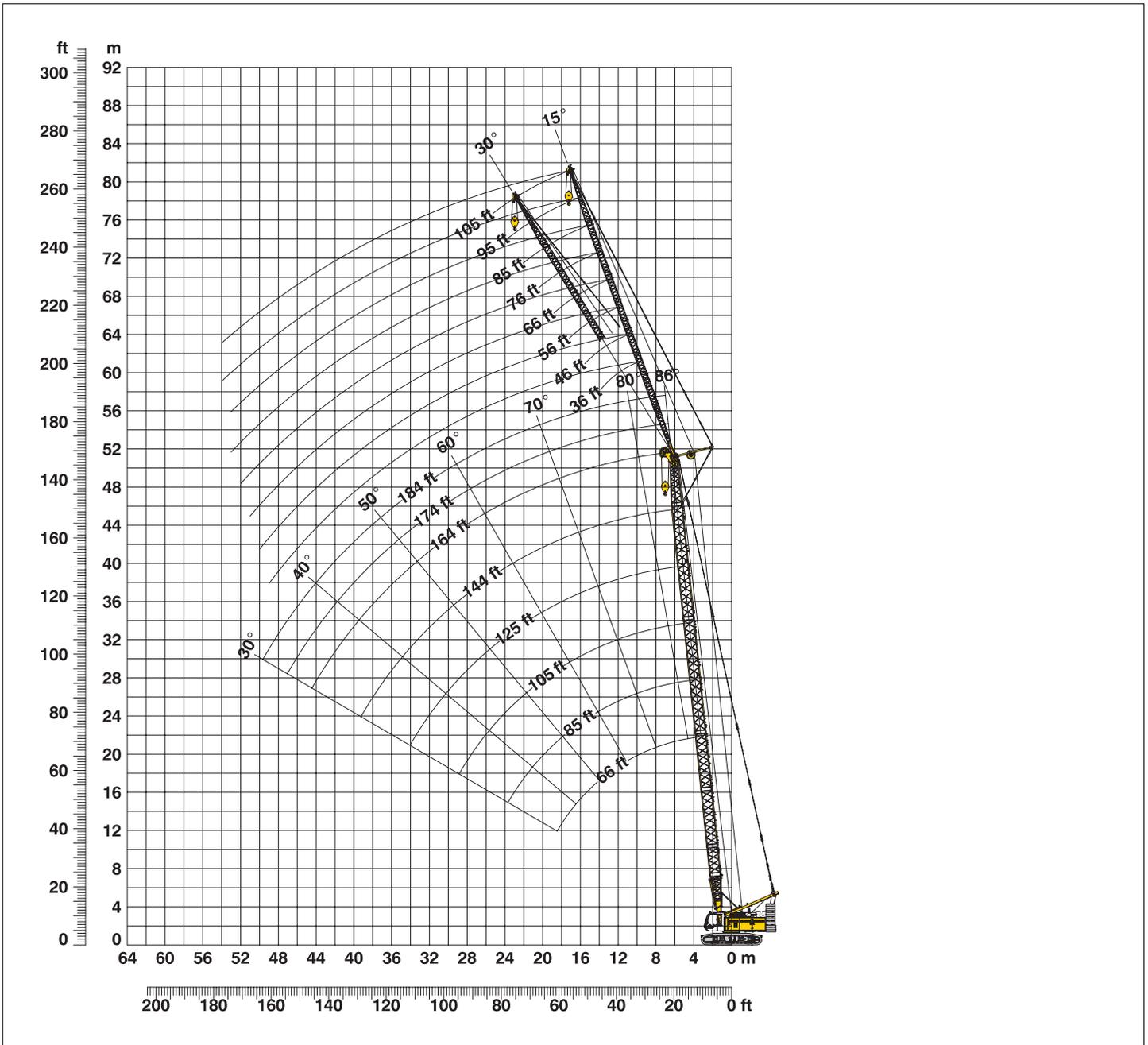
Radius	Boom length in (ft)																Radius			
	36	56	66	85	105	115	125	135	144	154	164	174	184	194	203	213		223		
(ft)	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	lbs	(ft)	
8.5	230.0*																		8.5	
10	230.0*	230.0*																	10	
15	198.4	194.0	198.4	178.1	137.6	115.1	99.4												15	
20	149.6	150.3	150.3	140.8	128.7	115.1	99.4	80.2	67.1	62.1	54.8	48.3	40.4	33.9					20	
25	106.5	107.1	107.1	107.0	102.0	98.5	90.3	76.7	66.2	62.1	54.8	48.3	40.4	33.9	29.4	25.9	23.2		25	
30	82.1	82.6	82.6	82.5	82.2	80.4	75.7	69.4	62.6	58.2	51.9	46.5	40.3	33.9	29.4	25.9	23.2		30	
35	66.3	66.9	66.9	66.7	66.4	66.6	66.4	62.2	55.5	54.3	48.8	42.3	37.7	31.9	28.1	25.4	23.2		35	
40		56.0	55.9	55.7	55.4	55.6	55.4	54.6	50.3	51.4	46.0	39.7	35.5	30.1	26.5	23.7	21.8		40	
45		47.9	47.9	47.6	47.3	47.5	47.3	47.1	42.7	45.8	42.4	37.8	33.6	28.4	24.7	22.3	20.7		45	
50		41.8	41.8	41.6	41.2	41.5	41.3	41.1	39.1	40.7	39.0	35.6	32.1	27.1	23.4	21.1	19.6		50	
55		36.8	36.9	36.7	36.3	36.5	36.3	36.1	35.9	35.9	35.7	33.4	30.2	26.2	22.5	20.2	18.7		55	
60			32.8	32.6	32.3	32.5	32.3	32.1	31.9	31.9	31.7	31.5	28.6	25.4	21.8	19.5	18.0		60	
65			29.4	29.3	28.9	29.2	29.0	28.8	28.5	28.6	28.4	28.1	27.4	24.8	21.2	18.9	17.5		65	
70				26.5	26.1	26.4	26.2	26.0	25.7	25.8	25.5	25.3	25.1	24.3	20.7	18.4	17.0		70	
75				24.1	23.7	24.0	23.8	23.6	23.3	23.4	23.2	22.9	22.7	22.7	20.3	18.0	16.5		75	
80				22.0	21.6	21.9	21.7	21.5	21.2	21.3	21.1	20.9	20.6	20.6	19.0	17.4	16.2		80	
85				20.1	19.8	20.1	19.9	19.7	19.4	19.5	19.3	19.0	18.8	18.8	17.9	16.4	15.4		85	
90					18.2	18.5	18.3	18.1	17.8	17.9	17.7	17.5	17.2	17.2	16.9	15.5	14.5		90	
95					16.8	17.1	16.9	16.7	16.4	16.5	16.3	16.0	15.8	15.8	15.5	14.7	13.8		95	
100					15.5	15.8	15.6	15.4	15.2	15.3	15.0	14.8	14.5	14.5	14.3	14.0	13.0		100	
110						13.7	13.5	13.2	13.0	13.1	12.9	12.6	12.4	12.4	12.1	11.9	11.6		110	
120							11.6	11.4	11.2	11.3	11.1	10.8	10.6	10.6	10.3	10.1	9.8		120	
130								9.9	9.7	9.8	9.6	9.4	9.1	9.1	8.9	8.6	8.3		130	
140									8.4	8.5	8.3	8.1	7.8	7.8	7.6	7.3	7.1		140	
145										8.0	7.7	7.5	7.2	7.3	7.0	6.8	6.5		145	
150										7.4	7.2	7.0	6.7	6.7	6.5	6.2	6.0		150	
155											6.7	6.5	6.2	6.2	6.0	5.7	5.5		155	
160											6.2	6.0	5.7	5.8	5.5	5.3	5.0		160	
165												5.6	5.3	5.3	5.1	4.9	4.6		165	
170													5.1	4.9	4.9	4.7	4.4		170	
175														4.5	4.5	4.3	4.1	3.8		175
180														4.1	4.2	3.9	3.7	3.4		180
185															3.8	3.6	3.3	3.1		185
195																2.9	2.7	2.4		195

Above lift chart is for reference only. For actual lift duty please refer to lift chart in operator's cab or manual.

\*) With heavy duty boom head

# Working range - fixed jib (No. 0806.xx) 15° and 30°

## Main boom 86°- 30°



### Boom configuration for boom lengths (36 ft - 184 ft) – see table 1 on page 10

### Fixed jib configuration for fixed jib lengths (36 ft - 105 ft)

	Length	Amount of fixed jib extensions							
Fixed jib foot	18 ft	1	1	1	1	1	1	1	1
Fixed jib insert	10 ft*		1		1		1		1
Fixed jib insert	20 ft*	0	0	1	1	2	2	3	3
Fixed jib head	18 ft	1	1	1	1	1	1	1	1
Fixed jib length (ft)		36	46	56	66	76	85	95	105

\*Actual lengths of boom sections are metric (e.g. 3 m, 6 m). The figures shown above are approximate conversions to feet.

# Lift chart - fixed jib (No. 0806.xx)

Offset 15°

## Main boom 36 ft

Radius (ft)	Fixed jib length in (ft)			
	36	66	85	105
16.8	60.4			
35	41.8	25.1		
40	38.8	23.4	16.2	
50	34.9	21.0	13.1	9.5
55	33.6	20.2	12.5	9.2
60	32.2	19.5	11.9	8.9
65	30.4	18.9	11.4	8.7
80		16.3	10.1	8.0
95		14.5	9.0	7.5
110			8.4	7.2
120				7.0
130				6.8

## Main boom 66 ft

Radius (ft)	Fixed jib length in (ft)			
	36	66	85	105
19.9	56.1			
35	43.1	24.5		
45	38.8	21.9	14.0	
55	36.0	20.5	12.9	9.2
60	33.1	20.1	12.4	8.9
70	26.9	19.2	11.6	8.6
80	22.4	18.4	10.8	8.2
85	20.5	17.8	10.5	8.0
90	18.9	17.2	10.2	7.9
120		13.0	8.7	7.2
140			8.2	6.9
160				6.6

## Main boom 85 ft

Radius (ft)	Fixed jib length in (ft)			
	36	66	85	105
22	52.7			
40	40.7	22.8		
45	38.7	21.7	15.1	
55	35.9	20.4	12.9	9.1
60	32.6	19.9	12.5	8.9
70	26.3	19.3	11.8	8.6
80	21.8	18.6	11.2	8.2
90	18.3	18.0	10.6	7.9
105	14.4	15.5	9.8	7.5
135		10.2	8.6	7.0
155			8.2	6.7
175				6.5

## Main boom 105 ft

Radius (ft)	Fixed jib length in (ft)			
	36	66	85	105
24	48.4			
40	39.3	21.7		
50	36.5	20.3	13.2	
60	32.0	19.5	12.5	8.9
80	21.2	18.4	11.3	8.2
90	17.8	17.8	10.8	7.9
100	15.0	16.1	10.3	7.7
110	12.8	13.9	9.8	7.5
120	11.0	12.0	9.5	7.3
150		7.9	8.3	6.8
170			6.4	6.6
190				5.1

## Main boom 125 ft

Radius (ft)	Fixed jib length in (ft)			
	36	66	85	105
26.1	41.8			
40	36.6	21.7		
50	33.9	19.3	12.9	
60	31.8	18.6	12.3	8.7
80	21.0	17.8	11.3	8.1
100	14.8	15.9	10.5	7.7
120	10.8	11.7	9.7	7.3
130	9.3	10.2	9.3	7.1
140	7.9	8.8	8.9	7.0
170		5.7	6.1	6.5
190			4.5	4.9
195				4.5

## Main boom 144 ft

Radius (ft)	Fixed jib length in (ft)			
	36	66	85	105
28.1	36.6			
45	31.8	18.3		
55	29.3	17.6	12.2	
60	28.1	17.4	11.9	9.0
80	20.5	16.7	11.1	8.0
100	14.3	15.2	10.3	7.6
120	10.2	11.2	9.6	7.2
140	7.4	8.3	8.7	6.9
160	5.2	6.1	6.5	6.5
175		4.7	5.2	5.5
180			4.8	5.1
185				4.7

## Main boom 164 ft

Radius (ft)	Fixed jib length in (ft)			
	36	66	85	105
30.2	31.5			
45	28.4	16.9		
55	26.7	16.2	11.6	
65	23.9	15.9	11.2	8.0
80	20.2	15.2	10.8	7.7
100	14.0	14.3	9.7	7.4
120	9.9	10.9	9.1	7.1
140	7.1	8.0	8.4	6.8
165	4.5	5.3	5.7	6.1
175		4.5	4.9	5.2
180			4.5	4.8
185				4.4

## Main boom 174 ft

Radius (ft)	Fixed jib length in (ft)			
	36	56	66	76
31.2	28.8			
45	26.1	18.7	17.2	
50	25.1	18.3	15.7	14.5
60	23.3	17.7	15.2	13.1
80	19.6	16.3	14.4	12.6
100	13.7	14.5	13.3	10.6
120	9.7	10.4	10.6	9.5
140	6.8	7.4	7.7	8.0
160	4.7	5.3	5.5	5.8
165		4.8	5.1	5.3
170			4.6	4.8
175				4.4

## Main boom 184 ft

Radius (ft)	Fixed jib length in (ft)			
	36	46	56	
32.2	25.4			
40	24.4	21.2		
45	23.6	20.7	17.7	
60	21.6	19.1	16.7	
80	17.8	16.6	15.3	
100	13.4	13.8	13.8	
120	9.4	9.7	10.1	
130	7.8	8.2	8.5	
140	6.5	6.8	7.2	
150	5.4	5.7	6.0	
160	4.4	4.7	5.0	
165			4.5	

Capacities in 1000 lbs with fixed jib (No. 0806.xx), 71,200 lbs counterweight + 33,100 lbs carbody counterweight. Above lift chart is for reference only. For actual lift duty and complete chart with all available configurations please refer to lift chart in operator's cab or manual.

# Lift chart - fixed jib (No. 0806.xx)

## Offset 30°

### Main boom 36 ft

Radius (ft)	Fixed jib length in (ft)			
	36	66	85	105
25.5	40.7			
50	26.2	16.3		
60	23.2	14.5	11.9	
65	22.2	13.8	10.3	
75		12.5	9.6	7.7
90		11.2	8.7	6.9
95		11.0	8.4	6.7
110			7.8	6.1
115			7.7	5.9
120				5.8
130				5.5
135				5.5

### Main boom 66 ft

Radius (ft)	Fixed jib length in (ft)			
	36	66	85	105
28.6	39.0			
50	30.0	16.8		
65	25.8	14.7	10.6	
80	22.7	13.2	9.7	7.5
90	19.1	12.3	9.2	7.1
95	17.5	12.0	8.9	6.9
110		11.2	8.4	6.4
120		11.0	8.0	6.1
130			7.8	5.9
140			7.7	5.7
150				5.5
160				5.5

### Main boom 85 ft

Radius (ft)	Fixed jib length in (ft)			
	36	66	85	105
30.6	37.6			
55	30.0	16.2		
65	27.5	15.1	10.5	
80	22.3	13.7	9.8	7.5
90	18.7	12.9	9.4	7.2
100	15.8	12.3	9.0	6.8
110	13.5	11.7	8.6	6.5
130		11.0	8.0	6.0
140		9.7	7.8	5.8
160			7.7	5.5
170				5.5
180				5.5

### Main boom 105 ft

Radius (ft)	Fixed jib length in (ft)			
	36	66	85	105
32.7	35.8			
55	30.5	16.0		
70	26.5	14.9	10.2	
80	21.8	14.0	9.8	7.9
90	18.2	13.4	9.5	7.2
100	15.4	12.7	9.1	6.9
110	13.1	12.1	8.8	6.6
120	11.2	11.7	8.5	6.4
125	10.3	11.5	8.4	6.3
155		7.5	7.8	5.7
175			6.1	5.5
195				4.9

### Main boom 125 ft

Radius (ft)	Fixed jib length in (ft)			
	36	66	85	105
34.7	33.6			
55	29.8	17.0		
70	26.3	14.5	9.6	
85	19.7	13.7	9.4	7.3
100	15.2	13.0	9.1	6.9
110	13.0	12.4	8.9	6.7
120	11.1	12.0	8.6	6.4
130	9.5	10.6	8.4	6.2
140	8.1	9.2	8.2	6.0
170		5.8	6.4	5.6
190			4.7	5.2
200				4.4

### Main boom 144 ft

Radius (ft)	Fixed jib length in (ft)			
	36	66	85	105
36.8	30.5			
60	27.2	13.2		
75	23.4	12.9	8.7	
85	19.3	12.8	8.6	7.1
100	14.8	12.6	8.5	6.8
120	10.6	11.7	8.5	6.4
140	7.6	8.8	8.2	6.1
150	6.4	7.5	8.1	5.9
160	5.4	6.4	7.0	5.8
180		4.5	5.1	5.4
185			4.7	5.2
195				4.4

### Main boom 164 ft

Radius (ft)	Fixed jib length in (ft)			
	36	66	85	105
38.8	27.2			
60	23.8	15.9		
75	20.8	11.4	7.6	
90	17.3	11.1	7.5	6.8
100	14.5	10.7	7.5	6.3
120	10.3	10.2	7.5	5.5
140	7.4	8.5	7.5	5.5
160	5.2	6.2	6.8	5.5
165	4.7	5.7	6.3	5.5
175		4.8	5.3	5.5
185			4.5	5.0
190				4.6

### Main boom 174 ft

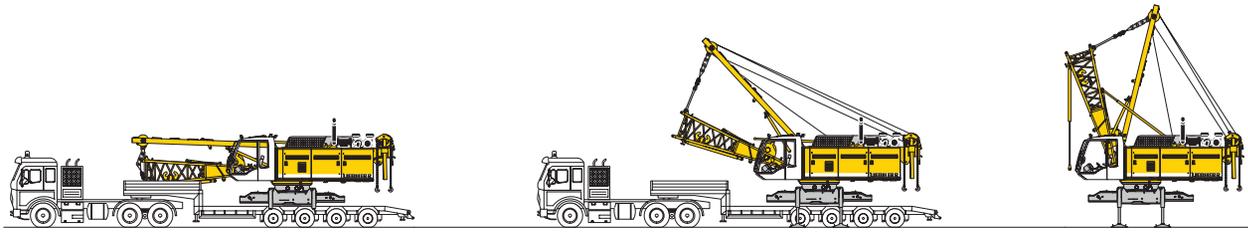
Radius (ft)	Fixed jib length in (ft)			
	36	56	66	75
39.9	24.6			
55	22.2	13.7		
60	21.6	13.6	11.3	
70	20.1	12.7	10.8	8.9
80	18.5	12.1	10.3	8.5
100	14.3	11.4	10.0	8.4
120	10.1	10.5	9.8	8.2
140	7.2	8.0	8.3	7.8
165	4.5	5.2	5.5	5.8
170		4.7	5.0	5.3
175			4.6	4.9
180				4.4

### Main boom 184 ft

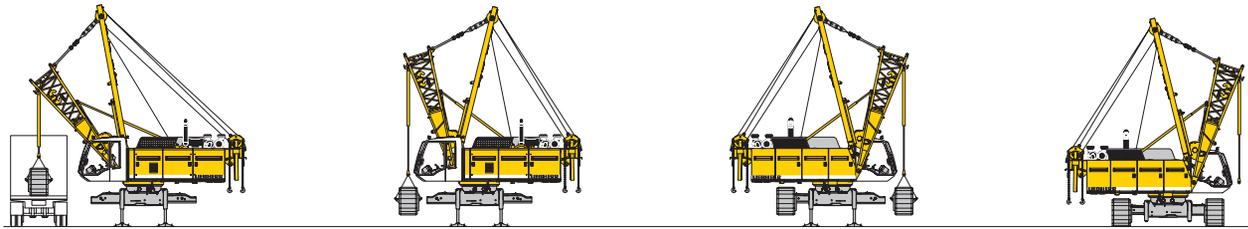
Radius (ft)	Fixed jib length in (ft)			
	36	46	56	
40.9	22.1			
55	20.6	18.3	16.5	
60	20.0	17.4	15.4	
80	17.2	15.9	14.4	
100	14.0	13.9	12.9	
120	9.8	10.3	10.8	
130	8.2	8.7	9.1	
140	6.9	7.3	7.7	
150	5.7	6.1	6.5	
160	4.7	5.0	5.4	
165		4.6	4.9	
170			4.5	

Capacities in 1000 lbs with fixed jib (No. 0806.xx), 71,200 lbs counterweight + 33,100 lbs carbody counterweight. Above lift chart is for reference only. For actual lift duty and complete chart with all available configurations please refer to lift chart in operator's cab or manual.

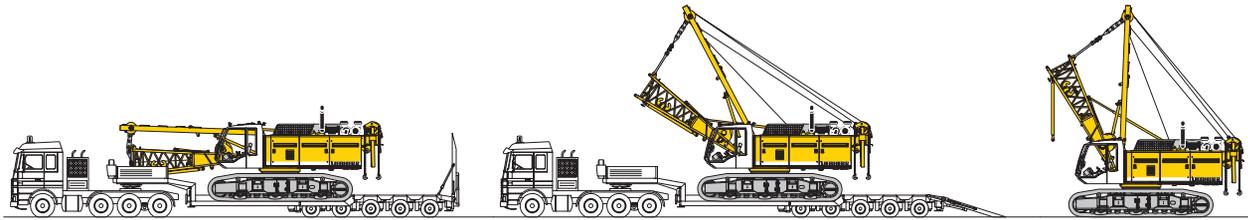
# Self assembly system



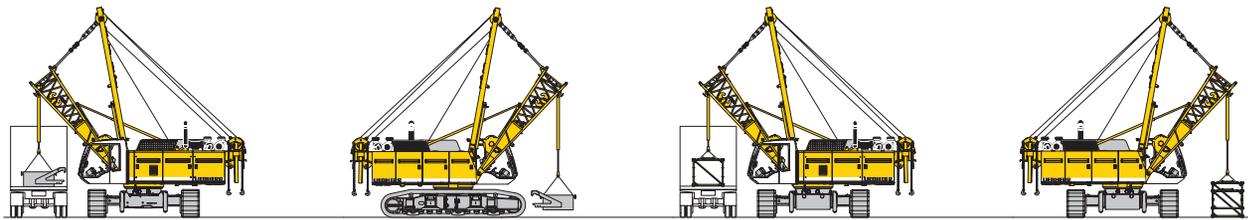
Unloading of basic machine (option)



Unloading and assembly of crawlers

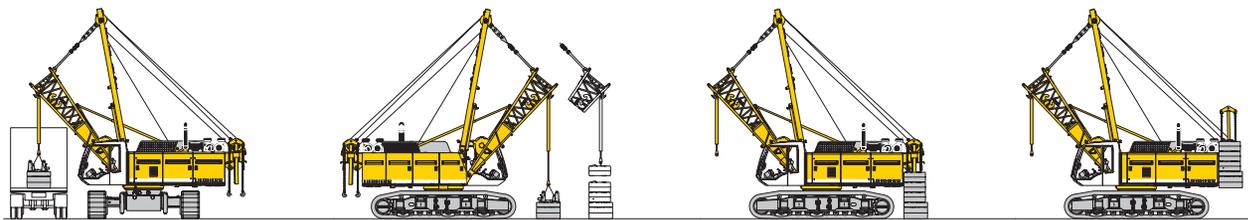


Unloading of basic machine (standard)

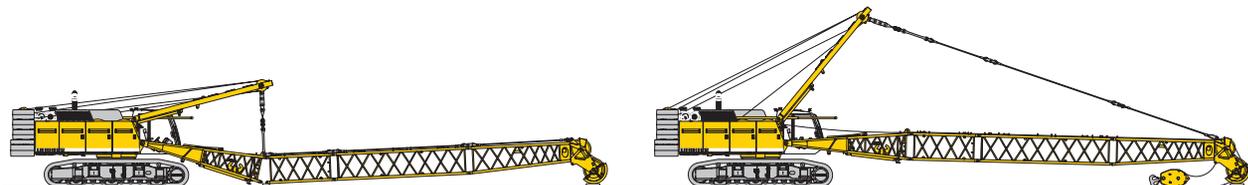


Unloading and assembly of carbody counterweight

Unloading and assembly of boom



Unloading and assembly of counterweight



Assembly of boom and reeving of hoist ropes