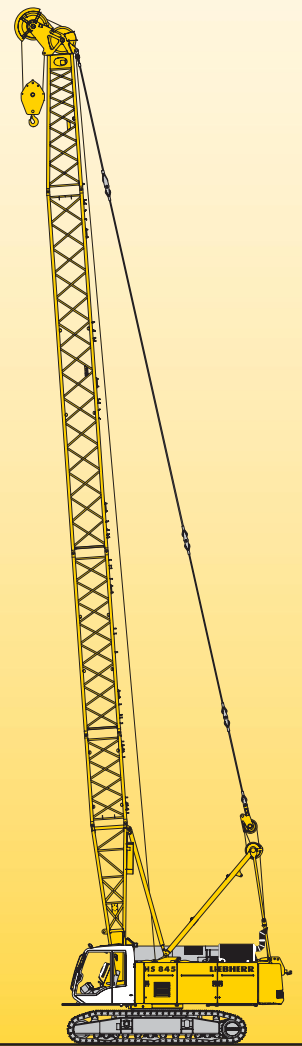


**Technical data**  
**Hydraulic crawler crane**

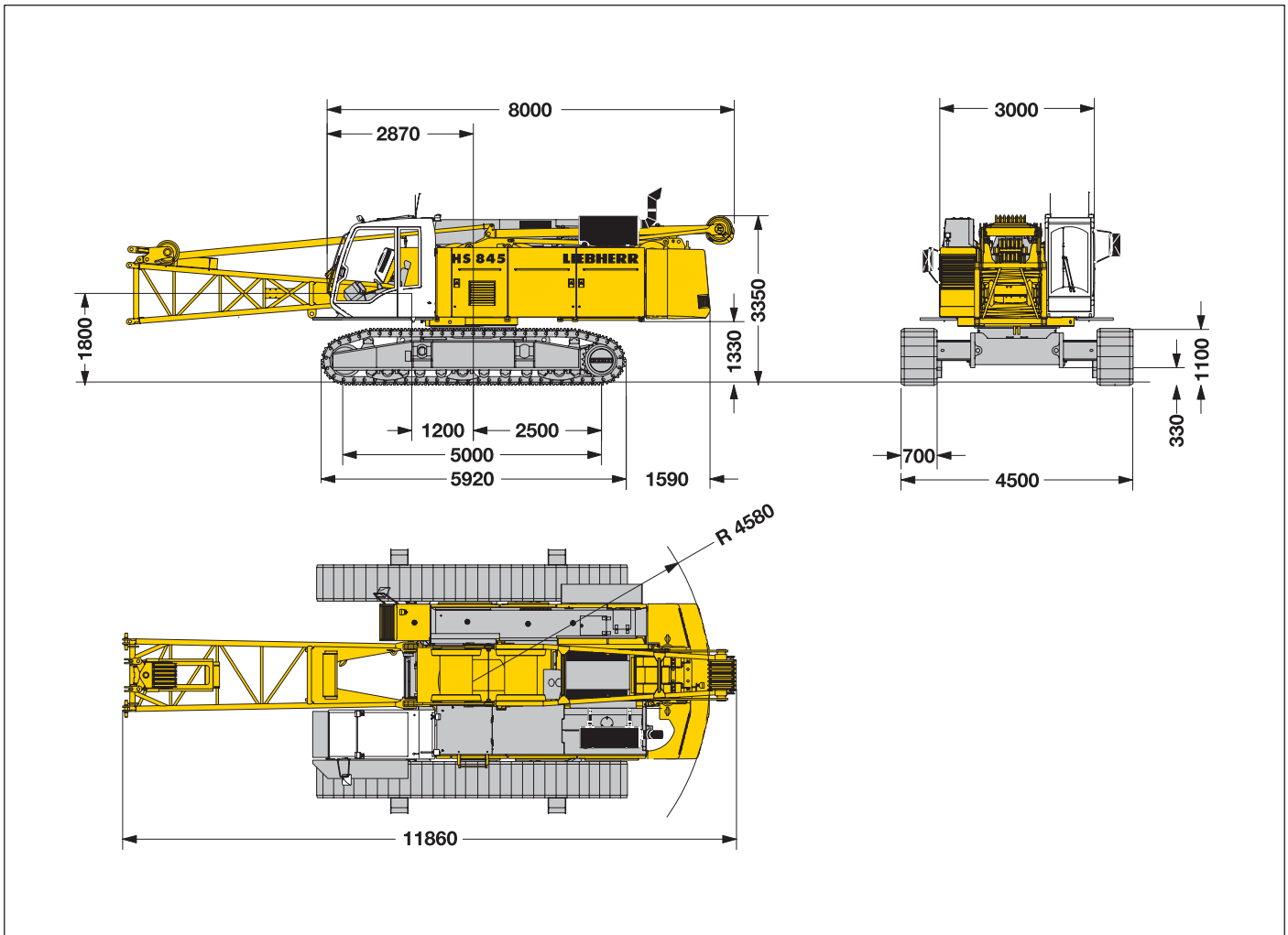
**HS 845 HD**  
Litronic®



**LIEBHERR**

# Dimensions

## Basic machine with undercarriage



### Operating weight

The operating weight includes the basic machine with HD undercarriage, 2 main winches 200 kN including wire ropes (90 m) and 11 m main boom, consisting of A-frame, pulley block, boom foot (5.5 m) and boom head (5.5 m), 20 t basic counterweight, 700 mm 3-web grousers and 60 t hook block.

Total weight \_\_\_\_\_ approx. 68 t

### Ground pressure

Ground bearing pressure \_\_\_\_\_ 0,97 kg/cm<sup>2</sup>

### Equipment

Main boom (No. 1311.18) max. length \_\_\_\_\_ 56 m  
 Main boom (No. 1311.22) max. length \_\_\_\_\_ 50 m  
 Fixed jib (No. 0806) \_\_\_\_\_ 11 m - 32 m  
 Modular designed equipment for operation as crane, with dragline or clamshell.

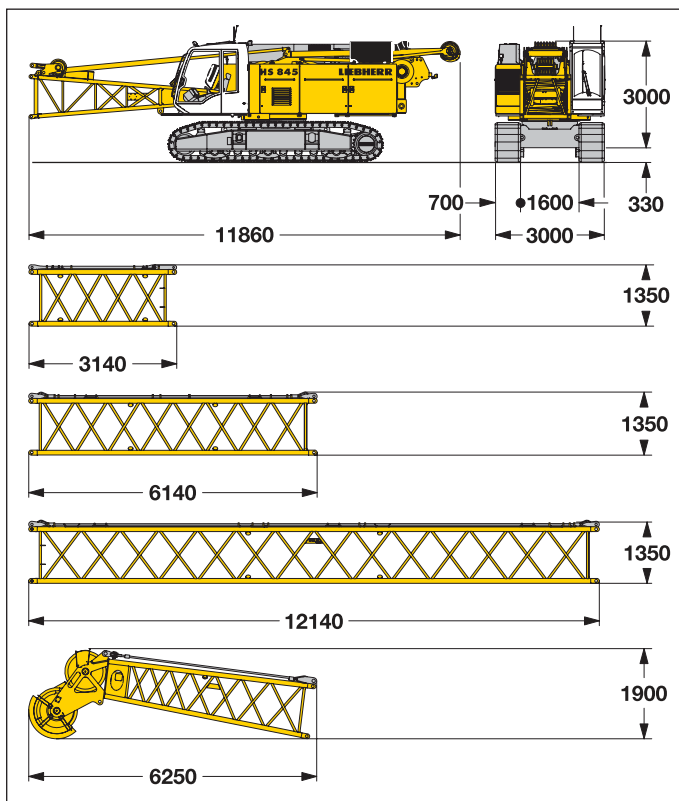
For dragline operation, a rotating fairlead is fitted into the boom foot. This minimizes the rope angle to drum, which results in lower rope wear.

### Remarks

1. The lifting capacities stated are valid for lifting operation only (corresponding 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 center 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 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).

# Transport dimensions and weights

## Basic machine and boom (No. 1311.18)



\*) Including pendant ropes, without auxiliary equipment

### Basic machine

with HD undercarriage, boom foot, pulley block, A-frame, 2x 200 kN winches including wire ropes (90 m), without basic counterweight

Width	3000 mm
Weight	47000 kg

### Boom section (No. 1311.18) **3 m**

Width	1430 mm
Weight*	390 kg

### Boom section (No. 1311.18) **6 m**

Width	1430 mm
Weight*	620 kg

### Boom section (No. 1311.18) **12 m**

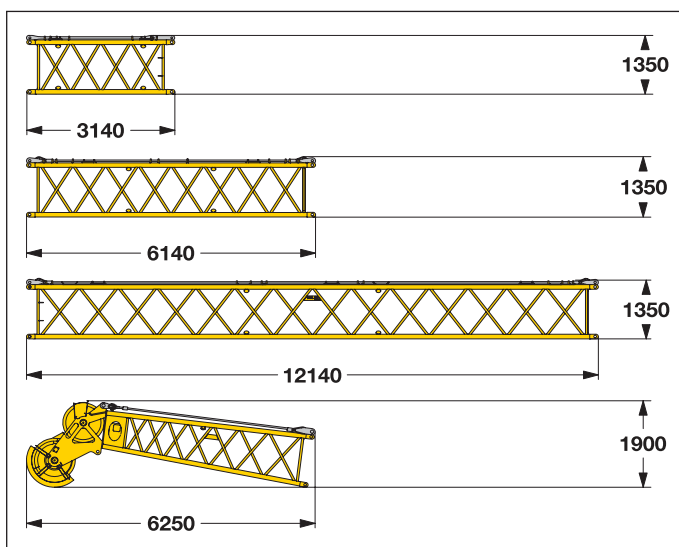
Width	1430 mm
Weight*	1085 kg

### Boom head<sup>1)</sup> (No. 1311.18)

Width	1400 mm
Weight*	1420 kg

1) Polyamide sheaves

## Main boom (No. 1311.22)



\*) Including pendant ropes, without auxiliary equipment

### Boom section (No. 1311.22) **3 m**

Width	1430 mm
Weight*	470 kg

### Boom section (No. 1311.22) **6 m**

Width	1430 mm
Weight*	730 kg

### Boom section (No. 1311.21) **12 m**

Width	1430 mm
Weight*	1260 kg

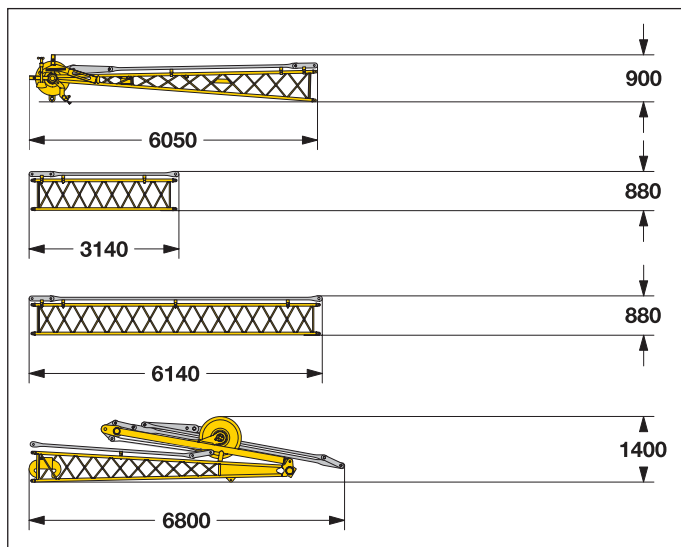
### Boom head<sup>1)</sup> (No. 1311.22)

Width	1400 mm
Weight*	1610 kg

1) Polyamide sheaves

# Transport dimensions and weights

## Fixed jib (No. 0806.xx)



\*) Including pendant ropes

### Fixed jib head (No. 0806.16)

Width	1140 mm
Weight*	475 kg

### Fixed jib section (No. 0806.15) **3 m**

Width	950 mm
Weight*	150 kg

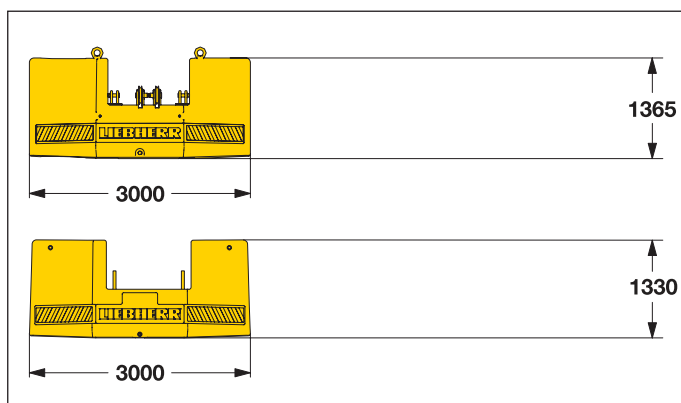
### Fixed jib section (No. 0806.15) **6 m**

Width	950 mm
Weight*	252 kg

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

Width	1500 mm
Weight*	1210 kg

## Counterweight



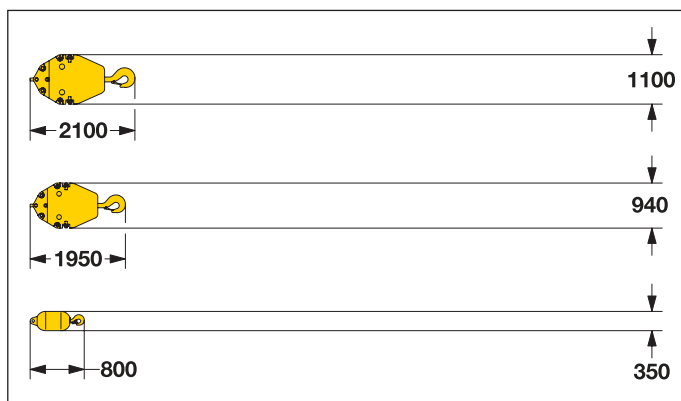
### Counterweight I **1x**

Width	830 mm
Weight	12600 kg

### Counterweight II **1x**

Width	625 mm
Weight	7400 kg

## Hooks



### 60 t hook block - 1 sheave

Width	350 mm
Weight	1100 kg

### 40 t hook block - 1 sheave

Width	350 mm
Weight	515 kg

### 20 t single hook

Width	350 mm
Weight	350 kg

# Technical description



## Engine

Power rating according to ISO 9249, 350 kW (469 hp) at 1900 rpm  
Engine type \_\_\_\_\_ Liebherr D 846A7  
Fuel tank \_\_\_\_\_ 795 l 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

A double axial displacement pump with integrated gearbox supplies the open loop hydraulic system, allowing all functions to be operated simultaneously. To minimize peak pressure an automatic working pressure cut-off is integrated in the pump. All filters are electronically monitored.  
The use of synthetic environmentally friendly (biodegradable) oils is possible. Ready made hydraulic retrofit kits are available to customize requirements e. g. powering casing oscillators, VM vibrators, hydraulic grabs, fixed leaders etc.  
Working pressure \_\_\_\_\_ max. 350 bar  
Oil tank capacity \_\_\_\_\_ 1000 l



## Boom winch

Line pull \_\_\_\_\_ max. 2x 50 kN  
Rope diameter \_\_\_\_\_ 18 mm  
Boom up \_\_\_\_\_ 45 sec. from 15° to 82°



## Swing

Consists of roller bearing 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 – 4,5 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) \_\_\_\_\_ 120 kN \_\_\_\_\_ 160 kN \_\_\_\_\_ 200 kN  
Rope diameter \_\_\_\_\_ 24 mm \_\_\_\_\_ 26 mm \_\_\_\_\_ 30 mm  
Drum diameter \_\_\_\_\_ 525 mm \_\_\_\_\_ 580 mm \_\_\_\_\_ 630 mm  
Rope speed \_\_\_\_\_ 0–133 m/min - 0-111 m/min - 0-90 m/min  
Rope capacity 1st layer — 43.5 m \_\_\_\_\_ 51.9 m \_\_\_\_\_ 40 m  
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 — 70 kN in boom foot  
Tagline winch — 30 kN 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.  
3-web grousers \_\_\_\_\_ 700 mm  
Drive speed \_\_\_\_\_ 0 – 1.5 km/h  
Option:  
• 2-speed hydraulic motor for higher travel speed

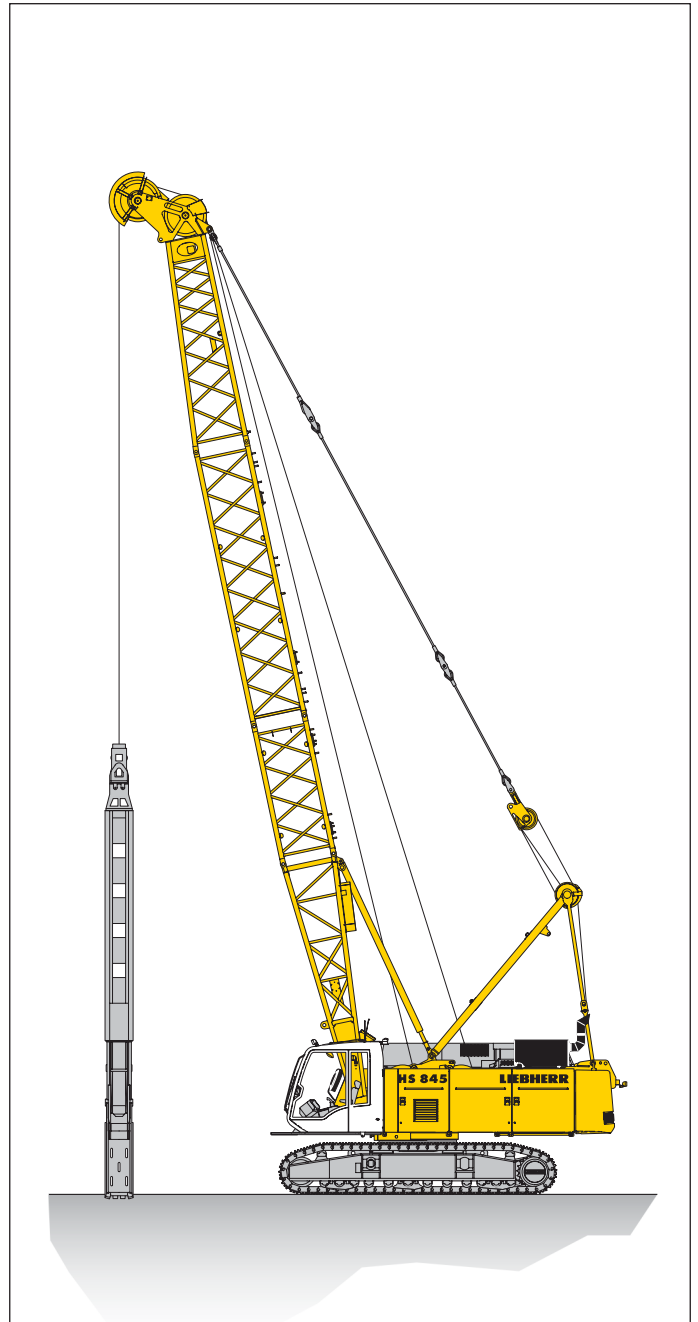
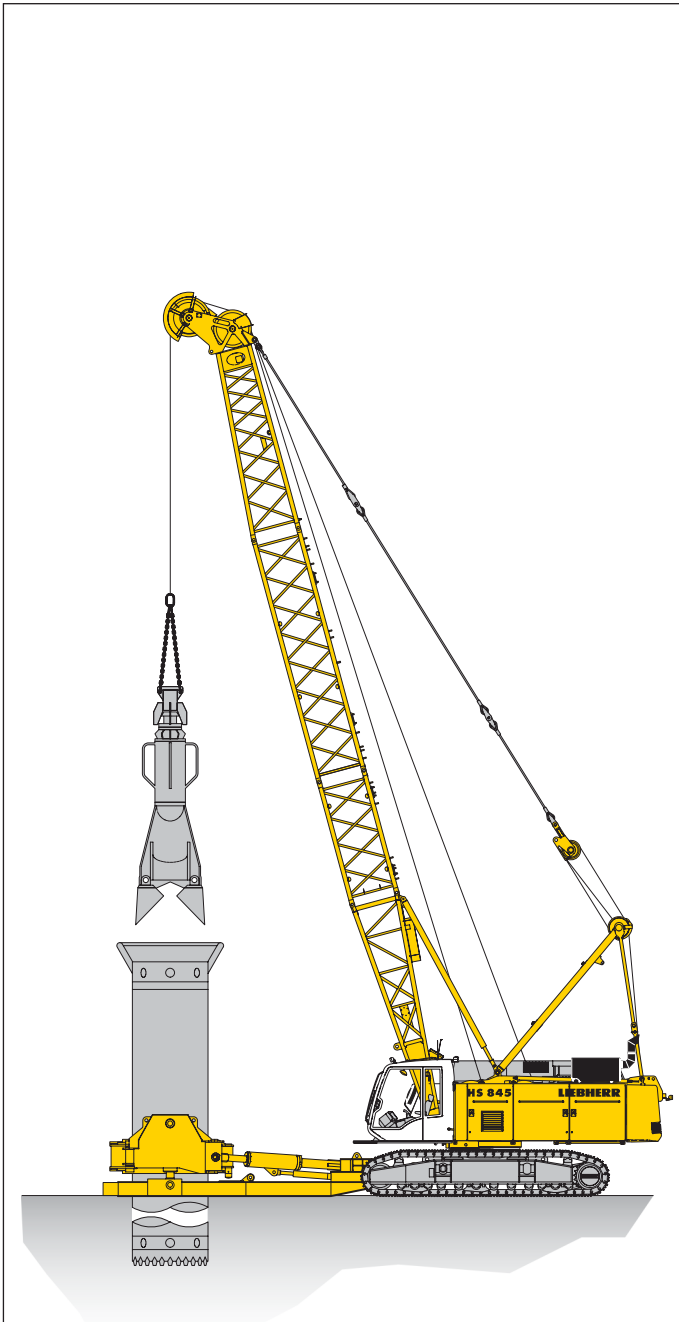


## Control

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.  
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

# Equipment (main boom No. 1311.18 and 20 t counterweight)

## Casing oscillator and slurry wall grab



### Casing oscillator\*

Winch options	2 x 200 kN
Line speed 1st layer	0–90 m/min
Drilling diameter	1800 mm

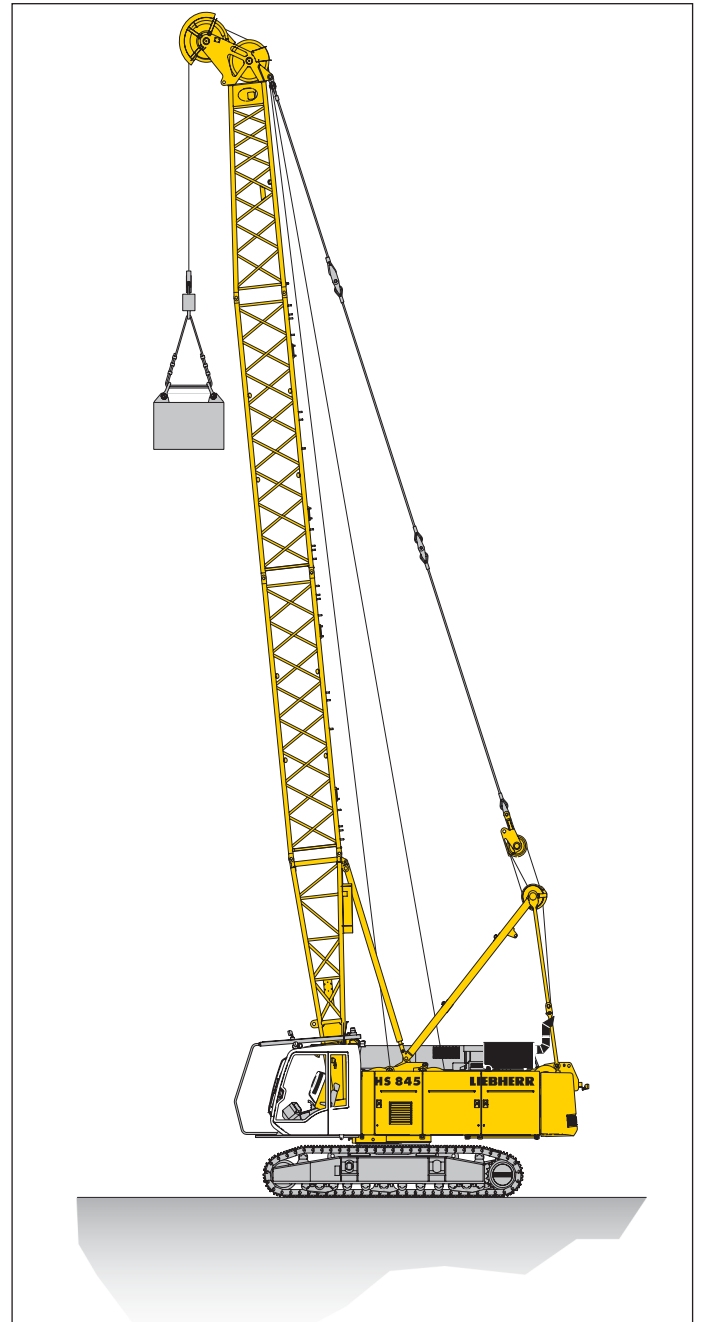
### Slurry wall grab\*

Winch options	2 x 200 kN
Line speed 1st layer	0–90 m/min
Max. chisel weight	12 t

\*) Load chart for duty cycle operation see page 8

# Equipment (main boom No. 1311.18 and 20 t counterweight)

## Dynamic soil compaction



Capacities in metric tons for boom lengths (20 m - 26 m)

Radius (m)	Boom length		
	20 m	23 m	26 m
	t	t	t
8	19	18	18
9	17	16	16

Max. capacities in metric tons 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 20 m.

# Load chart for duty cycle operation (main boom No. 1311.18)

## 20 t counterweight

### Capacities in metric tons for boom lengths (11 m - 32 m) - with 200 kN winches

Radius	Boom length (m)							Radius	
	11	14	17	20	23	26	29		32
(m)	t	t	t	t	t	t	t	t	(m)
5.3							24.5		5.3
6				29.9	30.3	28.5	24.5	21.0	6
7		29.8	29.0	28.1	27.6	27.2	24.5	21.0	7
8	24.5	24.6	24.6	24.6	24.3	23.5	22.7	21.0	8
9	20.8	20.8	20.9	20.8	20.8	20.6	19.6	18.5	9
10	18.0	18.1	18.1	18.0	18.0	17.7	17.3	16.3	10
12		14.1	14.1	14.1	14.1	13.7	13.2	12.8	12
14		11.5	11.5	11.5	11.4	11.1	10.9	10.6	14
16			9.6	9.6	9.6	9.5	9.4	9.2	16
18				8.2	8.2	8.1	8.1	8.0	18
20				7.0	7.1	7.0	7.0	6.9	20
22					6.2	6.1	6.1	6.0	22
24						5.4	5.4	5.3	24
26							4.7	4.7	26
28							4.2	4.1	28
30								3.7	30

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### Maximum capacity in duty cycle operation with standard ropes

Line pull (1st layer)	kN	120	160	200
Rope diameter	mm	24	26	30
Minimum breaking load	kN	517	615	846
Line pull - 1-rope duty cycle operation	t	12	16	20
Line pull - 2-rope duty cycle operation <sup>1)</sup>	t	18.2	24.2	30.3

- 1) Lifting a load exceeding the line pull of one winch is only allowed if it can be ensured that each individual winch is not overloaded. When working with a mechanical 2-rope grab the total load to be lifted is limited by the line pull of one winch. Rigging and ropes are part of the load.
- 2) Max. capacities in metric tons do not exceed 75% of tipping load. Crane standing on firm, horizontal ground.

Capacities in duty cycle operation are for reference only and are not programmed in the LMI system.

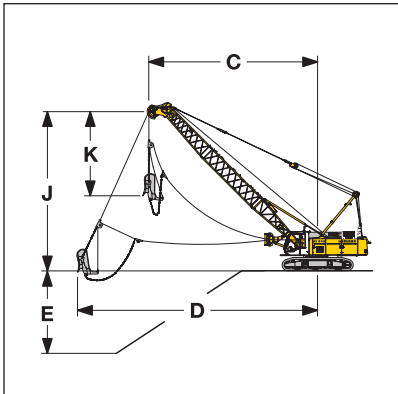
All loads and counterweight configurations are max. values and must not be exceeded.

Weight of additional equipment on boom (e.g. walkways, hose drums etc.) must be deducted to get the net capacity.



# Dragline equipment

**20 t counterweight** (main boom No. 1311.18)



Traglasten in t für Auslegerlängen von 14 m bis 26 m

Ballast 20 t

alpha	Auslegerlänge (m)																	
	14			17			20			23			26			29		
	C	J	t	C	J	t	C	J	t	C	J	t	C	J	t	C	J	t
	(m)	(m)	t	(m)	(m)	t	(m)	(m)	t	(m)	(m)	t	(m)	(m)	t	(m)	(m)	t
45	11.9	11.3	14.2	14.1	13.4	11.5	16.2	15.6	9.5	18.3	17.7	8.0	20.4	19.8	6.8	22.5	21.9	5.9
40	12.7	10.4	13.1	15.0	12.3	10.5	17.3	14.2	8.6	19.6	16.2	7.3	21.9	18.1	6.2	24.2	20.0	5.3
35	13.4	9.4	12.2	15.9	11.1	9.7	18.3	12.8	8.0	20.8	14.5	6.7	23.2	16.2	5.7	25.7	18.0	4.8
30	14.0	8.3	11.5	16.6	9.8	9.2	19.2	11.3	7.5	21.8	12.8	6.3	24.4	14.3	5.3	27.0	15.8	4.5
25	14.5	7.2	10.4	17.3	8.5	8.5	20.0	9.7	7.1	22.7	11.0	5.9	25.4	12.3	5.0	28.1	13.5	4.2

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Max. capacities in metric tons do not exceed 75% of tipping load.

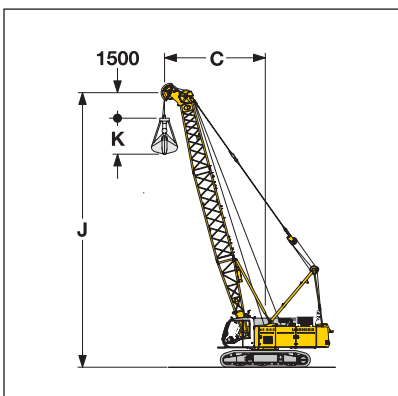
Capacities in duty cycle operation are for reference only and are not programmed in the LMI system. The size of the bucket has to be determined according to local conditions.

## Digging diagram

- C = Radius / dumping radius
- D = Max. digging radius = approx.  $C + 1/3$  to  $1/2 J - K$
- E = Digging depth = approx. 40 - 50% of C
- J = Height to centre rope pulley boom head
- K = Length of dragline bucket (according to manufacturer's specification)

# Clamshell equipment

**20 t counterweight** (main boom No. 1311.18)



Traglasten in t für Auslegerlängen von 14 m bis 26 m

Ballast 20 t

alpha	Auslegerlänge (m)																	
	14			17			20			23			26			29		
	C	J	t	C	J	t	C	J	t	C	J	t	C	J	t	C	J	t
	(m)	(m)	t	(m)	(m)	t	(m)	(m)	t	(m)	(m)	t	(m)	(m)	t	(m)	(m)	t
65	8.1	14.3	21.5	9.4	17.0	17.6	10.6	19.7	14.8	11.9	22.4	12.7	13.2	25.2	11.0	14.4	27.9	9.7
60	9.1	13.7	18.1	10.6	16.3	14.8	12.1	18.9	12.3	13.6	21.5	10.6	15.1	24.1	9.1	16.6	26.7	8.0
55	10.1	13.0	15.7	11.9	15.4	12.8	13.6	17.9	10.6	15.3	20.3	9.1	17.0	22.8	7.8	18.7	25.3	6.8
50	11.1	12.2	14.0	13.0	14.5	11.3	14.9	16.8	9.4	16.9	19.1	8.0	18.8	21.4	6.8	20.7	23.7	5.9
45	11.9	11.3	12.6	14.1	13.4	10.2	16.2	15.6	8.4	18.3	17.7	7.1	20.4	19.8	6.1	22.5	21.9	5.2
40	12.7	10.4	11.6	15.0	12.3	9.3	17.3	14.2	7.7	19.6	16.2	6.5	21.9	18.1	5.5	24.2	20.0	4.7
35	13.4	9.4	10.8	15.9	11.1	8.7	18.3	12.8	7.1	20.8	14.5	6.0	23.2	16.2	5.0	25.7	18.0	4.3
30	14.0	8.3	10.2	16.6	9.8	8.1	19.2	11.3	6.6	21.8	12.8	5.6	24.4	14.3	4.7	27.0	15.8	4.0
25	14.5	7.2	9.7	17.3	8.5	7.7	20.0	9.7	6.3	22.7	11.0	5.3	25.4	12.3	4.4	28.1	13.5	3.7

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Max. capacities in metric tons do not exceed 66.7% of tipping load.

Capacities in duty cycle operation are for reference only and are not programmed in the LMI system.

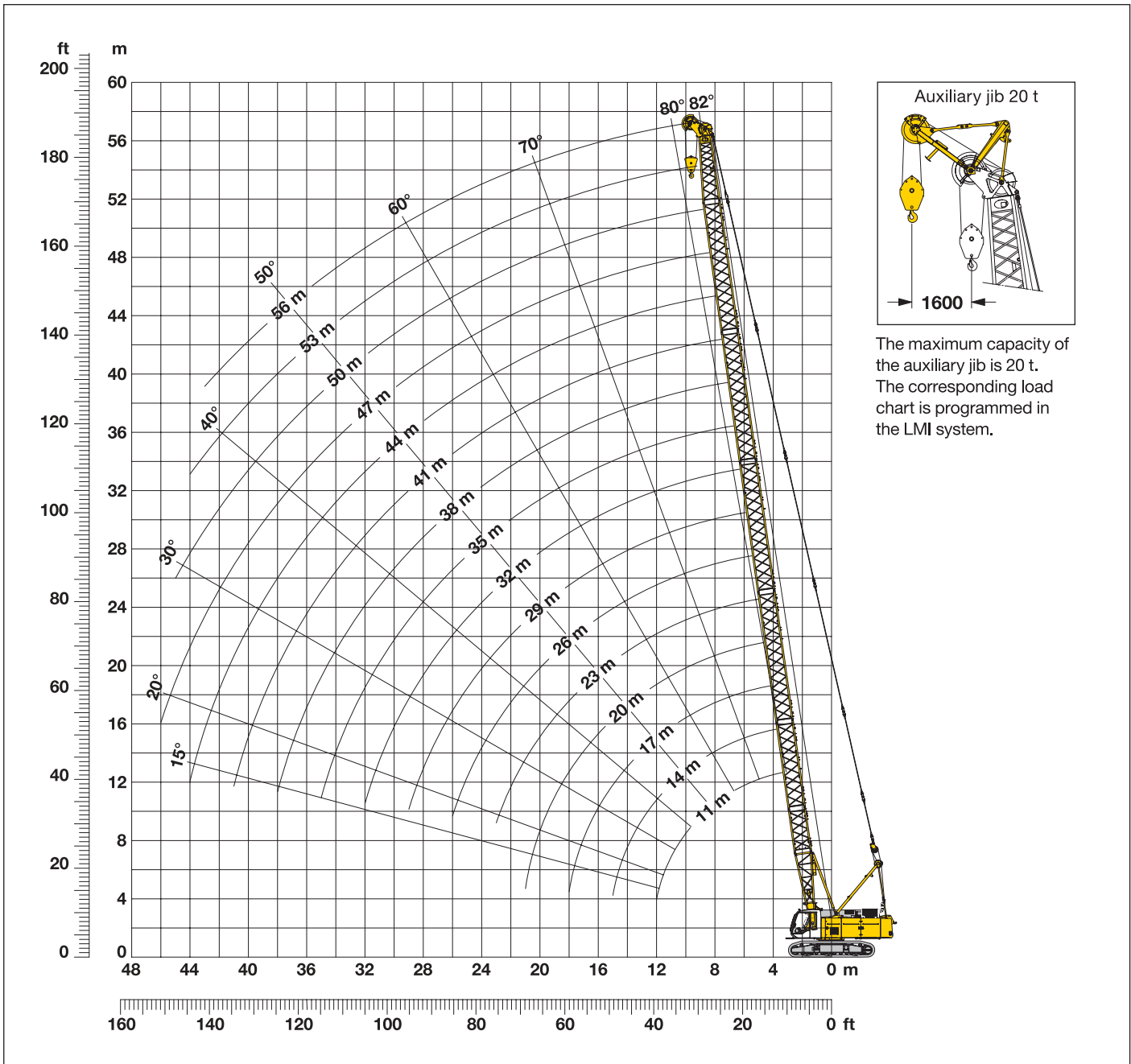
## Working diagram

- 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)

# Main boom (No. 1311.18)

## 20 t counterweight

# 82° - 15°



The maximum capacity of the auxiliary jib is 20 t. The corresponding load chart is programmed in the LMI system.

### Main boom configuration - Table 1

Configuration for boom lengths (11 m - 56 m)																	
	Length	Amount of boom extensions															
Boom foot	5.5 m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Boom section	3.0 m		1		1		1		1		1		1		1		
Boom section	6.0 m			1	1		1		1		1		1		1		
Boom section	12.0 m					1	1	1	1	2	2	2	2	3	3	3	
Boom head	5.5 m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Boom length (m)		11	14	17	20	23	26	29	32	35	38	41	44	47	50	53	56

# Load chart for lift crane operation (No. 1311.18)

## 12.3 t counterweight

Capacities in metric tons for boom lengths (11 m - 50 m) - with 200 kN winches

Radius	Boom length (m)														Radius
	11	14	17	20	23	26	29	32	35	38	41	44	47	50	
(m)	t	t	t	t	t	t	t	t	t	t	t	t	t	t	(m)
3.4	51.3														3.4
4	51.3	48.3													4
5	38.3	36.2	34.3	32.6											5
6	30.2	28.8	27.6	26.4	25.3	24.2	23.2								6
7	24.0	23.9	22.9	22.1	21.2	20.5	19.7	19.0	18.3						7
8	19.7	19.8	19.6	18.9	18.3	17.6	17.0	16.4	16.0	15.4	14.9	14.3			8
9	16.7	16.7	16.7	16.5	16.0	15.5	15.0	14.5	14.1	13.6	13.2	12.7	12.3	11.8	9
10	14.4	14.5	14.5	14.5	14.2	13.7	13.3	12.9	12.5	12.1	11.7	11.3	11.0	10.6	10
12	11.2	11.2	11.2	11.2	11.2	11.1	10.8	10.4	10.1	9.8	9.5	9.2	8.9	8.6	12
14		9.0	9.1	9.0	9.0	8.9	8.9	8.7	8.4	8.1	7.9	7.6	7.3	7.1	14
16			7.5	7.4	7.4	7.4	7.3	7.2	7.1	6.9	6.6	6.4	6.2	5.9	16
18			6.3	6.3	6.3	6.2	6.1	6.0	6.0	5.8	5.6	5.4	5.2	5.0	18
20				5.3	5.3	5.3	5.2	5.1	5.0	5.0	4.8	4.6	4.4	4.2	20
22					4.6	4.5	4.5	4.4	4.3	4.2	4.1	4.0	3.8	3.6	22
24						3.9	3.9	3.8	3.7	3.6	3.5	3.4	3.2	3.0	24
26						3.4	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.6	26
28							2.9	2.8	2.8	2.7	2.6	2.5	2.4	2.2	28
30								2.4	2.4	2.3	2.2	2.1	2.0	1.9	30
32								2.1	2.1	2.0	1.9	1.8	1.7	1.6	32
34									1.8	1.7	1.6	1.5	1.4	1.3	34
36										1.4	1.4	1.2	1.2	1.1	36
38										1.2	1.1	1.0			38

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

# Load chart for lift crane operation (No. 1311.18)

## 20 t counterweight

Capacities in metric tons for boom lengths (11 m - 56 m) - with 200 kN winches

Radius	Boom length (m)															Radius	
	11	14	17	20	23	26	29	32	35	38	41	44	47	50	53		56
(m)	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	(m)
5.4						32.0											5.4
6				34.7	33.3	32.0	30.7										6
7	31.5	31.5	30.3	29.1	28.1	27.1	26.1	25.2	24.3								7
8	26.0	26.0	25.9	25.0	24.2	23.4	22.7	21.9	21.2	20.5	19.9	19.3					8
9	22.0	22.0	22.1	21.9	21.2	20.6	20.0	19.3	18.7	18.2	17.6	17.1	16.6	15.7			9
10	19.0	19.1	19.1	19.0	18.9	18.3	17.8	17.2	16.7	16.3	15.9	15.4	14.9	14.4	13.6	11.7	10
12	14.9	15.0	15.0	14.9	14.9	14.9	14.6	14.2	13.8	13.4	13.0	12.7	12.3	11.9	11.5	11.1	12
14		12.1	12.2	12.1	12.1	12.0	12.0	11.9	11.6	11.3	10.9	10.6	10.3	10.0	9.7	9.4	14
16			10.2	10.1	10.1	10.0	10.0	9.9	9.8	9.6	9.3	9.1	8.8	8.5	8.3	8.0	16
18			8.6	8.6	8.6	8.5	8.5	8.4	8.3	8.2	8.1	7.8	7.6	7.4	7.1	6.8	18
20				7.4	7.4	7.3	7.3	7.2	7.1	7.0	6.9	6.8	6.6	6.4	6.1	5.9	20
22					6.5	6.4	6.3	6.2	6.2	6.1	6.0	5.9	5.8	5.5	5.3	5.1	22
24						5.6	5.6	5.5	5.4	5.3	5.2	5.1	5.0	4.8	4.6	4.4	24
26						5.0	4.9	4.8	4.7	4.7	4.6	4.5	4.4	4.3	4.0	3.8	26
28							4.4	4.3	4.2	4.1	4.0	3.9	3.8	3.7	3.6	3.3	28
30								3.8	3.7	3.6	3.5	3.4	3.4	3.3	3.1	2.9	30
32								3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.6	32
34									2.9	2.9	2.8	2.7	2.6	2.5	2.4	2.2	34
36										2.2	2.5	2.3	2.3	2.2	2.1	2.0	36
38											2.2	2.1	2.0	1.9	1.8	1.7	38
40											1.9	1.8	1.7	1.6	1.5	1.4	40
42												1.6	1.5	1.4	1.3	1.2	42
44													1.3	1.3	1.2	1.1	44
46														1.1			46

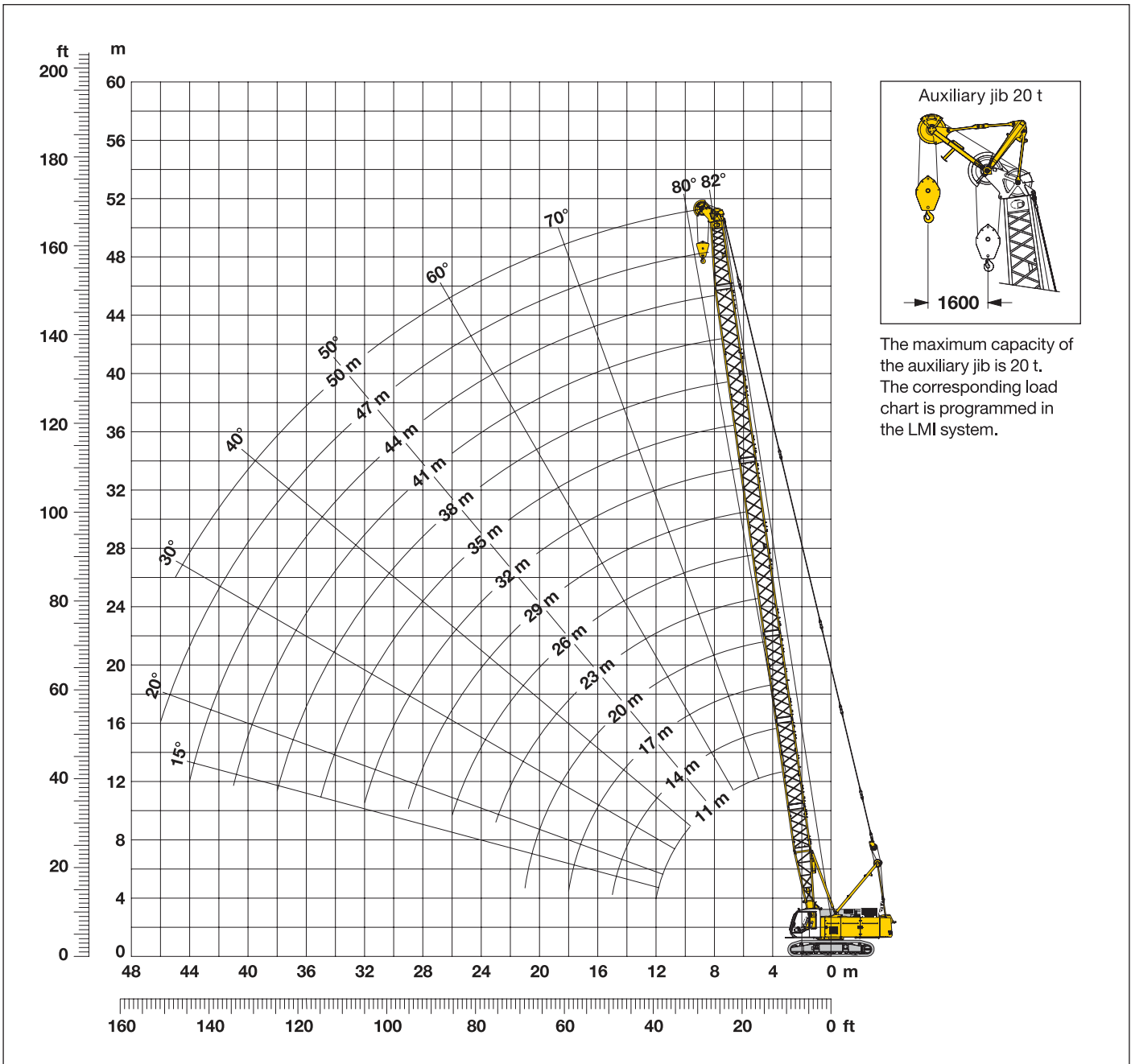
TLT 984311814 - M 65623

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

# Main boom (No. 1311.22)

## 20 t counterweight

# 82° - 15°



## Main boom configuration

### Configuration for boom lengths (11 m - 50 m)

	Length	Amount of boom extensions													
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom foot	5.5 m	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom section	3.0 m		1		1		1		1		1		1		1
Boom section	6.0 m			1	1	2	2	1	1	2	2	1	1	2	2
Boom section	12.0 m							1	1	1	1	2	2	2	2
Boom head	5.5 m	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom length (m)		11	14	17	20	23	26	29	32	35	38	41	44	47	50

# Load chart for lift crane operation (main boom No. 1311.22)

## 12.3 t counterweight

Capacities in metric tons for boom lengths (11 m - 41 m) - with 200 kN winches

Radius	Boom length (m)											Radius	
	11	14	17	20	23	26	29	32	35	38	41		
(m)	t	t	t	t	t	t	t	t	t	t	t	t	(m)
3.4	66.0												3.4
4	51.4	47.8											4
5	37.9	35.8	33.9	32.0	30.0								5
6	29.8	28.4	27.1	25.9	24.7	23.7	22.6						6
7	23.7	23.4	22.5	21.5	20.7	19.8	19.2	18.4	17.5				7
8	19.4	19.4	19.1	18.4	17.7	17.0	16.5	15.9	15.3	14.7	14.1		8
9	16.3	16.3	16.3	15.9	15.3	14.8	14.4	13.8	13.3	12.8	12.4		9
10	14.0	14.0	14.0	13.9	13.5	13.0	12.7	12.2	11.8	11.3	11.0		10
12	10.7	10.7	10.7	10.6	10.5	10.3	10.1	9.7	9.4	9.0	8.8		12
14		8.5	8.5	8.4	8.3	8.2	8.3	7.9	7.6	7.3	7.1		14
16			6.9	6.9	6.8	6.7	6.7	6.6	6.3	6.0	5.9		16
18			5.7	5.7	5.6	5.5	5.5	5.4	5.3	5.0	4.9		18
20				4.7	4.7	4.5	4.6	4.5	4.3	4.2	4.1		20
22					3.9	3.8	3.8	3.7	3.6	3.5	3.4		22
24					3.3	3.2	3.2	3.1	3.0	2.9	2.8		24
26						2.6	2.7	2.6	2.5	2.3	2.3		26
28							2.3	2.2	2.0	1.9	1.9		28
30								1.8	1.7	1.5	1.5		30
32								1.4	1.3	1.2	1.2		32
34									1.0				34
36													36
38													38

TLT 983708714 - M 67147

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

# Load chart for lift crane operation (main boom No. 1311.22)

## 20 t counterweight

Capacities in metric tons for boom lengths (11 m - 50 m) - with 200 kN winches

Radius	Boom length (m)														Radius	
	11	14	17	20	23	26	29	32	35	38	41	44	47	50		
(m)	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	(m)
4.2			54.0													4.2
5		46.9	44.4	42.1	32.0											5
6	39.2	37.3	35.6	34.1	32.6	31.2	30.0									6
7	31.0	30.9	29.7	28.5	27.4	26.3	25.5	24.5	23.6							7
8	25.5	25.5	25.3	24.4	23.5	22.6	22.0	21.2	20.5	19.8	19.2	18.6				8
9	21.5	21.5	21.5	21.2	20.5	19.8	19.3	18.6	18.0	17.4	16.9	16.3	15.9	15.3		9
10	18.5	18.5	18.5	18.4	18.1	17.5	17.1	16.5	16.1	15.6	15.2	14.7	14.2	13.6		10
12	14.5	14.5	14.4	14.4	14.3	14.2	13.9	13.5	13.0	12.6	12.3	11.9	11.5	11.1		12
14		11.6	11.6	11.5	11.5	11.3	11.4	11.2	10.8	10.4	10.2	9.8	9.5	9.2		14
16			9.6	9.5	9.4	9.3	9.4	9.2	9.1	8.8	8.6	8.3	8.0	7.7		16
18			8.1	8.0	7.9	7.8	7.8	7.7	7.6	7.5	7.3	7.0	6.7	6.5		18
20				6.8	6.7	6.6	6.7	6.5	6.4	6.3	6.3	6.0	5.7	5.5		20
22					5.8	5.7	5.7	5.6	5.5	5.3	5.3	5.2	4.9	4.7		22
24					5.0	4.9	4.9	4.8	4.7	4.6	4.5	4.4	4.2	4.0		24
26						4.2	4.3	4.2	4.0	3.9	3.9	3.7	3.6	3.4		26
28							3.7	3.6	3.5	3.3	3.3	3.2	3.1	2.9		28
30								3.1	3.0	2.9	2.9	2.7	2.6	2.4		30
32								2.7	2.6	2.4	2.4	2.3	2.2	2.0		32
34									2.2	2.1	2.1	1.9	1.8	1.7		34
36										1.8	1.8	1.6	1.5	1.3		36
38										1.5	1.5	1.3	1.2	1.1		38
40											1.2	1.1				40

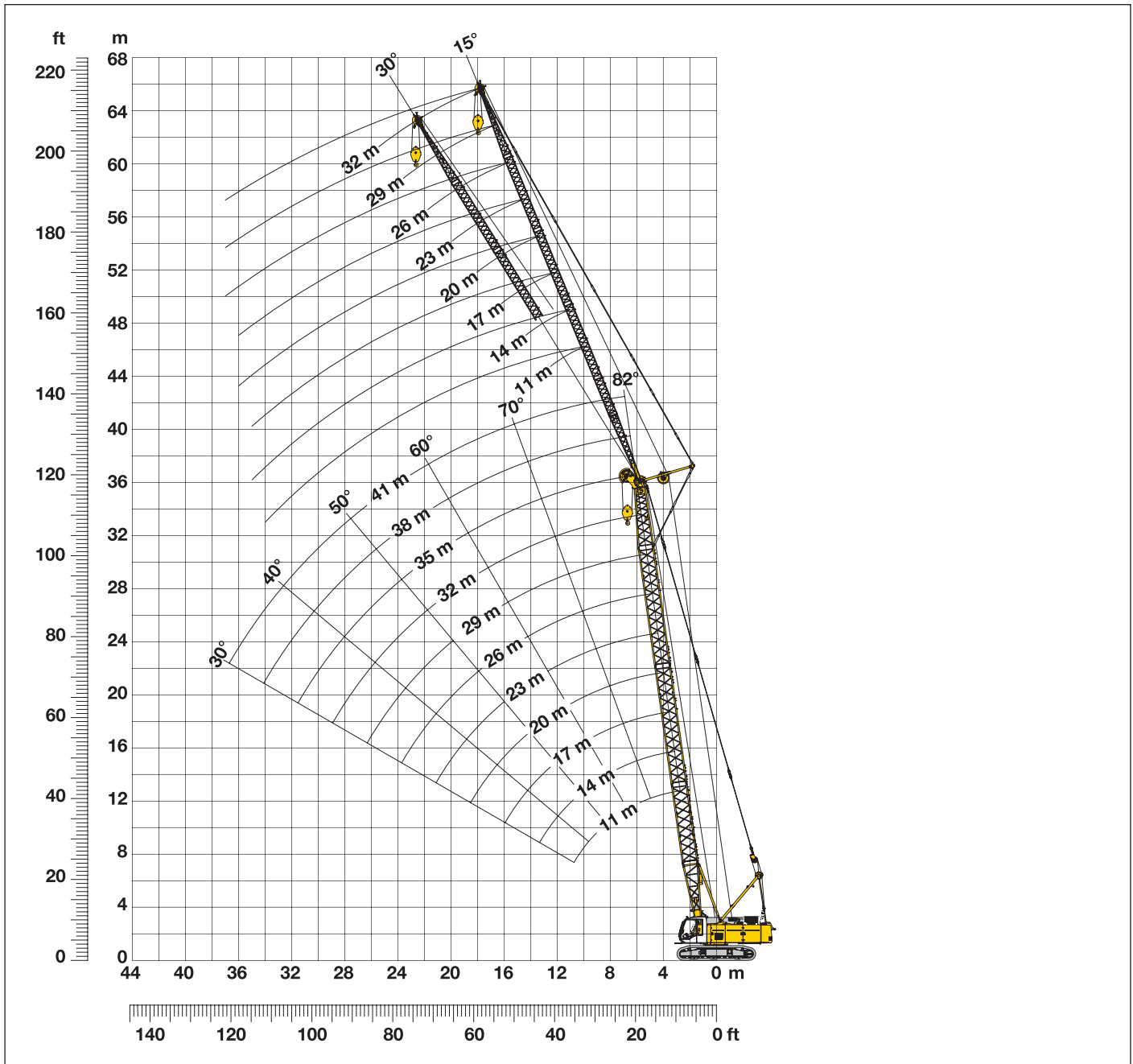
TLT 983708714 - M 67147

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

# Fixed jib (No. 0806.xx)

Main boom 82° - 30°

# 15° and 30°



## Main boom configuration (No. 1311.18) for boom lengths (11 m - 44 m) - see table 1, page 10

### Fixed jib configuration for fixed jib lengths (11 m - 32 m)

	Length	Amount of jib extensions							
Fixed jib foot	5.5 m	1	1	1	1	1	1	1	1
Fixed jib section	3.0 m		1		1		1		1
Fixed jib section	6.0 m			1	1	2	2	3	3
Fixed jib head	5.5 m	1	1	1	1	1	1	1	1
Fixed jib length (m)		11	14	17	20	23	26	29	32

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

Offset 15°

## Main boom 11 m

Radius	Fixed jib length (m)			
	11	20	26	32
(m)	t	t	t	t
7	18.9			
11	15.0	9.2		
14	12.4	8.2	6.0	
17	9.5	7.5	5.6	4.0
18	8.8	7.2	5.5	4.0
20	7.6	6.4	5.3	3.8
22		5.9	5.1	3.6
28		4.5	3.9	3.2
32			3.4	2.9
34			3.1	2.7
38				2.3
40				2.2

## Main boom 14 m

Radius	Fixed jib length (m)			
	11	20	26	32
(m)	t	t	t	t
6.5	19.6			
11	14.6	8.9		
14	12.3	7.6	5.8	
17	9.4	6.6	5.1	4.0
18	8.7	6.4	5.0	3.9
20	7.5	5.8	4.7	3.6
22	6.5	5.3	4.4	3.4
24		4.9	4.1	3.2
28		4.2	3.4	2.8
32		3.7	3.0	2.4
36			2.6	2.1
38			2.5	2.0

## Main boom 17 m

Radius	Fixed jib length (m)			
	11	20	26	32
(m)	t	t	t	t
6.9	19.1			
12	14.2	8.3		
15	11.1	6.8	5.3	
18	8.6	5.7	4.5	3.9
20	7.4	5.1	4.1	3.5
22	6.4	4.6	3.7	3.2
24	5.6	4.2	3.4	3.0
26	5.0	3.9	3.2	2.7
32		3.3	2.5	2.1
34		3.1	2.4	
38			2.1	
40			2.0	

## Main boom 23 m

Radius	Fixed jib length (m)			
	11	20	26	32
(m)	t	t	t	t
7.7	17.9			
13	12.9	7.2		
16	9.9	5.9	4.4	
19	7.7	5.1	3.9	3.2
20	7.2	4.8	3.7	3.0
22	6.2	4.4	3.5	2.8
24	5.4	4.1	3.2	2.6
26	4.7	3.8	2.9	2.4
30	3.7	3.4	2.5	2.1
34		3.0	2.3	
38		2.5	2.0	
40		2.3		

## Main boom 29 m

Radius	Fixed jib length (m)			
	11	20	26	32
(m)	t	t	t	t
8.6	16.5			
13	12.1	6.4		
16	9.4	5.8	4.2	
19	7.5	5.0	3.7	3.0
20	7.0	4.9	3.6	2.9
24	5.2	4.1	3.1	2.5
28	4.0	3.6	2.7	2.2
30	3.5	3.4	2.6	2.0
34	2.7	3.0	2.3	
36	2.3	2.6	2.2	
38		2.3	2.1	
40		2.1		

## Main boom 35 m

Radius	Fixed jib length (m)			
	11	20	26	32
(m)	t	t	t	t
9.4	14.9			
14	10.4	6.4		
17	8.2	5.5	3.9	
18	7.6	5.3	3.8	
20	6.6	4.9	3.5	2.8
22	5.7	4.6	3.3	2.6
24	5.0	4.2	3.1	2.4
26	4.3	4.0	2.9	2.3
28	3.7	3.8	2.7	2.1
32	2.8	3.1	2.5	
36	2.1	2.4	2.2	
38		2.1	2.1	

## Main boom 38 m

Radius	Fixed jib length (m)			
	11	20	26	32
(m)	t	t	t	t
9.8	13.9			
15	9.3	6.2		
18	7.3	5.5	3.8	
20	6.3	5.1	3.6	
22	5.5	4.7	3.4	2.6
24	4.8	4.4	3.2	2.4
26	4.2	4.1	3.0	2.2
28	3.6	3.8	2.8	2.1
32	2.7	3.0	2.5	
34	2.3	2.6	2.4	
36	2.0	2.3	2.3	
38		2.0	2.1	

## Main boom 41 m

Radius	Fixed jib length (m)			
	11	20	26	32
(m)	t	t	t	t
10.2	13.0			
15	9.0	6.0		
18	7.1	5.3	3.7	
20	6.1	5.0	3.5	
22	5.3	4.6	3.3	
24	4.6	4.4	3.1	
26	4.0	4.1	2.9	
28	3.5	3.6	2.8	
30	3.0	3.2	2.6	
32	2.6	2.8	2.5	
34	2.2	2.4	2.4	
36		2.1	2.2	

## Main boom 44 m

Radius	Fixed jib length (m)			
	11	14	17	20
(m)	t	t	t	t
10.6	12.2			
13	10.4	8.7		
14	9.5	8.4	6.5	
16	8.0	7.8	5.9	5.0
18	6.8	6.9	5.3	4.5
20	5.9	6.0	4.9	4.2
22	5.0	5.1	4.6	3.8
24	4.4	4.4	4.2	3.6
26	3.8	3.8	3.9	3.4
30	2.8	2.9	2.9	3.0
32	2.4	2.5	2.6	2.6
34	2.1	2.1	2.2	2.3

TLT 983708414 - M 40860

Capacities in metric tons with fixed jib (No. 0806.xx) and 20 t counterweight. Above load chart is for reference only. For actual lift duty and complete chart with all available configurations please refer to load chart in operator's cab or manual.

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

Offset 30°

## Main boom 11 m

Radius	Fixed jib length (m)			
	11	20	26	32
(m)	t	t	t	t
8.7	14.5			
15	10.5	6.0		
20	7.7	5.3	4.0	
24		4.6	3.7	2.9
26		4.4	3.6	2.8
28		4.2	3.4	2.8
30		4.0	3.2	2.7
32			3.0	2.6
34			2.9	2.5
36			2.8	2.3
38				2.2
42				2.0

## Main boom 14 m

Radius	Fixed jib length (m)			
	11	20	26	32
(m)	t	t	t	t
9.1	12.8			
16	9.2	5.3		
20	7.6	4.7	3.6	
22	6.6	4.4	3.4	
24	5.8	4.2	3.2	2.5
26		3.9	3.1	2.4
28		3.7	2.9	2.3
30		3.6	2.8	2.2
32		3.4	2.6	2.1
34			2.5	2.0
36			2.4	
38			2.3	

## Main boom 17 m

Radius	Fixed jib length (m)			
	11	20	26	32
(m)	t	t	t	t
9.5	11.4			
12	10.8			
16	8.5	4.7		
18	7.7	4.4		
20	7.2	4.1		
22	6.5	3.8	3.0	
24	5.7	3.6	2.8	
26	5.0	3.3	2.6	2.1
28		3.2	2.5	
30		3.0	2.3	
32		2.9	2.2	
34		2.9		

## Main boom 23 m

Radius	Fixed jib length (m)			
	11	20	26	32
(m)	t	t	t	t
10.3	9.9			
17	7.8	4.0		
22	6.4	3.5	2.6	
24	5.6	3.3	2.5	
26	4.9	3.1	2.3	
28	4.3	3.0	2.2	
30	3.7	2.8	2.1	
32		2.7		
34		2.6		
36		2.6		
38		2.5		
40		2.3		

## Main boom 29 m

Radius	Fixed jib length (m)			
	11	20	26	32
(m)	t	t	t	t
11.2	9.1			
18	7.6	3.7		
22	6.2	3.3	2.4	
24	5.4	3.2	2.3	
26	4.7	3.0	2.2	
28	4.1	2.9	2.1	
30	3.6	2.8	2.0	
32	3.1	2.7		
34	2.7	2.6		
36	2.4	2.5		
38		2.5		
40		2.2		

## Main boom 35 m

Radius	Fixed jib length (m)			
	11	20	26	32
(m)	t	t	t	t
12	8.5			
19	7.4	3.5		
22	6.0	3.3		
24	5.2	3.1	2.2	
26	4.5	3.0	2.1	
28	3.9	2.9	2.1	
30	3.4	2.8		
32	3.0	2.7		
34	2.6	2.6		
36	2.2	2.5		
38		2.3		
40		2.0		

## Main boom 38 m

Radius	Fixed jib length (m)			
	11	20	26	32
(m)	t	t	t	t
12.4	8.2			
19	7.2	3.5		
20	6.7	3.5		
22	5.8	3.3		
24	5.1	3.2	2.2	
26	4.4	3.1	2.2	
28	3.8	3.0	2.1	
30	3.3	2.9		
32	2.9	2.8		
34	2.5	2.7		
36	2.1	2.5		
38		2.2		

## Main boom 41 m

Radius	Fixed jib length (m)			
	11	20	23	26
(m)	t	t	t	t
12.8	8.0			
14	8.5			
20	6.5	3.4		
22	5.6	3.2	2.7	
24	4.9	3.1	2.6	2.2
26	4.2	3.0	2.5	2.1
28	3.7	2.9	2.4	2.0
30	3.2	2.8	2.3	
32	2.8	2.7	2.2	
34	2.4	2.7	2.2	
36	2.0	2.4	2.1	
38		2.1	2.0	

## Main boom 44 m

Radius	Fixed jib length (m)			
	11	14	17	20
(m)	t	t	t	t
13.2	7.0			
16	6.7	5.3		
18	6.3	5.0	3.8	
20	5.8	4.7	3.6	3.0
22	5.4	4.4	3.4	2.9
24	4.7	4.2	3.2	2.7
26	4.0	3.9	3.1	2.6
28	3.5	3.6	2.9	2.5
30	3.0	3.2	2.8	2.4
32	2.6	2.8	2.7	2.2
34	2.2	2.4	2.5	2.2
36		2.0	2.2	2.1

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Capacities in metric tons with fixed jib (No. 0806.xx) and 20 t counterweight. Above load chart is for reference only. For actual lift duty and complete chart with all available configurations please refer to load chart in operator's cab or manual.