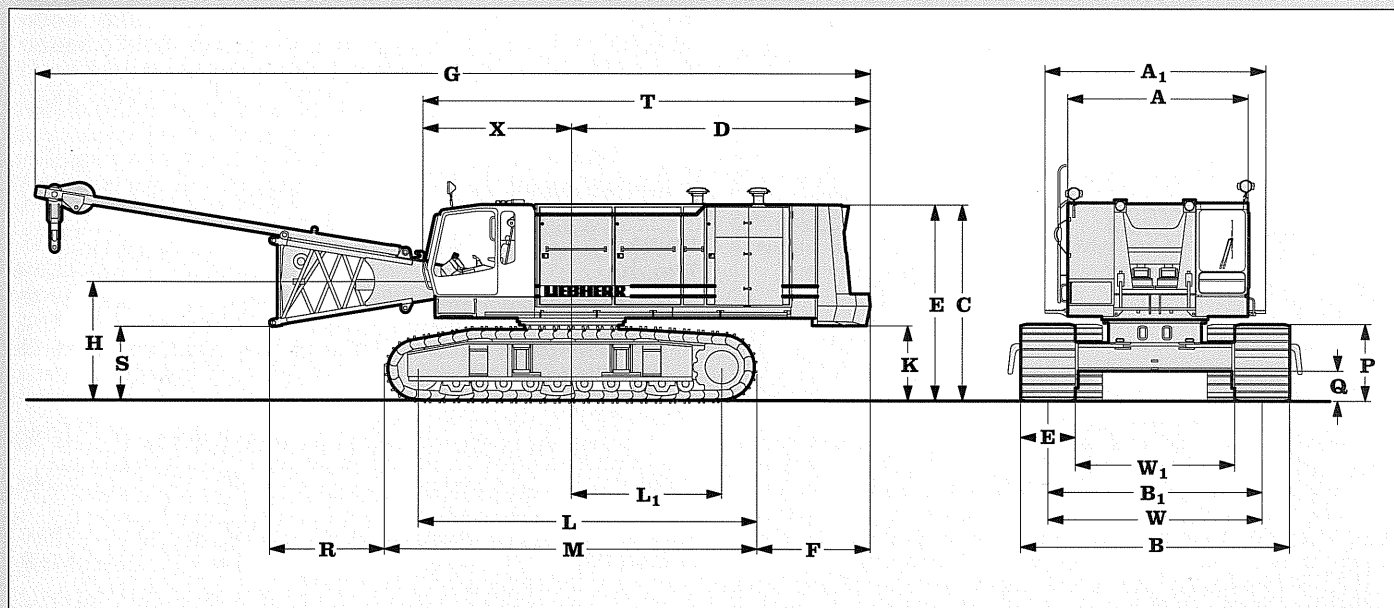


# Technical Data Hydraulic crawler crane

# HS 872 HD

Litronic®

## Basic machine with undercarriage



### Dimensions

|                                                                      | mm        |                                                  | mm                  |
|----------------------------------------------------------------------|-----------|--------------------------------------------------|---------------------|
| A Width of superstructure                                            | 3300/3480 | X Distance from centre of rotation to end of cab | 2685                |
| A <sub>1</sub> Width of superstructure with walk way                 | 4040      | N Width of track shoes                           | 700 800 900 1000    |
| C Height of basic machine                                            | 3590      | W <sub>1</sub> Track width retracted             | 2980 2980 2980 2980 |
| D Tail reach                                                         | 5460      | W Track width extended                           | 3900 3900 3900 3900 |
| Tail swing radius                                                    | 5510      | B Crawler width extended                         | 4600 4700 4800 4900 |
| E Height over counterweight                                          | 3510      | B <sub>1</sub> Crawler width retracted           | 3680 3780 3880 3980 |
| F Distance between rear end of crawler and outside of counterweight  | 2230      |                                                  |                     |
| G Overall length of superstructure with lowered A-frame              | 15370     |                                                  |                     |
| H Ground clearance of boom foot pivot                                | 2090      |                                                  |                     |
| K Ground clearance of superstructure                                 | 1220      |                                                  |                     |
| L Wheel base (centre idler to centre tumbler)                        | 5315      |                                                  |                     |
| L <sub>1</sub> Distance from centre of rotation to centre of tumbler | 2660      |                                                  |                     |
| M Length of crawlers                                                 | 6460      |                                                  |                     |
| S Ground clearance of horizontal boom foot                           | 1380      |                                                  |                     |
| Q Ground clearance of crawler                                        | 510       |                                                  |                     |
| R Distance from edge of horizontal boom foot to crawler              | 2230      |                                                  |                     |
| P Height of crawler                                                  | 1155      |                                                  |                     |
| T Length of superstructure                                           | 8145      |                                                  |                     |

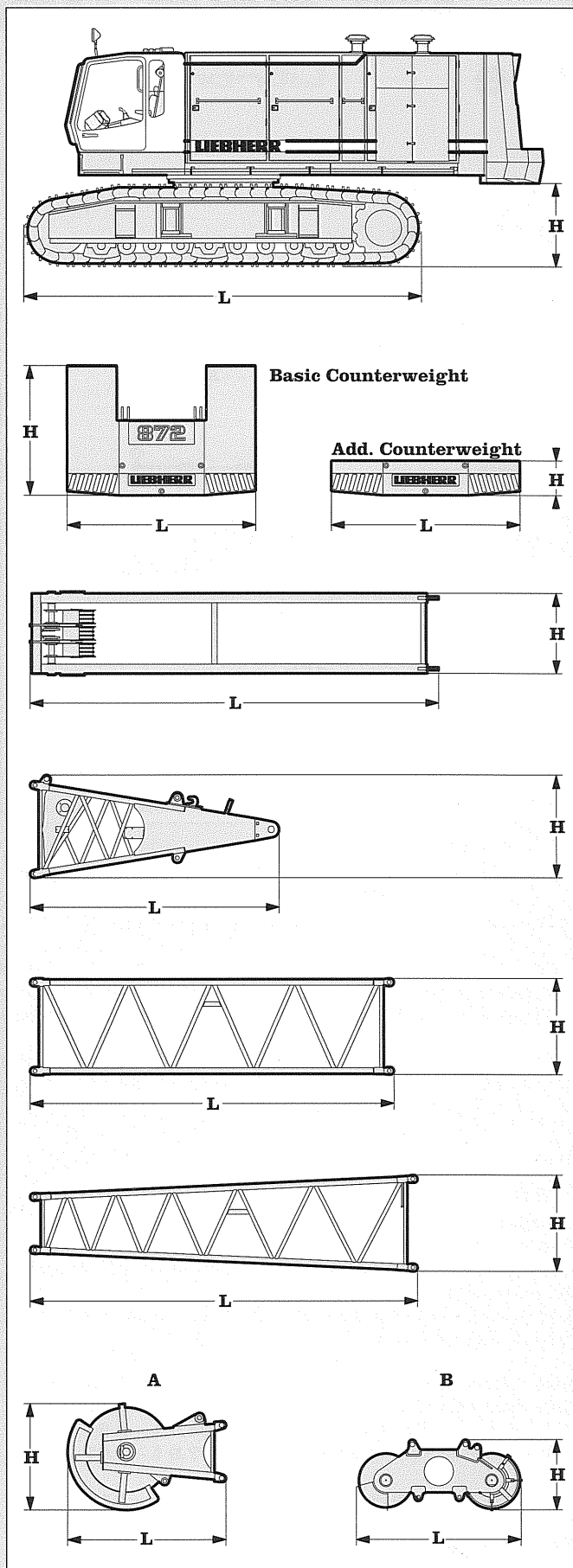
### Operating Weight and Ground Pressure

The operating weight includes the basic unit with B8-crawler tracks, 2 main winches 25 t with Schaltgetriebe and 11 m boom, consisting of A-frame, boom foot (4m), boom head section (6.5m) boom head (0.5m), and 19.6 t counterweight + 4.5 t add. counterweight. All systems are ready.

|                               |                                  |
|-------------------------------|----------------------------------|
| with 700 mm flat track shoes  | 94.8 t - 1.18 kg/cm <sup>2</sup> |
| with 800 mm flat track shoes  | 95.8 t - 1.04 kg/cm <sup>2</sup> |
| with 900 mm flat track shoes  | 96.9 t - 0.94 kg/cm <sup>2</sup> |
| with 1000 mm flat track shoes | 97.9 t - 0.85 kg/cm <sup>2</sup> |
| with 700 mm 3-web shoes       | 93.7 t - 1.15 kg/cm <sup>2</sup> |
| with 800 mm 3-web shoes       | 93.9 t - 1.02 kg/cm <sup>2</sup> |
| with 900 mm 3-web shoes       | 94.7 t - 0.91 kg/cm <sup>2</sup> |
| with 1000 mm 3-web shoes      | 95.5 t - 0.83 kg/cm <sup>2</sup> |

# LIEBHERR

The Better Machine.



## Basic machine

with HD undercarriage, counterweight 19.6 t,  
4.5 t add. counterweight, V 8 motor, 2 x 25 t winches  
without A-frame

| 3-web shoes | mm | 700  | 800  | 900  | 1000 |
|-------------|----|------|------|------|------|
| Weight      | t  | 81,9 | 82,7 | 83,5 | 84,3 |

## Crawler retracted

| 3-web shoes | mm | 700   | 800   | 900   | 1000  |
|-------------|----|-------|-------|-------|-------|
| Width       | mm | 3680  | 3780  | 3880  | 3980  |
| Weight      | kg | 31250 | 32050 | 32850 | 33650 |
| L Length    | mm | 6460  | 6460  | 6460  | 6460  |
| H Height    | mm | 1370  | 1370  | 1370  | 1370  |

## Counterweight

|          |    | Basic | Additional |
|----------|----|-------|------------|
| Width    | mm | 720   | 690        |
| Weight   | kg | 19600 | 4500       |
| L Length | mm | 3200  | 3200       |
| H Height | mm | 2200  | 585        |

## A-frame

|          |    | short | long |
|----------|----|-------|------|
| Width    | mm | 1410  | 1420 |
| Weight   | kg | 1700  | 1800 |
| L Length | mm | 5750  | 6930 |
| H Height | mm | 1440  | 1440 |

## Boom foot

|          |    |      |
|----------|----|------|
| Width    | mm | 1470 |
| Weight   | kg | 2035 |
| L Length | mm | 4200 |
| H Height | mm | 1550 |

## Tubular boom extension

|          |    | 3m   | 6m   | 9m   |
|----------|----|------|------|------|
| Width    | mm | 1440 | 1440 | 1440 |
| Weight   | kg | 710  | 1130 | 1530 |
| L Length | mm | 3130 | 6130 | 9130 |
| H Height | mm | 1450 | 1450 | 1450 |

## Boom head section

|          |    |      |
|----------|----|------|
| Width    | mm | 1420 |
| Weight   | kg | 1080 |
| L Length | mm | 6530 |
| H Height | mm | 1475 |

## Boom head

|          |    | A    | B    |
|----------|----|------|------|
| Width    | mm | 780  | 1060 |
| Weight   | kg | 1670 | 1730 |
| L Length | mm | 2665 | 2820 |
| H Height | mm | 1800 | 1170 |

# Transport dimensions and weights





## Engine

Mercedes Benz water cooled V-8 diesel engine, turbo-charged with intercooler. Power rating according to DIN ISO 3046 T1 IFN.

Model OM 442 LA with 297 kW (404 HP) at 1900 rpm  
Option:

Mercedes Benz water cooled V-12 diesel engine, turbo-charged with intercooler. Power rating according to DIN ISO 3046 T1 IFN.

Model OM 444 LA with 448 kW (609 HP) at 1900 rpm  
Fuel Tank: 800 l capacity with continuous level indicator and reserve warning.



## 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). A low loss pressure cut-off protects the pumps and saves energy.

Winch 1 and 2: Axial piston displacement pumps (swash plate design) with 565 l/min. each, reversible to crawler.

Swing gear: Axial piston displacement pump (swash plate design) with 203 l/min.

Boom hoist: Axial piston displacement pump (swash plate design) with 203 l/min. reversible to swing drive.

Max. working pressure: 340 bar.

Hydraulic oil tank capacity: 500 l with extended hydraulic packages 1200 l.

Extended hydraulic packages available on request to power external equipment such as casing oscillators, rotary drills, diaphragm wall mills, hydraulic grabs, etc.



## Winches

Winch options :

|                          |        |        |         |
|--------------------------|--------|--------|---------|
| Line pull (nominal load) | 160 kN | 200 kN | 250 kN  |
| Rope diameter :          | 26 mm  | 30 mm  | 34 mm   |
| Drum diameter :          | 550 mm | 640 mm | 750 mm  |
| Rope speed m/min         | 0 - 97 | 0 - 74 | 0 - 62  |
| Rope high speed m/min    |        |        | 0 - 115 |

Propulsion is via a planetary gearbox in oil bath. Load support by the hydraulic system; additional safety factor provided by a spring-loaded, multi-disc holding brake.

Clutch and braking functions on the free-fall system are provided by a compact designed, low wear and maintenance-free multi-disc brake. The dragline 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.

On clamshell operations, the oil motors distribute the load to both winches and provide speed compensation, even when working with different rope layers.

Option:

Auxiliary winch 50 kN (5 t)

Crane winch 80 kN (8 t) - without clutch, but with multi disc holding brake.



## Boom hoist drive

Twin drum with internally located planetary gearbox, axial piston hydraulic motor and hydraulically released spring loaded multi disc brake.

Max. line pull 2 x 70 kN. Rope diameter: 20 mm

Max. line speed: 23 m/min.

Counterweight lifting with boom hoist.



## Swing Drive

Consists of single row ballbearing 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.

Free swing with hydraulic moment control reduces wear to a minimum, because rotation moment is sustained through the hydraulic system by the diesel engine.

Swing speed from 0 - 3.7 rpm continuously variable, selector.



## Crawler

Propulsion through axial piston motor, hydraulically released spring loaded multi-disc brake, maintenance free crawler tracks, hydraulic chain tensioning device. Flat or 3-web track shoes.

Drive speed 0 - 2.4 km/h.

Option:

2 speed hydraulic motor for higher travel speed.



## Control

The control system - developed and manufactured by Liebherr - is designed to withstand temperature extremes and the many heavy-duty construction tasks for which this crane has been designed. Complete machine operating data are displayed on a high resolution monitor screen. To ensure clarity of the information on display, different levels of data are shown in enlarged lettering and symbols. Control and monitoring of the sensors are also handled by this high technology system. Error indications are automatically displayed on the monitor in English.

A special "Interlock" control system is also optionally available. It is designed for power lifting of the dragline bucket without using the grab winch brake. An additional option is also the so-called "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 of the crane is effortless and easy with a multi-directional joystick lever situated in the left and right hand seat armrests - right hand for hoist and boom winches; left hand for grab winch and swing.

Options:

- Both main winches with double-T levers
- Special demolition control system
- MDE: Machine data recording
- PDE: Process data recording
- Data transmission by phone



## Equipment

Lattice boom of tubular construction up to 50 m, boom head with interchangeable rope pulleys.

Modular designed equipment for operation as crane, dragline or clamshell.

For dragline operation, a fair lead is fitted into the boom foot to reduce wear of grab rope by limiting rope angle to drum.

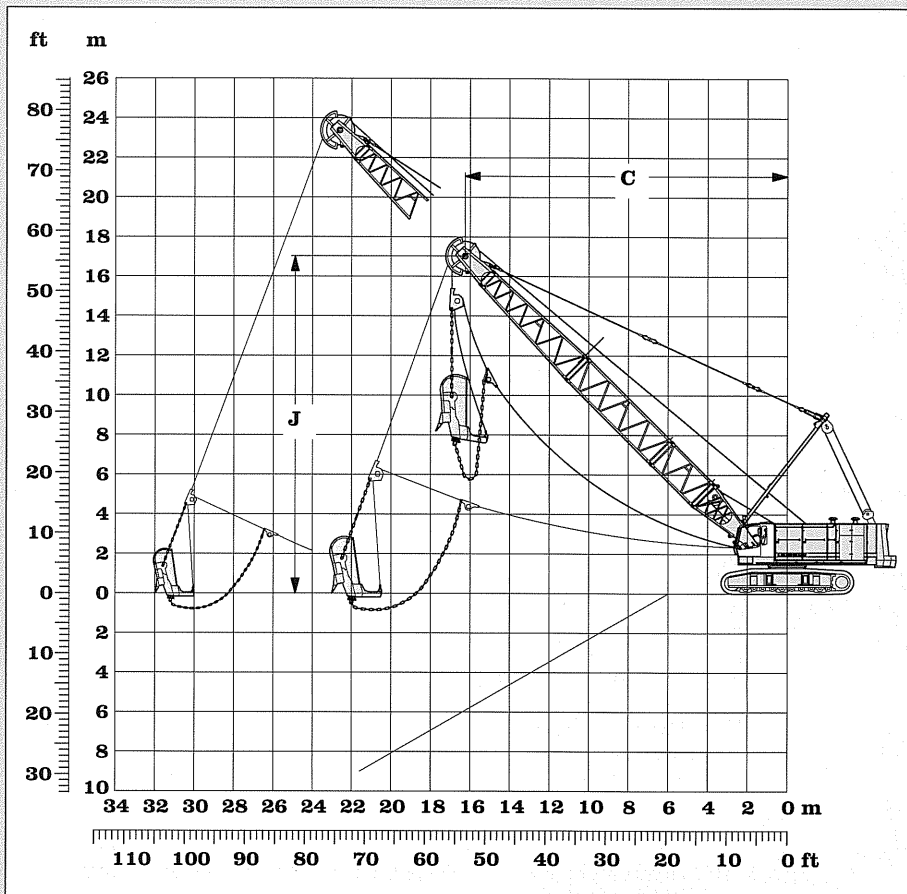


## Noise emission

Special sound proofing results in a very low noise level of 82 dB(A) at 7 m radius.

# Technical Description

## 19.6 t counterweight + 4.5 t add. counterweight



### Scope of delivery:

- Basic machine with corresponding track shoes
- Add. counterweight 4.5 t
- Second swing drive with free swing
- A-frame
- Boom foot 4 m
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom extension 9 m tubular steel
- Boom head section 6,5 m
- Boom head with interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Drag rope should be 2 mm below nominal diameter
- Corresponding fair lead
- Corresponding ropes optional
- Dragline bucket optional

| Capacities in metric tons for boom lengths from 15 m - 30 m |      |      |      |      |      |      |      |      |      |      |      |      | Counterweight 24.1 t |      |     |      |      |     |
|-------------------------------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|------|-----|------|------|-----|
| α                                                           | 15 m |      |      | 18 m |      |      | 21 m |      |      | 24 m |      |      | 27 m                 |      |     | 30 m |      |     |
|                                                             | C    | J    | t    | C    | J    | t    | C    | J    | t    | C    | J    | t    | C                    | J    | t   | C    | J    | t   |
| 45                                                          | 12.6 | 12.7 | 20.4 | 14.7 | 14.8 | 16.3 | 16.9 | 16.9 | 13.1 | 19.0 | 19.0 | 11.2 | 21.1                 | 21.2 | 9.5 | 23.2 | 23.3 | 8.1 |
| 40                                                          | 13.5 | 11.7 | 18.7 | 15.8 | 13.6 | 14.6 | 18.1 | 15.6 | 12.0 | 20.4 | 17.6 | 10.2 | 22.7                 | 19.4 | 8.6 | 25.0 | 21.3 | 7.2 |
| 35                                                          | 14.3 | 10.7 | 17.3 | 16.8 | 12.4 | 13.3 | 19.2 | 14.1 | 11.2 | 21.7 | 15.8 | 9.4  | 24.1                 | 17.5 | 7.8 | 26.6 | 19.3 | 6.5 |
| 30                                                          | 15.0 | 9.6  | 16.0 | 17.6 | 11.1 | 12.4 | 20.2 | 12.6 | 10.2 | 22.8 | 14.1 | 8.5  | 25.4                 | 15.6 | 7.0 | 28.0 | 17.1 | 5.8 |
| 25                                                          | 15.6 | 8.4  | 15.0 | 18.3 | 9.7  | 11.8 | 21.0 | 10.9 | 9.2  | 23.8 | 12.2 | 7.6  | 26.5                 | 13.5 | 6.3 | 29.2 | 14.7 | 5.2 |
| Content of dragline bucket                                  |      |      |      |      |      |      |      |      |      |      |      |      |                      |      |     |      |      |     |
| cu.yd.                                                      | 6    |      |      | 5½   |      |      | 5    |      |      | 4    |      |      | 3½                   |      |     | 3    |      |     |
| m³                                                          | 4.6  |      |      | 4.2  |      |      | 3.8  |      |      | 3    |      |      | 2.7                  |      |     | 2.3  |      |     |

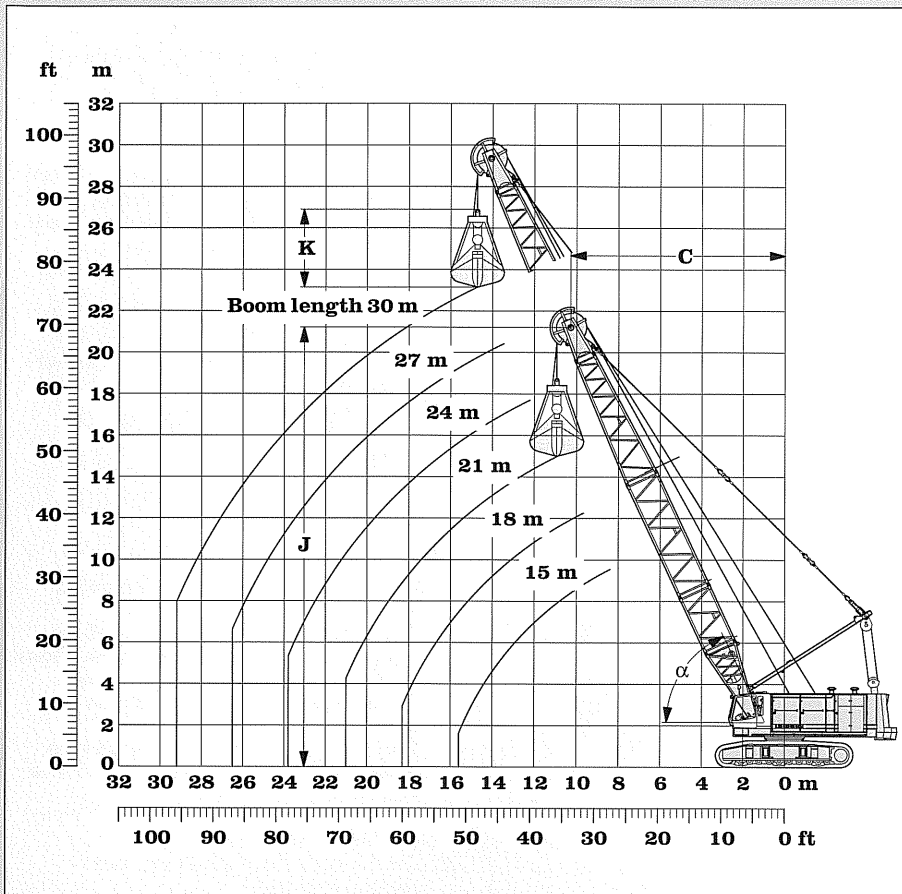
Max. capacities in metric tons do not exceed 75 % of tipping load

| Optimal boom configuration for boom lengths between 11 m bis 50 m: |        |                           |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
|--------------------------------------------------------------------|--------|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|
|                                                                    | Length | Amount of boom extensions |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Boom foot                                                          | 4.0 m  | 1                         | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1 |
| Boom extension                                                     | 3.0 m  |                           | 1    |      |      | 1    |      |      | 1    |      |      | 1    |      |      |      | 1 |
| Boom extension                                                     | 6.0 m  |                           |      |      | 1    |      |      | 1    |      |      | 1    |      |      | 1    |      |   |
| Boom extension                                                     | 9.0 m  |                           |      |      | 1    | 1    | 1    | 2    | 2    | 2    | 3    | 3    | 3    | 4    | 4    |   |
| Boom head extension                                                | 6.4 m  | 1                         | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1 |
| Boom head                                                          | 0.6 m  | 1                         | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1 |
| Boom length                                                        |        | 11 m                      | 14 m | 17 m | 20 m | 23 m | 26 m | 29 m | 32 m | 35 m | 38 m | 41 m | 44 m | 47 m | 50 m |   |

# Dragline equipment



## 19.6 t counterweight + 4.5 t add. counterweight



### Scope of delivery:

- Basic machine with corresponding track shoes
- Add. counterweight 4.5 t
- Second swing drive with free swing
- A-frame
- Boom foot (4 m)
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom extension 9 m tubular steel
- Boom head section 6.5 m
- Boom head with interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Stabilizing winch
- Corresponding ropes optional
- Clamshell optional
- Hoist limit switch
- Load moment limitation
- 4-rope clamshell on request

### 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 metric tons for boom lengths from 15 m – 30 m:

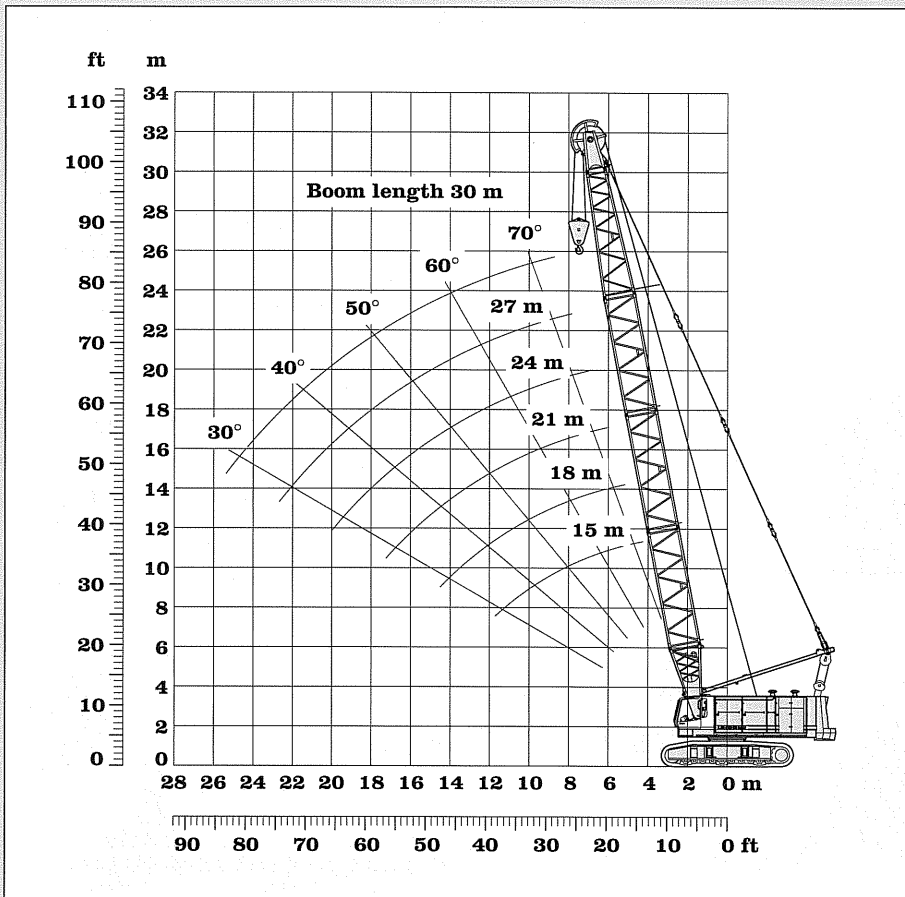
|          |      |      |      |      |      |      |      |      |      |      |      |      |      |      | Counterweight 24.1 t |      |      |      |
|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|------|------|------|
| $\alpha$ | 15 m |      |      | 18 m |      |      | 21 m |      |      | 24 m |      |      | 27 m |      |                      | 30 m |      |      |
|          | C    | J    | t    | C    | J    | t    | C    | J    | t    | C    | J    | t    | C    | J    | t                    | C    | J    | t    |
| 65       | 8.4  | 15.6 | 28.0 | 9.6  | 18.4 | 23.5 | 10.9 | 21.1 | 20.3 | 12.2 | 23.8 | 17.6 | 13.4 | 26.5 | 15.3                 | 14.7 | 29.2 | 13.4 |
| 60       | 9.5  | 15.0 | 26.5 | 11.0 | 17.6 | 21.4 | 12.5 | 20.2 | 18.2 | 14.0 | 22.8 | 15.4 | 15.5 | 25.4 | 13.2                 | 17.0 | 28.0 | 11.4 |
| 55       | 10.6 | 14.3 | 23.0 | 12.4 | 16.8 | 18.7 | 14.1 | 19.3 | 15.5 | 15.8 | 21.7 | 13.1 | 17.5 | 24.2 | 11.2                 | 19.2 | 26.6 | 9.6  |
| 50       | 11.7 | 13.5 | 20.3 | 13.6 | 15.8 | 16.4 | 15.5 | 18.1 | 13.6 | 17.4 | 20.4 | 11.4 | 19.4 | 22.7 | 9.6                  | 21.3 | 25.0 | 8.2  |
| 45       | 12.6 | 12.7 | 18.2 | 14.7 | 14.8 | 14.7 | 16.9 | 16.9 | 12.1 | 19.0 | 19.0 | 10.1 | 21.1 | 21.2 | 8.5                  | 23.2 | 23.3 | 7.2  |
| 40       | 13.5 | 11.7 | 16.6 | 15.8 | 13.6 | 13.3 | 18.1 | 15.6 | 10.9 | 20.4 | 17.5 | 9.1  | 22.7 | 19.4 | 7.6                  | 25.0 | 21.3 | 6.4  |
| 35       | 14.3 | 10.7 | 15.3 | 16.8 | 12.4 | 12.3 | 19.2 | 14.1 | 10.1 | 21.7 | 15.8 | 8.3  | 24.1 | 17.5 | 6.9                  | 26.6 | 19.3 | 5.7  |
| 30       | 15.0 | 9.6  | 14.4 | 17.6 | 11.1 | 11.5 | 20.2 | 12.6 | 9.4  | 22.8 | 14.1 | 7.7  | 25.4 | 15.6 | 6.4                  | 28.0 | 17.1 | 5.3  |
| 25       | 15.6 | 8.4  | 13.5 | 18.3 | 9.7  | 10.8 | 21.0 | 10.9 | 8.8  | 23.8 | 12.2 | 7.2  | 26.5 | 13.5 | 5.9                  | 29.2 | 14.7 | 4.9  |

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

Max. lifting capacities with standard ropes: 18.5 t with 250 kN winch (25 t)  
 14.5 t with 200 kN winch (20 t)  
 11.0 t with 160 kN winch (16 t)

# Clamshell equipment

## 19.6 t counterweight + 4.5 t add. counterweight



### Scope of delivery:

- Basic machine with corresponding shoes
- Add. counterweight 4.5 t
- A-frame
- Boom foot section (4 m)
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom extension 9 m tubular steel
- Boom head section 6.5 m
- Boom head with interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Hoist ropes optional
- Corresponding hook block optional
- Load moment limitation

### Remarks:

1. The lifting capacities are valid for wide track.
2. The lifting capacities stated do not exceed 75 % of the tipping load
3. The lifting capacities are indicated in metric tons with unlimited swing (360 degrees).
4. The weight of the lifting device must be deducted to arrive at the net lifting capacity.
5. Working radii are measured from centre of swing.
6. Crane standing on firm, horizontal ground.

<sup>1)</sup> Capacities in metric tons for boom length from 15 m – 30 m:

Counterweight 24.1 t

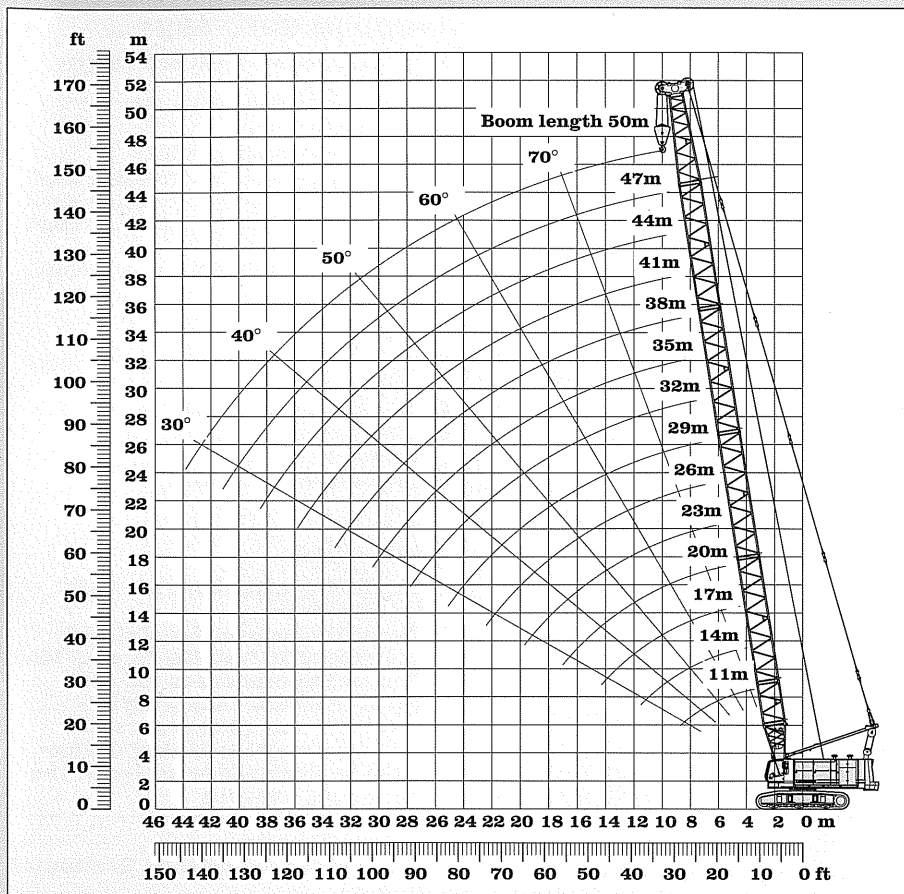
| Boom length   | 15 m | 18 m | 21 m | 24 m | 27 m | 30 m |
|---------------|------|------|------|------|------|------|
| Radius in (m) | t    | t    | t    | t    | t    | t    |
| 5             | 40.4 |      |      |      |      |      |
| 5.5           | 39.3 | 35.4 |      |      |      |      |
| 6             | 38.3 | 34.6 | 31.3 |      |      |      |
| 6.5           | 37.4 | 33.7 | 30.6 | 28.0 |      |      |
| 7             | 36.4 | 33.0 | 30.0 | 27.4 | 23.7 |      |
| 7.5           | 35.5 | 32.2 | 29.3 | 26.8 | 23.2 | 21.4 |
| 8             | 34.7 | 31.5 | 28.7 | 24.7 | 22.8 | 21.0 |
| 9             | 32.4 | 30.0 | 27.5 | 23.8 | 21.9 | 20.2 |
| 10            | 28.0 | 27.9 | 26.3 | 22.8 | 21.1 | 19.5 |
| 11            | 24.6 | 24.5 | 23.8 | 22.0 | 20.3 | 18.8 |
| 12            | 21.9 | 21.8 | 21.6 | 21.1 | 19.5 | 18.1 |
| 13            | 19.7 | 19.6 | 19.4 | 19.2 | 18.8 | 17.4 |
| 14            | 17.8 | 17.7 | 17.5 | 17.3 | 17.1 | 16.8 |
| 15            | 16.2 | 16.1 | 16.0 | 15.8 | 15.6 | 15.4 |
| 16            |      | 14.8 | 14.6 | 14.4 | 14.2 | 14.0 |
| 17            |      | 13.6 | 13.4 | 13.3 | 13.1 | 12.9 |
| 18            |      | 12.6 | 12.4 | 12.2 | 12.0 | 11.8 |
| 19            |      |      | 11.5 | 11.3 | 11.1 | 10.9 |
| 20            |      |      |      | 10.5 | 10.3 | 10.1 |
| 22            |      |      |      | 9.2  | 9.0  | 8.8  |
| 24            |      |      |      | 8.0  | 7.9  | 7.7  |
| 26            |      |      |      |      | 6.9  | 6.7  |
| 28            |      |      |      |      |      | 5.9  |
| 30            |      |      |      |      |      | 5.2  |

<sup>1)</sup> Lifting capacities with optimal boom configuration.

# Lifting capacity with dragline boom head



## 19.6 t counterweight



### Scope of delivery:

- Basic machine with corresponding shoes
- Add. counterweight 4.5 t
- A-frame
- Boom foot section (4 m)
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom extension 9 m tubular steel
- Boom head section 6.5 m
- Boom head with interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Hoist ropes optional
- Corresponding hook block optional
- Load moment limitation

### Remarks:

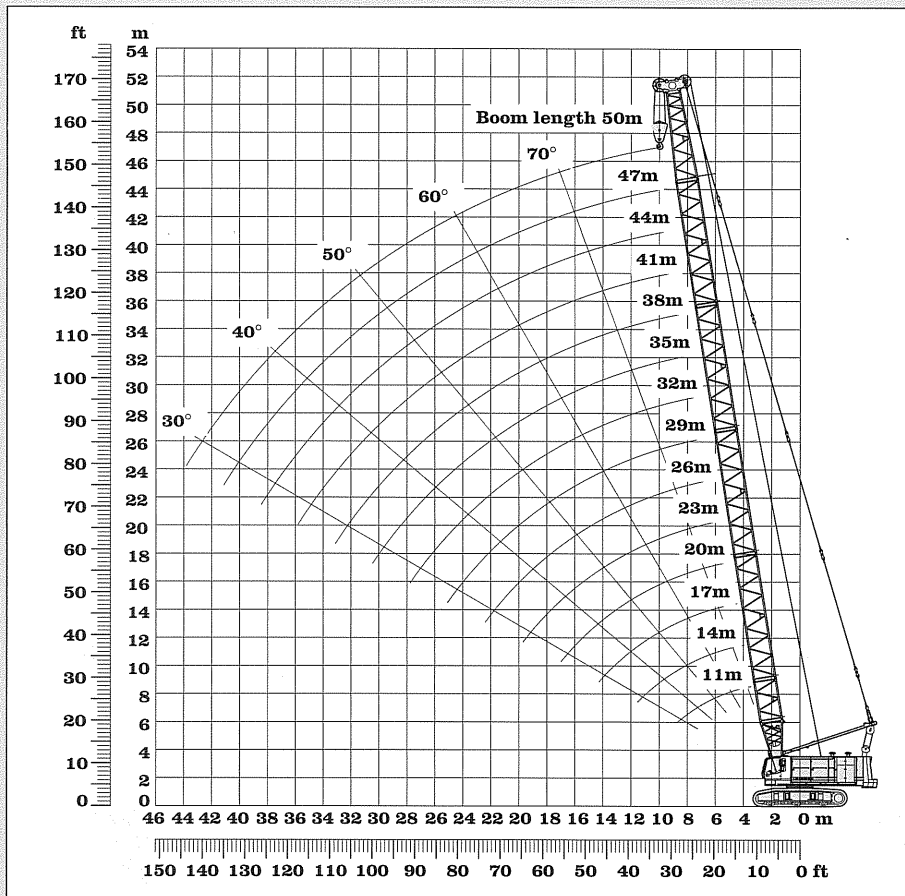
1. The lifting capacities are valid for wide track.
2. The lifting capacities stated do not exceed 75 % of the tipping load
3. The lifting capacities are indicated in metric tons with unlimited swing (360 degrees).
4. The weight of the lifting device must be deducted to arrive at the net lifting capacity.
5. Working radii are measured from centre of swing.
6. Crane standing on firm, horizontal ground.

| 1) Capacities in metric tons for boom lengths from 11 m – 50 m: |      |      |      |      |      |      |      |      |      |      | Counterweight 19.6 t |      |      |      |  |
|-----------------------------------------------------------------|------|------|------|------|------|------|------|------|------|------|----------------------|------|------|------|--|
| Boom length                                                     | 11 m | 14 m | 17 m | 20 m | 23 m | 26 m | 29 m | 32 m | 35 m | 38 m | 41 m                 | 44 m | 47 m | 50 m |  |
| Radius in (m)                                                   | t    | t    | t    | t    | t    | t    | t    | t    | t    | t    | t                    | t    | t    | t    |  |
| 4                                                               | 90.0 |      |      |      |      |      |      |      |      |      |                      |      |      |      |  |
| 4.5                                                             | 80.0 | 71.3 |      |      |      |      |      |      |      |      |                      |      |      |      |  |
| 5                                                               | 71.8 | 68.6 | 64.2 |      |      |      |      |      |      |      |                      |      |      |      |  |
| 5.5                                                             | 61.1 | 64.1 | 61.0 | 58.2 |      |      |      |      |      |      |                      |      |      |      |  |
| 6                                                               | 53.1 | 53.0 | 53.0 | 52.9 | 52.7 |      |      |      |      |      |                      |      |      |      |  |
| 6.5                                                             | 46.8 | 46.8 | 46.7 | 46.6 | 46.5 | 46.4 |      |      |      |      |                      |      |      |      |  |
| 7                                                               | 41.9 | 41.9 | 41.8 | 41.6 | 41.5 | 41.4 | 41.2 | 40.5 |      |      |                      |      |      |      |  |
| 7.5                                                             | 37.8 | 37.8 | 37.7 | 37.6 | 37.4 | 37.3 | 37.1 | 37.0 | 36.8 |      |                      |      |      |      |  |
| 8                                                               | 34.4 | 34.4 | 34.3 | 34.2 | 34.0 | 33.9 | 33.7 | 33.6 | 33.4 | 33.2 |                      |      |      |      |  |
| 9                                                               | 29.1 | 29.1 | 29.0 | 28.9 | 28.7 | 28.6 | 28.4 | 28.2 | 28.0 | 27.8 | 27.7                 | 20.6 |      |      |  |
| 10                                                              | 25.1 | 25.1 | 25.0 | 24.9 | 24.7 | 24.6 | 24.4 | 24.2 | 24.0 | 23.8 | 23.6                 | 19.0 | 15.1 | 12.2 |  |
| 11                                                              | 22.0 | 22.0 | 21.9 | 21.8 | 21.6 | 21.5 | 21.3 | 21.1 | 20.9 | 20.7 | 20.5                 | 17.5 | 13.9 | 11.2 |  |
| 12                                                              | 19.4 | 19.5 | 19.4 | 19.3 | 19.2 | 19.0 | 18.8 | 18.6 | 18.4 | 18.2 | 18.0                 | 16.2 | 12.8 | 10.4 |  |
| 13                                                              |      | 17.5 | 17.4 | 17.3 | 17.1 | 16.9 | 16.8 | 16.6 | 16.4 | 16.2 | 16.0                 | 15.0 | 12.0 | 9.6  |  |
| 14                                                              |      | 15.8 | 15.7 | 15.6 | 15.4 | 15.3 | 15.1 | 14.9 | 14.7 | 14.5 | 14.3                 | 13.9 | 11.2 | 8.9  |  |
| 15                                                              |      | 14.3 | 14.3 | 14.2 | 14.0 | 13.8 | 13.6 | 13.4 | 13.2 | 13.0 | 12.8                 | 12.6 | 10.4 | 8.2  |  |
| 16                                                              |      |      | 13.0 | 12.9 | 12.8 | 12.6 | 12.4 | 12.2 | 12.0 | 11.8 | 11.6                 | 11.4 | 9.7  | 7.6  |  |
| 17                                                              |      |      | 11.9 | 11.9 | 11.7 | 11.5 | 11.3 | 11.1 | 10.9 | 10.7 | 10.5                 | 10.3 | 9.1  | 7.1  |  |
| 18                                                              |      |      | 11.0 | 10.9 | 10.8 | 10.6 | 10.4 | 10.2 | 10.0 | 9.8  | 9.6                  | 9.4  | 8.5  | 6.6  |  |
| 19                                                              |      |      |      | 10.1 | 9.9  | 9.8  | 9.6  | 9.4  | 9.2  | 9.0  | 8.8                  | 8.6  | 8.0  | 6.1  |  |
| 20                                                              |      |      |      | 9.3  | 9.2  | 9.0  | 8.9  | 8.7  | 8.5  | 8.2  | 8.0                  | 7.8  | 7.5  | 5.7  |  |
| 22                                                              |      |      |      |      | 7.9  | 7.8  | 7.6  | 7.4  | 7.2  | 7.0  | 6.8                  | 6.6  | 6.3  | 4.9  |  |
| 24                                                              |      |      |      |      | 6.9  | 6.7  | 6.6  | 6.4  | 6.2  | 6.0  | 5.7                  | 5.5  | 5.2  | 4.2  |  |
| 26                                                              |      |      |      |      |      | 5.9  | 5.7  | 5.5  | 5.3  | 5.1  | 4.8                  | 4.6  | 4.3  | 3.6  |  |
| 28                                                              |      |      |      |      |      |      | 5.0  | 4.8  | 4.5  | 4.3  | 4.0                  | 3.8  | 3.5  | 3.0  |  |
| 30                                                              |      |      |      |      |      |      | 4.2  | 4.1  | 3.8  | 3.6  | 3.4                  | 3.1  | 2.9  | 2.5  |  |
| 32                                                              |      |      |      |      |      |      |      | 3.5  | 3.3  | 3.0  | 2.8                  | 2.5  | 2.3  | 2.0  |  |
| 34                                                              |      |      |      |      |      |      |      |      | 2.7  | 2.5  | 2.3                  | 2.0  | 1.8  | 1.5  |  |
| 36                                                              |      |      |      |      |      |      |      |      |      | 2.1  | 1.8                  | 1.6  | 1.3  | 1.1  |  |
| 38                                                              |      |      |      |      |      |      |      |      |      |      | 1.4                  | 1.2  | 0.9  | 0.7  |  |

1) Capacities with optimal boom configuration.

# Lifting capacity with multi sheave HD boom head

# 19.6 t counterweight + 4.5 t add. counterweight



## Scope of delivery:

- Basic machine with corresponding shoes
- Add. counterweight 4.5 t
- A-frame
- Boom foot section (4 m)
- Boom extension 3 m tubular steel
- Boom extension 6 m tubular steel
- Boom extension 9 m tubular steel
- Boom head section 6.5 m
- Boom head with interchangeable pulleys
- Stay ropes according to boom length
- Main winches according to specification
- Hoist ropes optional
- Corresponding hook block optional
- Load moment limitation

## Remarks:

1. The lifting capacities are valid for wide track.
2. The lifting capacities stated do not exceed 75 % of the tipping load
3. The lifting capacities are indicated in metric tons with unlimited swing (360 degrees).
4. The weight of the lifting device must be deducted to arrive at the net lifting capacity.
5. Working radii are measured from centre of swing.
6. Crane standing on firm, horizontal ground.

1) Capacities in metric tons for boom length from 11 m – 50 m:

|               |      |      |      |      |      |      |      |      |      | Counterweight 24.1 t |      |      |      |      |     |
|---------------|------|------|------|------|------|------|------|------|------|----------------------|------|------|------|------|-----|
| Boom length   | 11 m | 14 m | 17 m | 20 m | 23 m | 26 m | 29 m | 32 m | 35 m | 38 m                 | 41 m | 44 m | 47 m | 50 m |     |
| Radius in (m) | t    | t    | t    | t    | t    | t    | t    | t    | t    | t                    | t    | t    | t    | t    | t   |
| 4             | 90.0 |      |      |      |      |      |      |      |      |                      |      |      |      |      |     |
| 4.5           | 80.0 | 71.3 |      |      |      |      |      |      |      |                      |      |      |      |      |     |
| 5             | 73.6 | 68.2 | 64.2 |      |      |      |      |      |      |                      |      |      |      |      |     |
| 5.5           | 68.1 | 66.2 | 62.0 | 58.2 |      |      |      |      |      |                      |      |      |      |      |     |
| 6             | 59.2 | 59.2 | 59.1 | 56.3 | 52.9 |      |      |      |      |                      |      |      |      |      |     |
| 6.5           | 52.3 | 52.3 | 52.2 | 52.1 | 51.3 | 46.9 |      |      |      |                      |      |      |      |      |     |
| 7             | 46.8 | 46.8 | 46.7 | 46.6 | 46.4 | 45.6 | 43.0 | 40.5 |      |                      |      |      |      |      |     |
| 7.5           | 42.3 | 42.3 | 42.2 | 42.0 | 41.9 | 41.7 | 41.6 | 39.4 | 37.1 |                      |      |      |      |      |     |
| 8             | 38.5 | 38.5 | 38.4 | 38.3 | 38.1 | 38.0 | 37.8 | 37.6 | 36.2 | 34.1                 |      |      |      |      |     |
| 9             | 32.6 | 32.6 | 32.5 | 32.4 | 32.2 | 32.1 | 31.9 | 31.7 | 31.5 | 31.3                 | 28.4 | 20.6 |      |      |     |
| 10            | 28.2 | 28.2 | 28.1 | 27.9 | 27.8 | 27.6 | 27.4 | 27.3 | 27.1 | 26.9                 | 23.6 | 19.0 | 15.1 | 12.2 |     |
| 11            | 24.7 | 24.7 | 24.6 | 24.5 | 24.3 | 24.2 | 24.0 | 23.8 | 23.6 | 23.4                 | 21.9 | 17.5 | 13.9 | 11.2 |     |
| 12            | 21.9 | 22.0 | 21.9 | 21.8 | 21.6 | 21.4 | 21.2 | 21.1 | 20.9 | 20.7                 | 20.4 | 16.2 | 12.8 | 10.4 |     |
| 13            |      | 19.7 | 19.6 | 19.5 | 19.3 | 19.2 | 19.0 | 18.8 | 18.6 | 18.4                 | 18.2 | 15.0 | 12.0 | 9.6  |     |
| 14            |      | 17.8 | 17.8 | 17.6 | 17.5 | 17.3 | 17.1 | 16.9 | 16.7 | 16.5                 | 16.3 | 13.9 | 11.2 | 8.9  |     |
| 15            |      | 16.1 | 16.2 | 16.0 | 15.9 | 15.7 | 15.5 | 15.3 | 15.1 | 14.9                 | 14.7 | 13.0 | 10.4 | 8.2  |     |
| 16            |      |      | 14.8 | 14.7 | 14.5 | 14.3 | 14.2 | 14.0 | 13.8 | 13.6                 | 13.3 | 12.2 | 9.7  | 7.6  |     |
| 17            |      |      | 13.6 | 13.5 | 13.3 | 13.2 | 13.0 | 12.8 | 12.6 | 12.4                 | 12.2 | 11.5 | 9.1  | 7.1  |     |
| 18            |      |      | 12.5 | 12.4 | 12.3 | 12.1 | 11.9 | 11.7 | 11.5 | 11.3                 | 11.1 | 10.8 | 8.5  | 6.6  |     |
| 19            |      |      |      | 11.5 | 11.4 | 11.2 | 11.0 | 10.8 | 10.6 | 10.4                 | 10.2 | 10.0 | 8.0  | 6.1  |     |
| 20            |      |      |      | 10.7 | 10.6 | 10.4 | 10.2 | 10.0 | 9.8  | 9.6                  | 9.4  | 9.2  | 7.5  | 5.7  |     |
| 22            |      |      |      |      | 9.2  | 9.0  | 8.8  | 8.6  | 8.4  | 8.2                  | 8.0  | 7.8  | 6.6  | 4.9  |     |
| 24            |      |      |      |      | 8.0  | 7.9  | 7.7  | 7.5  | 7.3  | 7.1                  | 6.9  | 6.7  | 5.8  | 4.2  |     |
| 26            |      |      |      |      |      | 6.9  | 6.7  | 6.5  | 6.3  | 6.1                  | 5.9  | 5.6  | 5.1  | 3.6  |     |
| 28            |      |      |      |      |      |      | 5.9  | 5.7  | 5.5  | 5.3                  | 5.0  | 4.8  | 4.5  | 3.0  |     |
| 30            |      |      |      |      |      |      | 5.1  | 5.0  | 4.8  | 4.5                  | 4.3  | 4.0  | 3.8  | 2.5  |     |
| 32            |      |      |      |      |      |      |      | 4.3  | 4.1  | 3.9                  | 3.7  | 3.4  | 3.1  | 2.1  |     |
| 34            |      |      |      |      |      |      |      |      | 3.6  | 3.3                  | 3.1  | 2.8  | 2.6  | 1.7  |     |
| 36            |      |      |      |      |      |      |      |      |      | 2.8                  | 2.6  | 2.3  | 2.1  | 1.3  |     |
| 38            |      |      |      |      |      |      |      |      |      |                      | 2.1  | 1.9  | 1.6  | 1.0  |     |
| 40            |      |      |      |      |      |      |      |      |      |                      |      | 1.7  | 1.5  | 1.2  | 0.7 |

1) Capacities with optimal boom configuration.

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