

 **630**

SENEBOGEN



PRELIMINARY

NEW!



 **188 kW**

 **30 t**

 **35.5 m**

 **MAX CAB**

630E

Heavy Duty Cycle Crawler / Crane

Stage V emission standards

630E Advanced. The E-Series.

630E



1962: rope-driven S833 with elevated operator cab

What makes up the E-Series

- 60 years of experience in the design and construction of duty cycle crawler cranes
- Uncompromisingly high performance in all areas
- Technology that can be mastered: high-quality components without over-engineering
- Long product service life and high value retention

Your top benefits:

1 Green Efficiency
Save fuel – reduce operating costs
Work quietly – protect operator and environment



2 Performance at the highest level
Durable mechanical systems – stressed parts optimized
High speeds – high load capacities

3 Maximum ease of use
Maxcab comfort cab – work in comfort
SENCON – SENNEBOGEN Control System

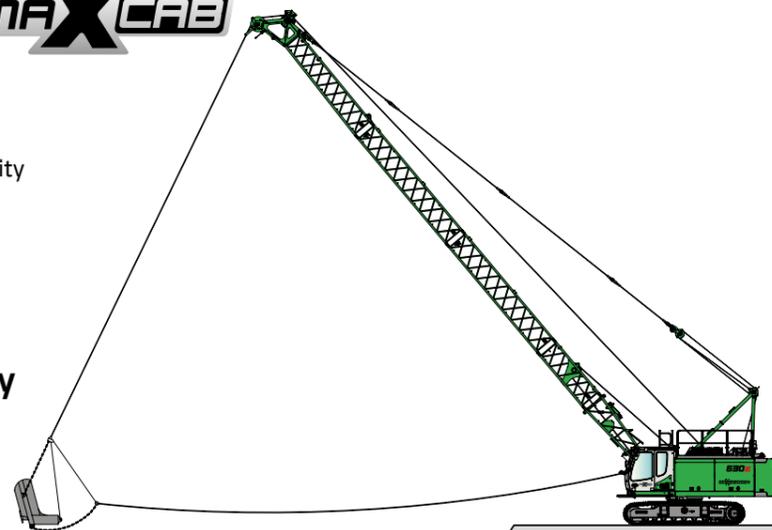


4 Flexible implementation
Moving under load – minimal space requirements
Strong undercarriage traction – good all-terrain mobility

5 Easy transport
Telescopic undercarriage – ready to go in no time
Ballast unloading system – short setup time

6 Maintenance and service made easy
Easy error diagnostics – central measuring points
Simple maintenance – clear labelling

7 Consultation and support
3 production locations – 2 subsidiaries
120 sales partners – more than 300 service stations



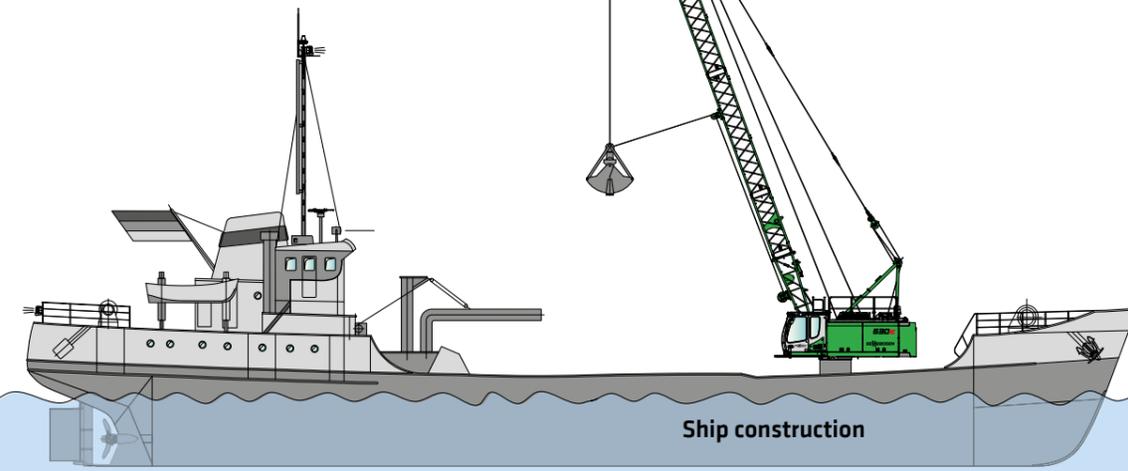
Leader

Casing oscillator

Grab equipment

Crane equipment

Crane equipment with fixed fly



Ship construction

MACHINE TYPE

Model (type) **630**

ENGINE

Power **186 kW/253 hp at 1850 rpm**

Model **Stage V:**
Cummins B6.7 EU / USA EPA Tier 4f FR95885
Rated engine power 168 kW / 2200 rpm
Standard operating point 188 kW / 1800 rpm
ECO operating point 185 kW / 1650 rpm
Tier 3a:
Cummins QSB6.7 EU / USA EPA Tier 3 R96045
Rated engine power 164 kW / 2000 rpm
Standard operating point 171 kW / 1800 rpm
ECO operating point 161 kW / 1650 rpm

Cooling Water-cooled

Air filter Dry filter with pre-separator, automatic dust discharge, main element and safety element, contamination indicator

Fuel **450 l**

Ad Blue **45l**

Electr. system **24 V**

Batteries **2 x 150 Ah**, main switch

UPPERCARRIAGE

Design Torsion-resistant box design, precision crafted, bronze bushings for boom bearing arrangement

Clear, service-friendly concept, engine installed in the longitudinal direction

Lighting LED headlights for optimal illumination of the work area

Safety Camera monitoring of the rear area and right side

Options

- Maritime climate varnish as corrosion protection
- Low-temperature package for use at temperatures below -20 °C
- Ballast support fixture
- Pinion tooth lubrication for slewing ring, outer
- Automatic central lubrication system for equipment and slewing ring, inner
- Walkways left and right on the uppercarriage

HYDRAULIC SYSTEM

Multi-circuit hydraulic system for optimal function and capacity, all movements can be run simultaneously. The hydraulic pumps are variable displacement piston pumps with individual control and energy-saving flow-on-demand control. The pumps only request as much oil as is actually consumed. Pressure cut-off, load limit sensing control

Delivery rate **maximum 3 x 220 l/min**

Operating pressure **max. 330 bar**

Filtration High-performance filtration with long-term change interval, contamination level indicator

Hydraulic tank **550 l (450 l to the middle of the sight glass)**

Control system Proportional, precision hydraulic servo control of the movements, 2 hydraulic servo joysticks for work functions, supplemental functions via switches and foot pedals - arranged clearly and ergonomically

Options

- Bio-oil - environmentally friendly
- SENNEBOGEN HydroClean micro-filter system with water separator
- Potentiometer for casing machine and other attachments
- Grapple fill automation
- Supplemental hydraulic system with 1 x 220 l/min

SLEWING DRIVE

Gearbox Compact planetary gear with slant axis hydraulic motor, integrated brake valves - positioner slewing gear brake

Parking brake Spring-loaded multi-disk brake

Slewing ring Ball bearing rotary connection with exterior gearing

Slewing speed 0-4.1 rpm, 3 adjustable rotation speeds

CAB MAXCAB

Cab type Maxcab rigid

Cab equipment Sliding door, excellent ergonomics, climate automation, seat heater, air-suspension comfort seat, fresh air filter / circulating air filter, joystick steering, 12 V / 24 V connections, SENCON, roof window

Options

- Cab type E270, can be elevated 270 cm
- Cab can be tilted 15°
- Auxiliary heating system with timer
- Cab active-charcoal filter - inside air/outside air
- Sliding window in operator door
- Armored glass windshield, additional safety
- Armored glass roof window, additional safety
- Safety side window and rear window
- Sunblind for windshield
- Protective roof grating
- FOPS protective roof grating
- Protective front grating
- Radio with speakers

ATTACHMENTS

Design Decades of experience and the latest computer simulations guarantee the greatest degree of stability and longest service life

Boom adjustment winch Drive via slant axis hydraulic motor with compact planetary gear, pulling force 52 kN, rope diameter 14 mm, adjustment speed 30° to 80° in approx. 40 seconds.

Safety brake Spring-loaded multi-disk brake

Boom Boom length to 35.5 m

Options

- Auxiliary jib, for safe working loads to 8.5 t
- Fixed fly to 18 m
- Steel rope sheaves
- Jib sheaves for grapple implementation
- HD sheaves for working with optimal rope guide
- Boom damping, hydraulic
- Load moment limitation for hoisting implementation: latest generation of load moment monitoring, display shows all important data, lifting limit switch, pressure relief valves, rope run-out safeguard

UNDERCARRIAGE

Design Extremely strong crawler undercarriage, type T27/355 with hydraulically extensible track width. Stable welded construction.

Drive Strong travel drive with axial piston hydraulic motor and directly attached automatically functioning brake valve and compact planetary gear on each running gear side; protected drive transmission

Parking brake Spring-loaded multi-disk brake

Traveling gear Maintenance-free tractor running gear B60 with hydraulic chain tension, 700 mm 3-grouser base plates,

Speed **0 - 2.0 km/h**

Options

- 700 mm flat base plates (transport width 3000 mm)
- 800 mm flat base plates (transport width 3200 mm)
- 800 mm 3-grouser base plates (transport width 3200 mm)

WINCH

The winches are driven via high-pressure-regulated adjustable hydraulic motors, thus there is always optimal pulling force speed control. Hydraulic lowering brake valves for sensitive, wear-free braking. Strong oil-bath planetary gear, low-maintenance.

Crane brake and free-fall brake are spring-loaded, maintenance-free, low-wear disc brakes running in the oil bath, oil-cooled. The individual, variably adjustable free-fall brake actively supports the operator, prevents slack cable and protects the machine

| | Series production | Option |
|-----------------------------------|-------------------|-------------|
| Winches | 12 t | 9 t |
| Rope winch (rated load) 1st layer | 120 kN | 90 kN |
| Rope diameter | 22 mm | 18 mm |
| Rope speed | 0-125 m/min | 0-120 m/min |

Options

- Grapple steadying winch 9 kN
- Grapple steadying winch 18 kN
- Rope tensioning pulley
- Fairlead (dragline bucket deflection)

OPERATING WEIGHT

Mass **approx. 35,000 kg**

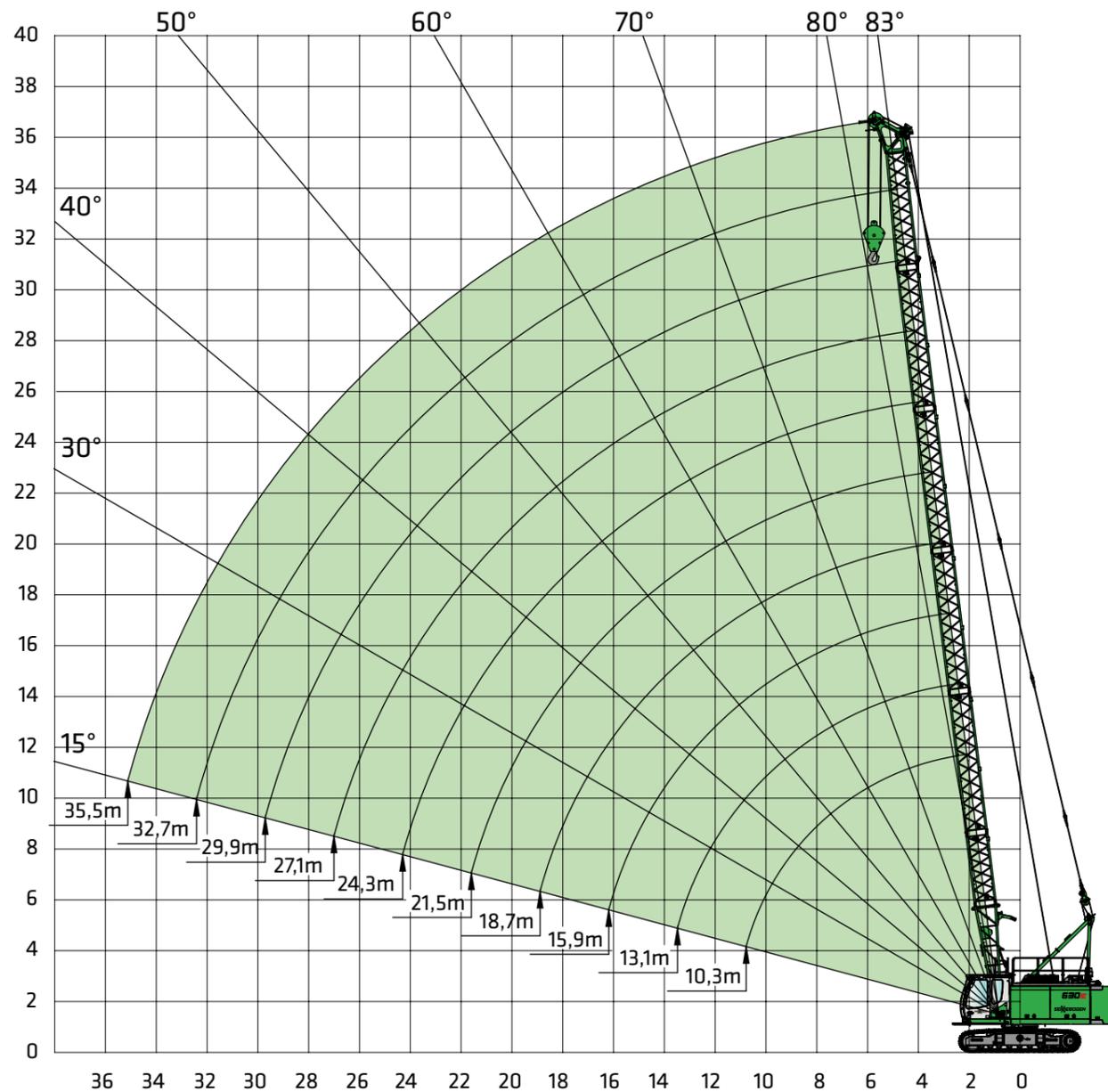
630 HD with 2 x 12 t free-fall winches, basic boom 10.3 m, counterweight 6.5 t, 25 t bottom hook block, 700 mm 3-grouser base plates, 125 m hoisting rope

Notice The operating weight varies depending on the version and equipment.



630E Main boom

HD



| | | Boom configuration | | | | | | | | | |
|---------------------------------|-------|--------------------|-------|-------|-------|-------|-------|------|------|------|------|
| Boom length | | 10.3 | 13.1 | 15.9 | 18.7 | 21.5 | 24.3 | 27.1 | 29.9 | 32.7 | 35.5 |
| Lower boom section type 870.52 | 4.4 m | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Boom section type 870.52 (DL) * | 2.8 m | 0 | 0 (1) | 0 (1) | 0 (1) | 0 (1) | 0 (1) | 0 | 0 | 0 | 0 |
| Boom section type 870.52 | 2.8 m | 0 | 1 (0) | 2 (1) | 1 (0) | 2 (1) | 1 (0) | 2 | 1 | 2 | 1 |
| Boom section type 870.52 | 5.6 m | 0 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 |
| Head piece type 870.52 | 5.9 m | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Auxiliary jib S12.5 (option) | 8.5 t | x | x | x | x | x | x | x | x | x | x |

* The 2.8 m boom section type 870.52 (DL) is only required for dragline bucket implementation; values in () apply for dragline bucket operation

630E Overall loads - with main boom SH

HD



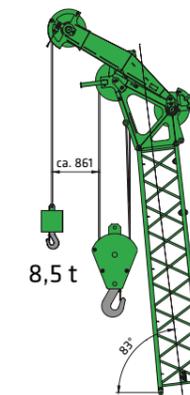
| Outreach [m] | Boom length [m] | | | | | | | | | |
|-------------------|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 10.3 | 13.1 | 15.9 | 18.7 | 21.5 | 24.3 | 27.1 | 29.9 | 32.7 | 35.5 |
| 2.6 | 30.0 | | | | | | | | | |
| 3.0 | 30.0 | 28.1 | 24.6/3.3 | 21.2/3.6 | | | | | | |
| 4.0 | 28.2 | 26.3 | 24.1 | 21.0 | 18.1 | 15.3/4.3 | 14.2/4.7 | | | |
| 5.0 | 20.6 | 19.9 | 18.9 | 17.9 | 17.1 | 15.0 | 14.0 | 12.2 | 10.4/5.4 | 8.8/5.7 |
| 6.0 | 15.4 | 15.3 | 15.2 | 14.5 | 13.9 | 13.3 | 12.8 | 11.7 | 10.1 | 8.7 |
| 7.0 | 12.3 | 12.2 | 12.1 | 12.1 | 11.7 | 11.2 | 10.8 | 10.4 | 9.7 | 8.3 |
| 8.0 | 10.1 | 10.0 | 10.0 | 9.9 | 9.8 | 9.6 | 9.3 | 8.9 | 8.6 | 8.0 |
| 9.0 | 8.6 | 8.5 | 8.4 | 8.4 | 8.3 | 8.3 | 8.1 | 7.8 | 7.5 | 7.3 |
| 10.0 | 7.4 | 7.3 | 7.3 | 7.2 | 7.1 | 7.1 | 7.0 | 6.9 | 6.7 | 6.4 |
| 11.0 | 6.6/10.9 | 6.4 | 6.4 | 6.3 | 6.2 | 6.2 | 6.1 | 6.0 | 5.9 | 5.7 |
| 12.0 | | 5.7 | 5.6 | 5.6 | 5.5 | 5.4 | 5.3 | 5.3 | 5.2 | 5.1 |
| 13.0 | | 5.1 | 5.0 | 5.0 | 4.9 | 4.8 | 4.7 | 4.7 | 4.6 | 4.5 |
| 14.0 | | 4.8/13.6 | 4.5 | 4.5 | 4.4 | 4.3 | 4.2 | 4.2 | 4.1 | 4.0 |
| 15.0 | | | 4.1 | 4.1 | 3.9 | 3.9 | 3.8 | 3.7 | 3.6 | 3.6 |
| 16.0 | | | 3.8 | 3.7 | 3.6 | 3.5 | 3.4 | 3.4 | 3.3 | 3.2 |
| 17.0 | | | 3.6/16.3 | 3.4 | 3.3 | 3.2 | 3.1 | 3.1 | 3.0 | 2.9 |
| 18.0 | | | | 3.1 | 3.0 | 2.9 | 2.9 | 2.8 | 2.7 | 2.6 |
| 19.0 | | | | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 2.4 |
| 20.0 | | | | | 2.5 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 |
| 22.0 | | | | | 2.2/21.7 | 2.1 | 2.0 | 1.9 | 1.8 | 1.8 |
| 24.0 | | | | | | 1.8 | 1.7 | 1.6 | 1.5 | 1.5 |
| 26.0 | | | | | | 1.8/24.4 | 1.5 | 1.4 | 1.3 | 1.2 |
| 28.0 | | | | | | | 1.4/27.1 | 1.2 | 1.1 | 1.0 |
| 30.0 | | | | | | | | 1.0/29.8 | 0.9 | 0.8 |
| 32.0 | | | | | | | | | 0.8 | 0.7 |
| 34.0 | | | | | | | | | 0.7/32.5 | 0.5 |
| 36.0 | | | | | | | | | | 0.5/35.2 |
| 38.0 | Table no. 630R-80/1840/6.5/08.14 SH | | | | | | | | | |
| Number of strands | Ø 22 mm | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 2 |
| | Ø 18 mm | 5 | 5 | 5 | 4 | 4 | 3 | 3 | 3 | 2 |

Comments:

- The specified safe working load values apply for a level and stable stance of the machine.
- The safe working load values are specified in tons (t) and apply for 360 degrees.
- The safe working loads take the standards ISO 4305 Tab. 1+2 and the tilt angle method (tilt angle 4°) into account
- Deduct the weight of the load handling devices (hook, suspension gear) from the safe working loads.
- The safe working loads apply for the maximum undercarriage track width of 3800 mm.
- Load ratings must be limited or reduced when conditions are unfavorable, such as soft or uneven ground, slopes, wind, lateral loads, swinging loads, jerking or sudden stopping of the load, operator inexperience, driving with load.
- Permissible rope tension per strand in crane operation for rope diameter with 22 mm - 8500 kg with rope diameter 18 mm - 6000 kg
- Safe working loads apply for the SH boom (boom assembly in accordance with the operating manual)
- Safe working loads apply for optimum boom assembly and a pulley head with plastic pulleys.
- The specified safe working load values are only for orientation. See the operating manual for the respectively valid safe working loads.

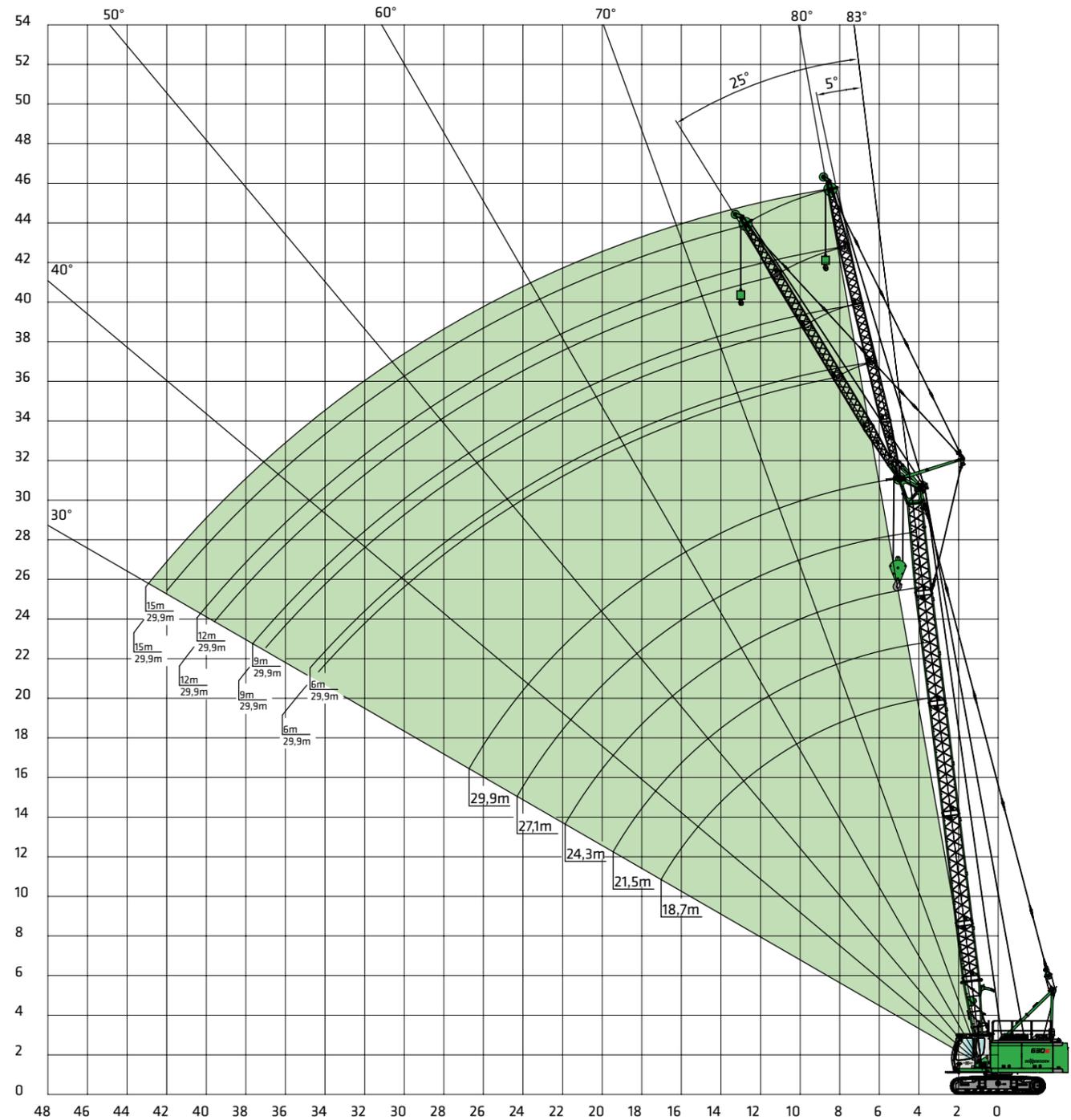
Auxiliary jib S12.5

Max. load capacity 8.5 t
(rope diameter 22 mm)
or max. load capacity 6.0 t
(rope diameter 18 mm)



630E Fixed fly boom

HD



630E Working loads SHFS - fixed fly boom

HD



| 8.2 t 5° | Main boom length [m] | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|----------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|---------|----------|---------|----------|----------|------|----------|---------|----------|-----|----------|----------|
| | 18.7 | | | | | 21.5 | | | | | 24.3 | | | | | 27.1 | | | | | 29.9 | | | |
| Outreach [m] | Fly boom length [m] | | | | | | | | | | | | | | | | | | | | | | | |
| | 6.0 | 9.0 | 12.0 | 15.0 | 18.0 | 6.0 | 9.0 | 12.0 | 15.0 | 18.0 | 6.0 | 9.0 | 12.0 | 15.0 | 18.0 | 6.0 | 9.0 | 12.0 | 15.0 | 18.0 | 6.0 | 9.0 | 12.0 | 15.0 |
| 5.0 | 8.5/5.2 | | | | | 8.5/5.5 | | | | | 8.5/5.8 | | | | | | | | | | | | | |
| 6.0 | 8.5 | 8.5/6.1 | 6.6/6.9 | | | 8.5 | 8.4/6.5 | | | | 8.5 | 7.8/6.8 | | | | 8.5/6.2 | | | | | 8.2/6.5 | | | |
| 7.0 | 8.5 | 8.5 | 6.6 | 5.5/7.4 | 4.8/7.6 | 8.5 | 8.2 | 6.2/7.2 | 5.2/7.7 | | 8.5 | 7.8 | 5.9/7.5 | | | 8.5 | 7.2/7.2 | | | | 8.1 | | | 6.6/7.5 |
| 8.0 | 8.5 | 8.0 | 6.3 | 5.3 | 4.7 | 8.5 | 7.8 | 6.0 | 5.2 | 4.5 | 8.5 | 7.4 | 5.8 | 5.0 | 4.4/8.3 | 8.5 | 7.0 | 5.6 | 4.7/8.4 | 4.1/8.6 | 7.9 | 6.5 | 5.2/8.3 | 4.3/8.8 |
| 9.0 | 8.3 | 7.6 | 5.9 | 5.1 | 4.5 | 8.1 | 7.4 | 5.8 | 4.9 | 4.4 | 7.9 | 7.1 | 5.6 | 4.8 | 4.3 | 7.6 | 6.7 | 5.4 | 4.6 | 4.1 | 7.3 | 6.3 | 5.1 | 4.3 |
| 10.0 | 7.2 | 7.1 | 5.6 | 4.8 | 4.3 | 7.1 | 7.0 | 5.5 | 4.7 | 4.2 | 7.0 | 6.8 | 5.4 | 4.6 | 4.1 | 6.7 | 6.5 | 5.2 | 4.4 | 3.9 | 6.5 | 6.1 | 5.0 | 4.2 |
| 11.0 | 6.2 | 6.3 | 5.3 | 4.6 | 4.1 | 6.1 | 6.3 | 5.2 | 4.5 | 4.0 | 6.1 | 6.2 | 5.2 | 4.4 | 4.0 | 6.0 | 5.9 | 5.0 | 4.2 | 3.8 | 5.8 | 5.7 | 4.8 | 4.0 |
| 12.0 | 5.5 | 5.6 | 5.0 | 4.3 | 3.9 | 5.4 | 5.5 | 5.0 | 4.2 | 3.9 | 5.3 | 5.4 | 4.9 | 4.2 | 3.8 | 5.3 | 5.3 | 4.8 | 4.1 | 3.7 | 5.2 | 5.1 | 4.6 | 3.9 |
| 13.0 | 4.9 | 5.0 | 4.7 | 4.1 | 3.7 | 4.8 | 4.9 | 4.7 | 4.0 | 3.7 | 4.7 | 4.8 | 4.7 | 4.0 | 3.6 | 4.6 | 4.7 | 4.6 | 3.9 | 3.5 | 4.6 | 4.6 | 4.5 | 3.8 |
| 14.0 | 4.4 | 4.5 | 4.3 | 3.9 | 3.5 | 4.3 | 4.4 | 4.4 | 3.8 | 3.5 | 4.2 | 4.3 | 4.3 | 3.8 | 3.5 | 4.1 | 4.2 | 4.3 | 3.7 | 3.4 | 4.1 | 4.2 | 4.2 | 3.6 |
| 15.0 | 4.0 | 4.0 | 4.0 | 3.7 | 3.3 | 3.9 | 3.9 | 4.0 | 3.7 | 3.3 | 3.8 | 3.9 | 3.9 | 3.6 | 3.3 | 3.7 | 3.8 | 3.8 | 3.5 | 3.3 | 3.6 | 3.7 | 3.8 | 3.5 |
| 16.0 | 3.6 | 3.7 | 3.7 | 3.5 | 3.2 | 3.5 | 3.6 | 3.6 | 3.5 | 3.2 | 3.4 | 3.5 | 3.5 | 3.4 | 3.2 | 3.3 | 3.4 | 3.4 | 3.4 | 3.4 | 3.2 | 3.3 | 3.3 | 3.4 |
| 17.0 | 3.3 | 3.3 | 3.4 | 3.3 | 3.0 | 3.2 | 3.2 | 3.3 | 3.3 | 3.0 | 3.1 | 3.2 | 3.2 | 3.2 | 3.0 | 3.0 | 3.1 | 3.1 | 3.1 | 3.1 | 3.0 | 2.9 | 3.0 | 3.0 |
| 18.0 | 3.0 | 3.0 | 3.1 | 3.1 | 2.9 | 2.9 | 3.0 | 3.0 | 3.0 | 2.8 | 2.8 | 2.9 | 2.9 | 2.9 | 2.9 | 2.7 | 2.8 | 2.8 | 2.8 | 2.8 | 2.6 | 2.7 | 2.8 | 2.8 |
| 19.0 | 2.7 | 2.8 | 2.8 | 2.8 | 2.7 | 2.6 | 2.7 | 2.7 | 2.7 | 2.6 | 2.6 | 2.6 | 2.7 | 2.7 | 2.6 | 2.5 | 2.5 | 2.6 | 2.6 | 2.5 | 2.4 | 2.5 | 2.5 | 2.5 |
| 20.0 | 2.5 | 2.6 | 2.6 | 2.6 | 2.6 | 2.4 | 2.5 | 2.5 | 2.5 | 2.5 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.3 |
| 22.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 2.0 | 2.0 | 1.9 | 1.8 | 1.9 | 1.9 | 1.9 |
| 24.0 | 2.0/23.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.7 | 1.8 | 1.8 | 1.8 | 1.8 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.5 | 1.5 | 1.6 | 1.6 |
| 26.0 | | 1.6/25.8 | 1.6 | 1.6 | 1.6 | 1.5/25.4 | 1.5 | 1.5 | 1.5 | 1.5 | 1.4 | 1.4 | 1.5 | 1.5 | 1.4 | 1.3 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.2 | 1.3 | 1.3 |
| 28.0 | | | 1.4 | 1.4 | 1.4 | | 1.3 | 1.3 | 1.3 | 1.3 | 1.2/27.8 | 1.2 | 1.2 | 1.2 | 1.2 | 1.1 | 1.1 | 1.1 | 1.2 | 1.1 | 1.0 | 1.1 | 1.1 | 1.1 |
| 30.0 | | | 1.8/28.6 | 1.2 | 1.2 | | 1.3/28.3 | 1.1 | 1.1 | 1.1 | | 1.0 | 1.1 | 1.1 | 1.0 | 0.9 | 0.9 | 1.0 | 1.0 | 0.9 | 0.8 | 0.9 | 0.9 | 0.9 |
| 32.0 | | | | 1.1/31.3 | 1.1 | | | 1.0/31.0 | 1.0 | 1.0 | | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 |
| 34.0 | | | | | 0.9/33.8 | | | | 0.8/33.7 | 0.8 | | | 0.8 | 0.7 | | 0.7/33.1 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6/32.6 | 0.6 | 0.6 | 0.6 |
| 36.0 | | | | | | | | | | 0.7 | | | | 0.6 | 0.6 | | 0.5/35.9 | 0.5 | 0.5 | | 0.5/35.5 | 0.4 | 0.4 | 0.4 |
| 38.0 | | | | | | | | | | 0.7/36.3 | | | | 0.6/36.1 | 0.5 | | | | 0.4 | 0.4 | | | 0.3 | 0.3 |
| 40.0 | | | | | | | | | | | | | | 0.4/38.7 | | | | | 0.4/38.5 | 0.3 | | | 0.3/38.3 | 0.2 |
| 42.0 | | | | | | | | | | | | | | | | | | | | | 0.2/41.1 | | | 0.2/41.0 |
| 44.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

Comments:

- The specified safe working load values apply for a level and stable stance of the machine.
- The safe working load values are specified in tons (t) and apply for 360 degrees.
- The safe working loads take the standards ISO 4305 Tab. 1+2 and the tilt angle method (tilt angle 4°) into account
- Deduct the weight of the load handling devices (hook, suspension gear) from the safe working loads.
- The safe working loads apply for the maximum undercarriage track width.
- Load ratings must be limited or reduced when conditions are unfavorable, such as soft or uneven ground, slopes, wind, lateral loads, swinging loads, jerking or sudden stopping of the load, operator inexperience, driving with load.
- Permissible rope tension per strand in crane operation is with rope diameter 22 mm - 8500 kg with rope diameter 18 mm - 6000 kg (max. safe working load 6000 kg)
- Safe working loads apply for the SHFS boom (boom assembly in accordance with the operating manual)
- Safe working loads apply for optimum boom assembly and a pulley head with plastic pulleys.
- The specified load ratings are only for orientation. See the operating manual for the respectively valid safe working loads.

630E Working loads SHFS - fixed fly boom HD



| 8.2 t 25° | Main boom length [m] | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|----------------------|----------|----------|----------|----------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 18.7 | | | | | 21.5 | | | | | 24.3 | | | | | 27.1 | | | | | 29.9 | | | |
| Outreach [m] | Fly boom length [m] | | | | | | | | | | | | | | | | | | | | | | | |
| | 6.0 | 9.0 | 12.0 | 15.0 | 18.0 | 6.0 | 9.0 | 12.0 | 15.0 | 18.0 | 6.0 | 9.0 | 12.0 | 15.0 | 18.0 | 6.0 | 9.0 | 12.0 | 15.0 | 18.0 | 6.0 | 9.0 | 12.0 | 15.0 |
| 5.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7.0 | 7.4/7.1 | | | | | 7.1/7.4 | | | | | 6.7/7.8 | | | | | | | | | | | | | |
| 8.0 | 7.2 | 5.5/8.8 | | | | 6.9 | | | | | 6.7 | | | | 6.4/8.1 | | | | | 6.0/8.5 | | | | |
| 9.0 | 6.9 | 5.5 | | | | 6.7 | 5.2/9.2 | | | | 6.5 | 5.0/9.5 | | | 6.2 | 4.7/9.9 | | | | 6.0 | | | | |
| 10.0 | 6.6 | 5.3 | 4.1/10.4 | | | 6.5 | 5.1 | 3.9/10.7 | | | 6.3 | 4.9 | | | 6.1 | 4.7 | | | | 5.8 | 4.5/10.2 | | | |
| 11.0 | 6.4 | 5.1 | 4.0 | 3.4/11.7 | | 6.3 | 4.9 | 3.9 | | | 6.1 | 4.8 | 3.7 | | 5.9 | 4.6 | 3.5/11.4 | | | 5.7 | 4.4 | 3.4/11.7 | | |
| 12.0 | 5.7 | 4.9 | 3.9 | 3.3 | 3.0/12.7 | 5.7 | 4.8 | 3.8 | 3.1 | | 5.6 | 4.6 | 3.6 | 3.0/12.3 | | 5.6 | 4.5 | 3.5 | 2.8/12.7 | | 5.4 | 4.3 | 3.4 | |
| 13.0 | 5.1 | 4.7 | 3.8 | 3.2 | 2.9 | 5.0 | 4.6 | 3.7 | 3.1 | 2.8 | 5.0 | 4.5 | 3.5 | 2.9 | 2.7/13.4 | 4.9 | 4.4 | 3.4 | 2.8 | 2.5/13.8 | 4.9 | 4.2 | 3.3 | 2.7 |
| 14.0 | 4.6 | 4.5 | 3.6 | 3.1 | 2.8 | 4.5 | 4.5 | 3.6 | 3.0 | 2.7 | 4.5 | 4.4 | 3.4 | 2.9 | 2.6 | 4.4 | 4.2 | 3.3 | 2.8 | 2.5 | 4.3 | 4.1 | 3.3 | 2.7 |
| 15.0 | 4.1 | 4.3 | 3.5 | 3.0 | 2.7 | 4.1 | 4.2 | 3.4 | 2.9 | 2.6 | 4.0 | 4.2 | 3.4 | 2.8 | 2.6 | 3.9 | 4.1 | 3.3 | 2.7 | 2.5 | 3.9 | 4.0 | 3.2 | 2.6 |
| 16.0 | 3.7 | 3.9 | 3.3 | 2.9 | 2.6 | 3.7 | 3.8 | 3.3 | 2.8 | 2.6 | 3.6 | 3.8 | 3.3 | 2.7 | 2.5 | 3.5 | 3.7 | 3.2 | 2.6 | 2.4 | 3.5 | 3.7 | 3.1 | 2.6 |
| 17.0 | 3.4 | 3.5 | 3.2 | 2.8 | 2.6 | 3.3 | 3.5 | 3.2 | 2.7 | 2.5 | 3.3 | 3.4 | 3.2 | 2.6 | 2.4 | 3.2 | 3.4 | 3.1 | 2.6 | 2.4 | 3.1 | 3.3 | 3.0 | 2.5 |
| 18.0 | 3.1 | 3.2 | 3.1 | 2.7 | 2.5 | 3.0 | 3.2 | 3.1 | 2.6 | 2.4 | 3.0 | 3.1 | 3.1 | 2.6 | 2.4 | 2.9 | 3.0 | 3.0 | 2.5 | 2.3 | 2.8 | 3.0 | 3.0 | 2.4 |
| 19.0 | 2.8 | 3.0 | 2.9 | 2.6 | 2.4 | 2.8 | 2.9 | 3.0 | 2.5 | 2.3 | 2.7 | 2.8 | 3.0 | 2.5 | 2.3 | 2.6 | 2.8 | 2.9 | 2.4 | 2.2 | 2.6 | 2.7 | 2.8 | 2.4 |
| 20.0 | 2.6 | 2.7 | 2.8 | 2.6 | 2.3 | 2.5 | 2.7 | 2.8 | 2.4 | 2.3 | 2.5 | 2.6 | 2.7 | 2.4 | 2.2 | 2.4 | 2.5 | 2.6 | 2.4 | 2.2 | 2.3 | 2.5 | 2.6 | 2.3 |
| 22.0 | 2.2 | 2.3 | 2.4 | 2.4 | 2.2 | 2.1 | 2.2 | 2.3 | 2.2 | 2.1 | 2.1 | 2.2 | 2.3 | 2.3 | 2.1 | 2.0 | 2.1 | 2.2 | 2.2 | 2.1 | 1.9 | 2.1 | 2.2 | 2.2 |
| 24.0 | 1.9/23.5 | 2.0 | 2.1 | 2.1 | 2.0 | 1.8 | 1.9 | 2.0 | 2.1 | 2.0 | 1.7 | 1.8 | 1.9 | 2.0 | 2.0 | 1.7 | 1.8 | 1.9 | 1.9 | 2.0 | 1.6 | 1.7 | 1.8 | 1.9 |
| 26.0 | | 1.7 | 1.8 | 1.8 | 1.9 | 1.5 | 1.6 | 1.7 | 1.8 | 1.8 | 1.5 | 1.6 | 1.6 | 1.7 | 1.8 | 1.4 | 1.5 | 1.6 | 1.6 | 1.7 | 1.3 | 1.4 | 1.5 | 1.6 |
| 28.0 | | 1.6/26.5 | 1.5 | 1.6 | 1.6 | | 1.4 | 1.4 | 1.5 | 1.6 | 1.2 | 1.3 | 1.4 | 1.5 | 1.5 | 1.2 | 1.2 | 1.3 | 1.4 | 1.4 | 1.1 | 1.2 | 1.3 | 1.3 |
| 30.0 | | | 1.3/29.5 | 1.4 | 1.4 | | 1.3/29.0 | 1.2 | 1.3 | 1.3 | 1.2/28.4 | 1.1 | 1.2 | 1.2 | 1.3 | 1.0 | 1.0 | 1.1 | 1.2 | 1.2 | 0.9 | 1.0 | 1.0 | 1.1 |
| 32.0 | | | | 1.2 | 1.2 | | | 1.0/31.9 | 1.1 | 1.1 | | 1.0/31.4 | 1.0 | 1.0 | 1.1 | 0.9/31.8 | 0.8 | 0.9 | 1.0 | 1.0 | 0.7 | 0.8 | 0.9 | 0.9 |
| 34.0 | | | | 1.1/32.5 | 1.0 | | | | 0.9 | 1.0 | | | 0.8 | 0.9 | 0.9 | | 0.7/33.8 | 0.7 | 0.8 | 0.8 | 0.6/33.2 | 0.6 | 0.7 | 0.7 |
| 36.0 | | | | | 0.9/35.4 | | | | 0.8/34.9 | 0.8 | | | 0.8/34.4 | 0.7 | 0.8 | | | 0.6 | 0.6 | 0.7 | | 0.5 | 0.5 | 0.6 |
| 38.0 | | | | | | | | | | 0.7/37.8 | | | | 0.6/37.3 | 0.6 | | | 0.5/36.8 | 0.5 | 0.5 | | 0.4/36.2 | 0.4 | 0.4 |
| 40.0 | | | | | | | | | | | | | | 0.5 | | | | | 0.4/39.7 | 0.4 | | | 0.3/39.2 | 0.3 |
| 42.0 | | | | | | | | | | | | | | 0.5/40.2 | | | | | | | 0.3 | | | 0.2 |
| 44.0 | | | | | | | | | | | | | | | | | | | | | 0.2/42.7 | | | 0.2/42.2 |
| 46.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| Number of strands | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

- Comments:**
- The specified safe working load values apply for a level and stable stance of the machine.
 - The safe working load values are specified in tons (t) and apply for 360 degrees.
 - The safe working loads take the standards ISO 4305 Tab. 1+2 and the tilt angle method (tilt angle 4°) into account
 - Deduct the weight of the load handling devices (hook, suspension gear) from the safe working loads.
 - The safe working loads apply for the maximum undercarriage track width.
 - Load ratings must be limited or reduced when conditions are unfavorable, such as soft or uneven ground, slopes, wind, lateral loads, swinging loads, jerking or sudden stopping of the load, operator inexperience, driving with load.
 - Permissible rope tension per strand in crane operation is with rope diameter 22 mm - 8500 kg with rope diameter 18 mm - 6000 kg (max. safe working load 6000 kg)
 - Safe working loads apply for the SHFS boom (boom assembly in accordance with the operating manual)
 - Safe working loads apply for optimum boom assembly and a pulley head with plastic pulleys.
 - The specified load ratings are only for orientation. See the operating manual for the respectively valid safe working loads.



630E Working loads SHFS - fixed fly boom HD



Main boom with fixed fly SHFS

| Boom length | Boom configuration | | | | | | | | | |
|----------------------------------------|--------------------|------|------|------|------|---------------|-----|------|------|------|
| | Main boom | | | | | Fixed fly jib | | | | |
| | 18.7 | 21.5 | 24.3 | 27.1 | 29.9 | 6.0 | 9.0 | 12.0 | 15.0 | 18.0 |
| Lower boom section type 870.52 | 1 | 1 | 1 | 1 | 1 | | | | | |
| Boom section type 870.52 | 1 | 2 | 1 | 2 | 1 | | | | | |
| Boom section type 870.52 | 1 | 1 | 2 | 2 | 3 | | | | | |
| Head piece type 870.52 | 1 | 1 | 1 | 1 | 1 | | | | | |
| Fly boom - lower boom section type 598 | | | | | | 1 | 1 | 1 | 1 | 1 |
| Fly boom - boom section type 598 | | | | | | 0 | 1 | 2 | 3 | 4 |
| Fly boom head piece type 598 | | | | | | 1 | 1 | 1 | 1 | 1 |

Combination possibilities SHFS

| Length fixed fly | Boom configuration | | | | |
|------------------|--------------------|------|------|------|------|
| | Main boom | | | | |
| | 18.7 | 21.5 | 24.3 | 27.1 | 29.9 |
| 6.0 m | x | x | x | x | x |
| 9.0 m | x | x | x | x | x |
| 12.0 m | x | x | x | x | x |
| 15.0 m | x | x | x | x | x |
| 18.0 m | x | x | x | x | |



Hook

For 120 kN winches with 22 mm rope diameter

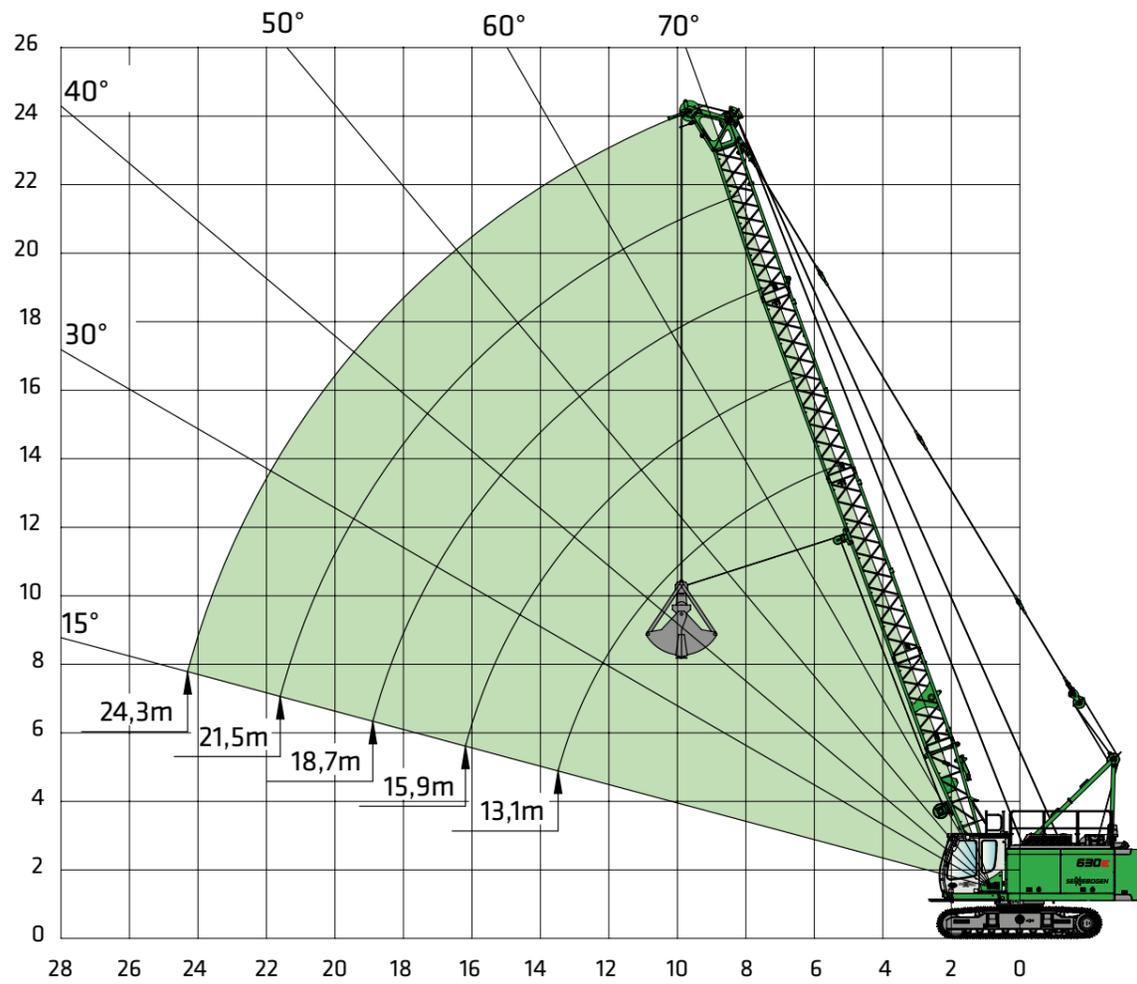
| Capacity | Weight | Rope strands and maximum safe working load [kg] | | | | | |
|---------------|--------|-------------------------------------------------|---|--------|--------|--------|------|
| | | 6 | 5 | 4 | 3 | 2 | 1 |
| 10 t | 200 kg | | | | | | 8500 |
| 25 t 1-pulley | 300 kg | | | | 25,000 | 17,000 | 8500 |
| 40 t 2-pulley | 350 kg | | | 30,000 | 25,500 | 17,000 | 8500 |

For 90 kN winches with 18 mm rope diameter

| Capacity | Weight | Rope strands and maximum safe working load [kg] | | | | | |
|---------------|--------|-------------------------------------------------|--------|--------|--------|--------|------|
| | | 6 | 5 | 4 | 3 | 2 | 1 |
| 6 t | 120 kg | | | | | | 6000 |
| 18 t 1-pulley | 200 kg | | | | 18,000 | 12,000 | 6000 |
| 32 t 3-pulley | 300 kg | | 30,000 | 24,000 | 18,000 | 12,000 | 6000 |

630E Grab equipment

HD



Comments:

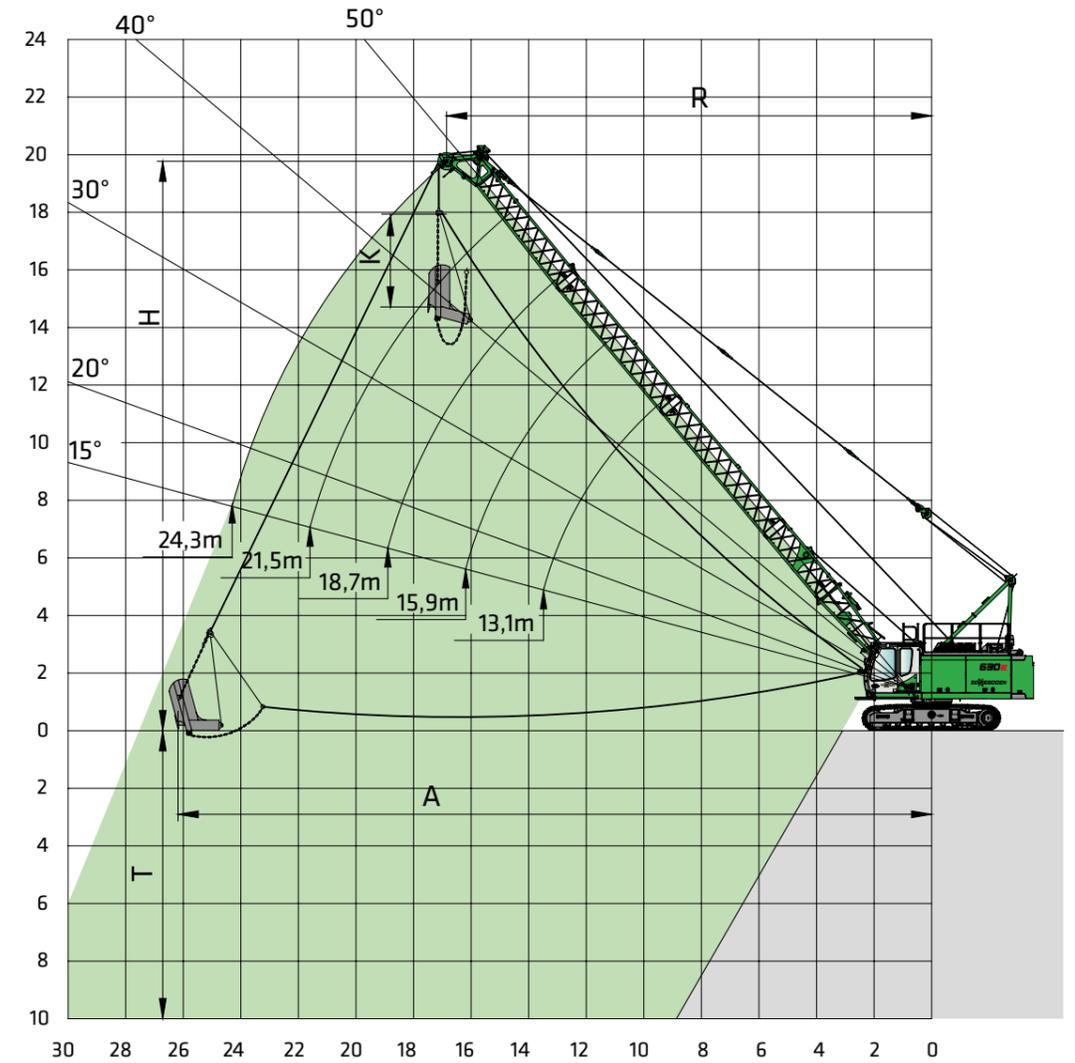
- The specified safe working load values apply for a level and stable stance of the machine.
- Load ratings are in tons (t) and apply for 360 degrees.
- The safe working loads apply for the maximum outrigger width / undercarriage track width of 3550 mm
- The specified safe working loads include the grapple weight and do not exceed 66.7% of the tipping load
- For operation with a mechanical two-rope grapple and even load distribution on the closing and holding ropes, the safe working load is limited by the permissible rope tension or the maximum winch pulling force of a winch:

| | | |
|-----------------------------------------------------|------|------|
| Winch pulling force [kN] | 90 | 120 |
| Rope diameter [mm] | 18 | 22 |
| Minimum tensile strength [kN] | 320 | 426 |
| Maximum safe working load in single-winch operation | 9.0 | 12.0 |
| Maximum safe working load in two-winch operation | 13.6 | 18.2 |

| 6.5 t | Boom length [m] | | | | | | | | | | | | | | |
|-------|-----------------|------|------|------|------|------|------|------|-----|------|------|-----|------|------|-----|
| | 13.1 | | | 15.9 | | | 18.7 | | | 21.5 | | | 24.3 | | |
| | R | H | t | R | H | t | R | H | t | R | H | t | R | H | t |
| 70 | 5.8 | 13.8 | 13.5 | 6.8 | 16.4 | 10.7 | 7.7 | 19.0 | 8.8 | 8.7 | 21.7 | 7.3 | 9.6 | 24.3 | 6.3 |
| 65 | 6.8 | 13.3 | 10.6 | 8.0 | 15.8 | 8.3 | 9.2 | 18.4 | 6.8 | 10.4 | 20.9 | 5.7 | 11.6 | 23.4 | 4.8 |
| 60 | 7.8 | 12.7 | 8.7 | 9.2 | 15.1 | 6.8 | 10.6 | 17.6 | 5.6 | 12.0 | 20.0 | 4.6 | 13.4 | 22.4 | 3.9 |
| 55 | 8.8 | 12.1 | 7.4 | 10.4 | 14.4 | 5.8 | 12.0 | 16.6 | 4.7 | 13.6 | 18.9 | 3.8 | 15.2 | 21.2 | 3.2 |
| 50 | 9.7 | 11.3 | 6.5 | 11.5 | 13.5 | 5.0 | 13.3 | 15.6 | 4.1 | 15.1 | 17.8 | 3.3 | 16.9 | 19.9 | 2.7 |
| 45 | 10.5 | 10.5 | 5.8 | 12.4 | 12.5 | 4.5 | 14.4 | 14.5 | 3.6 | 16.4 | 16.5 | 2.9 | 18.4 | 18.4 | 2.4 |
| 40 | 11.2 | 9.6 | 5.3 | 13.3 | 11.4 | 4.1 | 15.5 | 13.2 | 3.2 | 17.6 | 15.0 | 2.6 | 19.8 | 16.8 | 2.1 |
| 35 | 11.9 | 8.7 | 4.9 | 14.2 | 10.3 | 3.7 | 16.5 | 11.9 | 3.0 | 18.7 | 13.5 | 2.4 | 21.0 | 15.1 | 1.9 |
| 30 | 12.4 | 7.7 | 4.6 | 14.9 | 9.1 | 3.5 | 17.3 | 10.5 | 2.8 | 19.7 | 11.9 | 2.2 | 22.1 | 13.3 | 1.8 |
| 25 | 12.9 | 6.7 | 4.3 | 15.5 | 7.9 | 3.3 | 18.0 | 9.1 | 2.6 | 20.5 | 10.2 | 2.1 | 23.1 | 11.4 | 1.6 |
| 20 | 13.3 | 5.6 | 4.2 | 16.0 | 6.6 | 3.2 | 18.6 | 7.5 | 2.5 | 21.2 | 8.5 | 2.0 | 23.8 | 9.4 | 1.6 |
| 15 | 13.6 | 4.5 | 4.0 | 16.3 | 5.2 | 3.1 | 19.0 | 6.0 | 2.4 | 21.7 | 6.7 | 1.9 | 24.4 | 7.4 | 1.5 |

630E Dragline bucket equipment

HD



Comments:

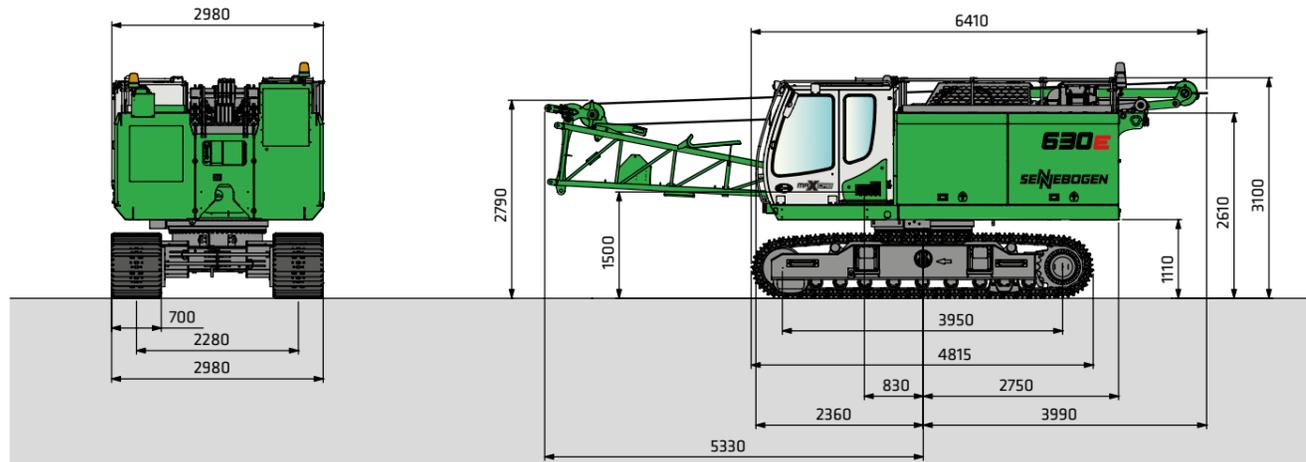
- The specified safe working load values apply for a level and stable stance of the machine.
- The safe working load values are specified in tons (t) and apply for 360 degrees.
- The safe working loads apply for the maximum outrigger width / undercarriage track width of 3550 mm.
- The specified safe working loads include the grapple weight and do not exceed 75% of the tipping load.
- Motor and winch equipment as required (the specified values apply for maximum equipment and average conditions).
- The dragline bucket size must be configured in accordance with the given conditions.

Dredging arc:
 R = Working radius
 A = Maximum dredging width = approx. R + 1/3 to 1/2 (H-K)
 T = Dredging depth = approx. 40-50% of R
 H = Height
 K = Length of the dragline bucket

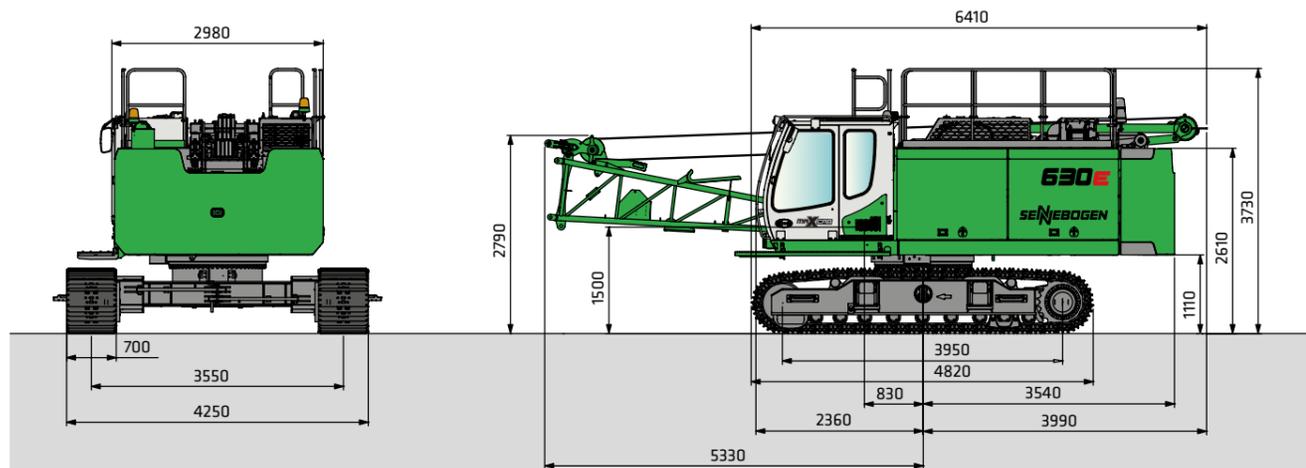
| 6.5 t | Boom length [m] | | | | | | | | | | | | | | |
|-------|-----------------|------|-----|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| | 13.1 | | | 15.9 | | | 18.7 | | | 21.5 | | | 24.3 | | |
| | R | H | t | R | H | t | R | H | t | R | H | t | R | H | t |
| 50 | 9.7 | 11.3 | 7.3 | 11.5 | 13.5 | 5.7 | 13.3 | 15.6 | 4.6 | 15.1 | 17.8 | 3.7 | 16.9 | 19.9 | 3.1 |
| 45 | 10.5 | 10.5 | 6.5 | 12.4 | 12.5 | 5.0 | 14.4 | 14.5 | 4.1 | 16.4 | 16.5 | 3.3 | 18.4 | 18.4 | 2.7 |
| 40 | 11.2 | 9.6 | 5.9 | 13.3 | 11.4 | 4.6 | 15.5 | 13.2 | 3.7 | 17.6 | 15.0 | 2.9 | 19.8 | 16.8 | 2.4 |
| 35 | 11.9 | 8.7 | 5.5 | 14.2 | 10.3 | 4.2 | 16.5 | 11.9 | 3.4 | 18.7 | 13.5 | 2.7 | 21.0 | 15.1 | 2.2 |
| 30 | 12.4 | 7.7 | 5.1 | 14.9 | 9.1 | 3.9 | 17.3 | 10.5 | 3.1 | 19.7 | 11.9 | 2.5 | 22.1 | 13.3 | 2.0 |
| 25 | 12.9 | 6.7 | 4.9 | 15.5 | 7.9 | 3.7 | 18.0 | 9.1 | 2.9 | 20.5 | 10.2 | 2.3 | 23.1 | 11.4 | 1.9 |
| 20 | 13.3 | 5.6 | 4.7 | 16.0 | 6.6 | 3.6 | 18.6 | 7.5 | 2.8 | 21.2 | 8.5 | 2.2 | 23.8 | 9.4 | 1.8 |
| 15 | 13.6 | 4.5 | 4.5 | 16.3 | 5.2 | 3.4 | 19.0 | 6.0 | 2.7 | 21.7 | 6.7 | 2.1 | 24.4 | 7.4 | 1.7 |

630E Dimensions

HD



630 HD without counterweight, lower boom section 2 x 12 t free-fall winch, approx. 27,200 kg



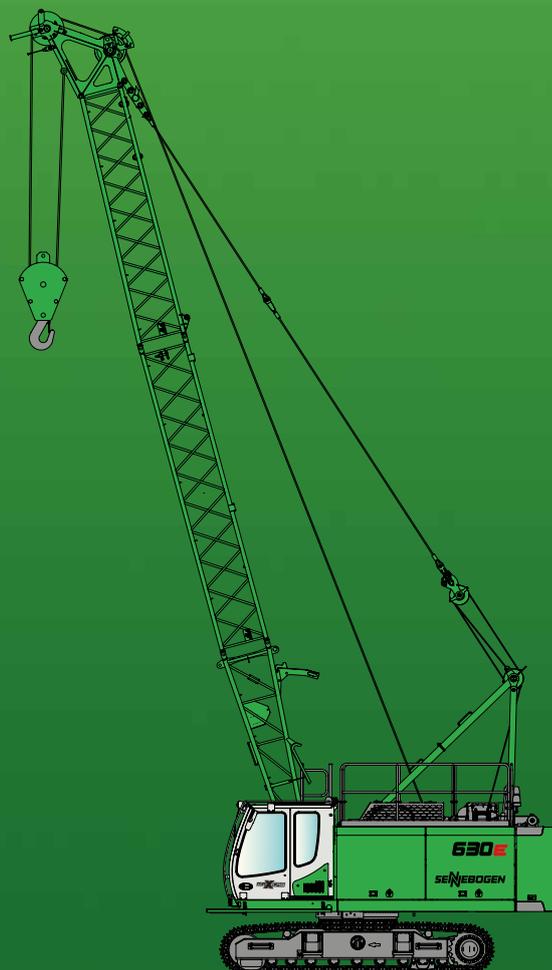
630 HD with counterweight 6.5 t, telescopic undercarriage T27/355.
Lower boom section 2 x 12 t free-fall winch approx. 33,700 kg

630E Transport dimensions

HD

| | |
|--|--------------------------------------------------------------------------------------------------------|
| | Lower boom section 4.4 m, type 870.52 |
| | Weight: 680 kg |
| | Intermediate boom section 2.8 m, type 870.52 (DL) with deflection sheave for dragline bucket operation |
| | Weight: 520 kg (incl. holding ropes) |
| | Intermediate boom section 2.8 m, type 870.52 |
| | Weight: 250 kg (incl. holding ropes) |
| | Intermediate boom section 5.6 m, type 870.52 with deflection sheave for dragline bucket operation |
| | Weight: 400 kg (incl. holding ropes) |
| | Boom headpiece 5.9 m, type 870.52 |
| | Steel rollers: 1050 kg (incl. holding ropes) Plastic rollers 920 kg (incl. holding ropes) |
| | Auxiliary jib S12.5 |
| | Weight: 280 kg |
| | Counterweight |
| | Weight: 6500 kg |
| | Lower boom section 3.0 m, type 598 |
| | Weight: 330 kg |
| | Intermediate boom section 3.0 m, type 598 |
| | Weight: 120 kg (incl. holding ropes) |
| | Boom headpiece 3 m, type 598 |
| | Weight: 210 kg (incl. holding rope) |

630E



This catalog describes machine models, scopes of equipment of individual models, and configuration options (standard equipment and optional equipment) of the machines delivered by SENNEBOGEN Maschinenfabrik. Machine illustrations can contain optional equipment and supplemental equipment. Actual equipment may vary depending on the country to which the machines are delivered, especially in regard to standard and optional equipment.

All product designations used may be trademarks of SENNEBOGEN Maschinenfabrik GmbH or other supplying companies, and any use by third parties for their own purposes may violate the rights of the owners.

Please contact your local SENNEBOGEN sales partner for information concerning the equipment variants offered. Requested performance characteristics are only binding if they are expressly stipulated upon conclusion of the contract. Delivery options and technical features are subject to change. Errors and omissions excepted. Equipment is subject to change, and rights of advancement are reserved.

© SENNEBOGEN Maschinenfabrik GmbH, Straubing, Germany. Reproduction in whole or in part only with written consent of SENNEBOGEN Maschinenfabrik GmbH, Straubing, Germany.

SENNEBOGEN

SENNEBOGEN
Maschinenfabrik GmbH
Sennebogenstrasse 10
94315 Straubing, Germany

Tel. +49 9421 540-144/146
Fax +49 942143 8-82
marketing@sennebogen.de

Order no. / Item no. 195288
630HD-E-011615

GO FOR GREEN

 www.sennebogen.com