



643E | Crawler

SENEBOGEN

# 40 t TELESCOPIC CRAWLER CRANE



129 kW



40 t



30 m



MULTI CAB

Stage V

# 643E

# The all-rounder.

The 40 t telescopic crawler crane is a versatile all-rounder. With a load capacity of up to 40 t and a boom length of up to 43 m, it offers a wide range of applications. The telescopic crawler undercarriage ensures the necessary maneuverability even on rough terrain and small transport dimensions.

Its compact dimensions and powerful Full-Power Boom, which has also proven itself in other products of the series, mean that the SENNEBOGEN 643 E offers guaranteed flexibility on construction sites, especially in structural and civil engineering, as well as in infrastructure construction.



## Ultimate ease of use

With a sound-proofed, flexibly mounted and optionally elevating comfort Multicab.

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## Maintenance & service

This is made easy with standard components and easy-to-access maintenance and service points.

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## More variety

Work optimally at all times with load hook, auxiliary jib, 6.5 m or 13 m fly jib. With the optional 13 m fly jib, boom lengths of up to 43 m are possible.

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## More flexibility

As the Full-Power Boom telescopes comfortably under load at any length and safely via the joystick. The telescopic crawler undercarriage can easily cope with even the most difficult terrain.

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## On site and ready to use fast

Easy to transport, including ballast. To the construction site, unload – off you go.

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Photo shows the 643 E crawler in prefabricated part construction; Hungary

# Advanced. The E Series



## LONG SERVICE LIFE, HIGH VALUE RETENTION

- Reliable and powerful thanks to its robust construction and high-quality components.

## SOPHISTICATED, STATE-OF-THE-ART TECHNOLOGY

- In the 5th generation – decades of experience in designing and constructing telescopic cranes



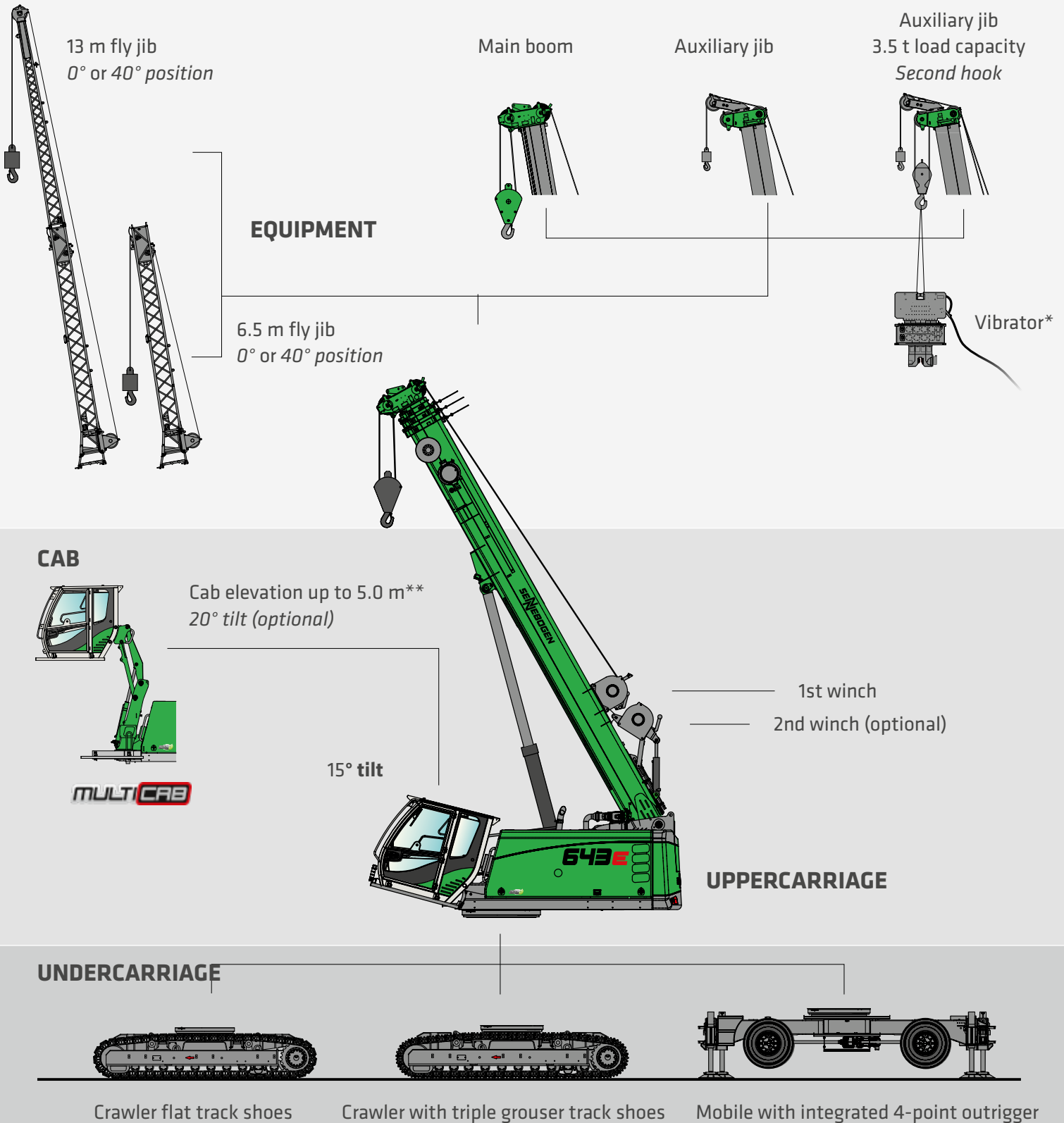
## SIMPLE TO MAINTAIN AND SERVICE

- Technology that can be mastered and no over-engineering, easy access to all components

## ENVIRONMENTALLY-FRIENDLY DRIVE TECHNOLOGY

- State-of-the-art engine, drive and emission systems in line with the latest technology standards (stage V)
- Large-scale pipes and valves for maximum efficiency

# A MODULAR DESIGN. NUMEROUS APPLICATIONS.



# OUTSTANDING FLEXIBILITY. WITH THE FULL-POWER BOOM

**43 m**  
BOOM LENGTH\*\*

FULL-POWER BOOM

- Impressive: the robust boom system can telescope easily and safely even with a load on the hook.
- Simple and convenient: can be operated using the joystick for any boom length, without needing to preselect length and load.
- Automatically optimal: always the best load capacity for each boom length.
- Steep things: Can work on inclines of up to 4°\*.
- Comfortable work area: Maximum main boom length 30.0 m and folding 6.5 m or 13 m fly jib.

\* with reduced load charts (optional)  
\*\* with 13 m fly jib (not shown)



Pick & Carry  
**30.2 t**

at 4.0 m  
radius

## **COMPACT AND STRONG. WITH MAXIMUM FLEXIBILITY**

- /// Pick & Carry: Lifting and moving loads
- /// High stability and optimum maneuverability even on narrow construction sites thanks to telescopic crawler undercarriage
- /// Optimal overview when lifting loads thanks to cab tiltable by 15° as standard
- /// Coverage of a large work area and flexibility thanks to a wide range of equipment options
- /// Radio remote control available





Outstanding off-road mobility; traveling on rough terrain and up to 20° slopes.



360°-rotations, telescoping and travel with up to 100% load on the hook.

# BETTER VIEW. BETTER SAFETY. FREE VIEW UPWARDS.

- Flexibly mounted, comfortable operator's cab with super sound-proofing
- Panoramic view with all-round glazing made from safety glass, with curved, hinged windshield, large skylight and rear window
- Optimal interior climate thanks to continuously adjustable cab heating and air conditioning
- Air-suspension comfort seat with seat heater, vibration damper, adjustable to any weight
- Ergonomic set up, resonant controls
- Radio with Bluetooth®
- Optional: Cab can be hydraulically elevated by 2.40 m and tilted by 20° (standard: 15°)

**MULTI**CAB

## THE PREMIUM CAB.





PANORAMIC VIEW  
tiltable up to **15°**  
as standard



### TAKE FULL CONTROL WITH OUR JOYSTICKS

- Joysticks on resonant, seat-mounted consoles
- Comfortable grip thanks to ergonomic design
- Shortcuts for direct and sensitive control of all functions
- Operating comfort thanks to optimized design of buttons and switches



GERMAN  
DESIGN  
AWARD  
WINNER  
2018



# EASY TO TRANSPORT. READY FOR USE QUICKLY.

It is not just with procurement and operating costs that companies can make cost-effective decisions and savings. Astute contractors know that simple and economical transportation between construction sites is an important factor, too.



## Economical

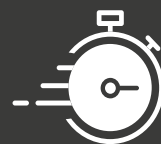
Thanks to the telescopic crawler undercarriage with a transport width of just 3.0 m, the 643 E fits easily on any standard low-loader.



**approx. 42 t\***

## Complete

Thanks to its weight of approximately 42 t, the machine can be transported fully assembled.



## Quick

Once it reaches the construction site, the machine is ready to use as soon as it has been unloaded.

# MAINTENANCE AND SERVICE. MAKE IT EASY ON YOURSELF.



The SENCON control system supports you with diagnostics and makes troubleshooting easier. So your machine is back in action more quickly.

All maintenance and service points are arranged clearly and easily accessible. The clear labeling of components makes finding your way around easy.

## KEEP IT SIMPLE. WITH TECHNOLOGY THAT CAN BE MASTERED.



Reliable and practical technology makes life easier. Where electronics add no value, we rely on hydraulics and electrical systems.



We make you happy, not reliant. With cost-effective components and fewer process steps, you can take care of the machine on your own.



At the central electrical distribution board, clearly arranged standard components simplify control and troubleshooting.

# TECHNICAL DATA, EQUIPMENT

## MACHINE TYPE

MODEL (TYPE) 643 Crawler

## ENGINE

**TYPE** Stage V:  
 Cummins B4.5 FR95721  
 Rated power: 129 kW/2200 rpm  
 Operating point standard: 129 kW/2200 rpm  
 Operating point ECO: 129 kW/2050 rpm

Stage IIIa:  
 Cummins QSB4.5 FR96169  
 Rated power: 119 kW/2200 rpm  
 Operating point standard: 119 kW/2200 rpm  
 Operating point ECO: 119 kW/2050 rpm

both:  
 direct injection, turbocharged, charge air cooling, reduced emissions

**COOLING** water-cooled

**DIESEL FILTER** with water separator and heater

**AIR FILTER** Dry filter with integrated pre-separator, automatic dust discharge, main element and safety element, contamination indicator

**FUEL** 360 l

**ADBLUE** 38 l

**ELECTRICAL SYSTEM** 24 V

**BATTERIES** 2 x 155 AH

**OPTIONS** Low-temperature package with engine preheating and reinforced batteries

Electric fuel pump

## UPPERCARRIAGE

**DESIGN** Torsion-resistant box design, precision crafted, steel bushings for boom mountings. Service-friendly design, engine installed in the longitudinal direction

**ELECTRICAL SYSTEM** Central electrical distributor, battery disconnect switch

**LIGHTING** LED headlights for optimal lighting of the work area

**COOLING SYSTEM** 3-circuit cooling system with high cooling output, electrically regulated fan drive for cooling water, charged air and oil

**SAFETY** Camera monitoring of the area to the rear and the right side

- OPTIONS**
- Additional LED headlights
  - 2 warning beacons at the rear
  - Additional cameras
  - Sea climate resistant coating as corrosion protection
  - Customized paint finish
  - Low temperature package
  - Automatic central lubrication for boom attachment point, luffing cylinder and live ring track
  - Pinion tooth lubrication



Optional: Elevating cab; type E240



Optional: Additional LED lights on the basic boom

# TECHNICAL DATA, EQUIPMENT

## HYDRAULIC SYSTEM / HYDRAULICS

Pump unit attached directly to diesel engine. Load-sensing/ LUDV hydraulic system, electro-hydraulic work functions, load limit control, axial piston variable displacement pump. Multiple work functions can be controlled precisely simultaneously and independently from each other thanks to the independent, proportional allocation of the pump flows.

DELIVERY RATE	up to 310 l / min
OPERATING PRESSURE	up to 330 bar
FILTRATION	High-performance filtration with long change interval
HYDRAULIC TANK	500 l
CONTROL SYSTEM	Proportional, precision hydraulic control of the movements, 2 servo joysticks for work functions, additional functions via switches and foot pedals – arranged clearly and ergonomically
SAFETY	Hydraulic circuits with safety valves Pipe-fracture safety valves for luffing cylinder and telescopic cylinder
OPTIONS	Bio-oil filling SENNEBOGEN HydroClean micro-filter system (3 µm) with water separator Hydraulic tank preheating

## SLEWING DRIVE

GEARBOX	Compact planetary gear with bent-axis hydraulic engine, integrated brake valves
SLEW BRAKE	Spring-loaded multi-disk brake
SLEWING RING	Large-scale, externally geared 1-row slewing ring
SLEWING SPEED	0-2 rpm, variable

## CAB

**MULTI CAB**

CAB TYPE	Multicab, 15° tiltable
CAB FEATURES	Flexibly mounted, comfortable operator's cab with super sound-proofing. All-weather version, all-round glazing made from safety glass and a large skylight, opening windshield. Flexibly mounted comfort seat, weight adjustable and with vibration damper. Clear dashboard with swivel-mounted steering column. Continuously adjustable cab heating with air circulation control and particle filter, automatic air conditioning.
OPTIONS	Hydraulically elevating cab type E240, can elevate up to 2.40 m and tilt by 20° Auxiliary heating system with timer Activated-carbon filter for cab FOPS protective front grating Protective roof grating FOPS protective roof grating Glazing of roof and windshield in bullet-proof glass design Radio with USB and SD connections, MP3 and Bluetooth® functions



Option: additional LED headlight on the cab

# TECHNICAL DATA, EQUIPMENT



Optional: radio remote control



Optional: Customized paint finish



Optional: 13 m fly jib extension

## EQUIPMENT

**BOOM** 4-part with pulley head, hydraulically telescopic end-to-end from 9 to 30 m, adjustment speed -12° to 70° in approx. 35 sec; complete telescopic extension in approx. 100 sec.

**CRANE SAFETY** Latest generation of load moment monitoring with event recorder, clear operations panel showing all important data via the SENCON display, lifting limit switch, cable exit protection, pressure relief valves and pipe fracture protection

**CYLINDERS** Hydraulic cylinders with high-quality sealing and guide elements

- OPTIONS**
- 6.5 m fly jib, tiltable (0°, 40°), can be set up without auxiliary equipment, can be bolted to basic boom when not in use
  - Fly jib extension to 13 m, tiltable (0°, 40°)
  - Auxiliary jib 3.5 t load capacity, 1-strand, 2nd hook
  - Customized paint finish
  - Electro-hydraulic emergency unit
  - Radio remote control
  - Programmable working limit
  - Additional load charts accepted for 2°/4° incline position
  - SENtrack telemetry system



Optional: 2nd crane winch



# TECHNICAL DATA, EQUIPMENT

## UNDERCARRIAGE



DESIGN	Very strong, hydraulically telescopic crawler undercarriage, with integrated, protected drive transmission
DRIVE	Strong travel drive with 2-stage variable-displacement hydraulic engine and directly attached automatically functioning brake valve and compact planetary gear on each running gear side
PARKING BRAKE	Spring-loaded multi-disk brake
CRAWLER CARRIER	Maintenance-free tractor chassis with hydraulic chain tension, 700 mm triple grouser shoes
SPEED	0 - 2.7 km/h
OPTIONS	Floor plates in the following equipment: 800 mm triple grouser shoes 900 mm triple grouser shoes 700 mm flat track shoes

## WINCH

The winches are driven via high-pressure-regulated adjustable hydraulic engines, so there is always optimal pulling force speed control. Hydraulic lowering brake valves for sensitive, wear-free braking. Strong oil bath planetary gears, low-maintenance. Holding brakes are spring-loaded, maintenance-free, low-wear disc brakes running in the oil bath, oil-cooled

35 kN tensile force (3rd position), cable speed 0-95 m/min., cable diameter 14 mm, max. cable length 160 m

SAFETY BRAKE Spring-loaded multi-disk brake

OPTIONS 2nd crane winch: 35 kN tensile force (3rd position), cable speed 0- 95 m/min., cable diameter 14 mm, max. cable length 130 m

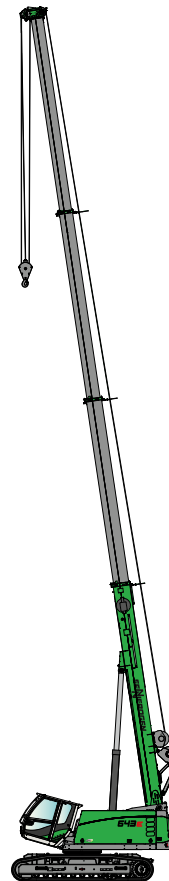
## OPERATING WEIGHT



MASS approx. 42,000 kg  
With 30 m telescopic boom, 13 m fly jib, 35 t hook, 2 hoisting winches, with hydraulic telescopic undercarriage, ballast 7 t, undercarriage ballast 4 t

NOTE Operating weight varies by model and equipment.

Subject to technical changes.

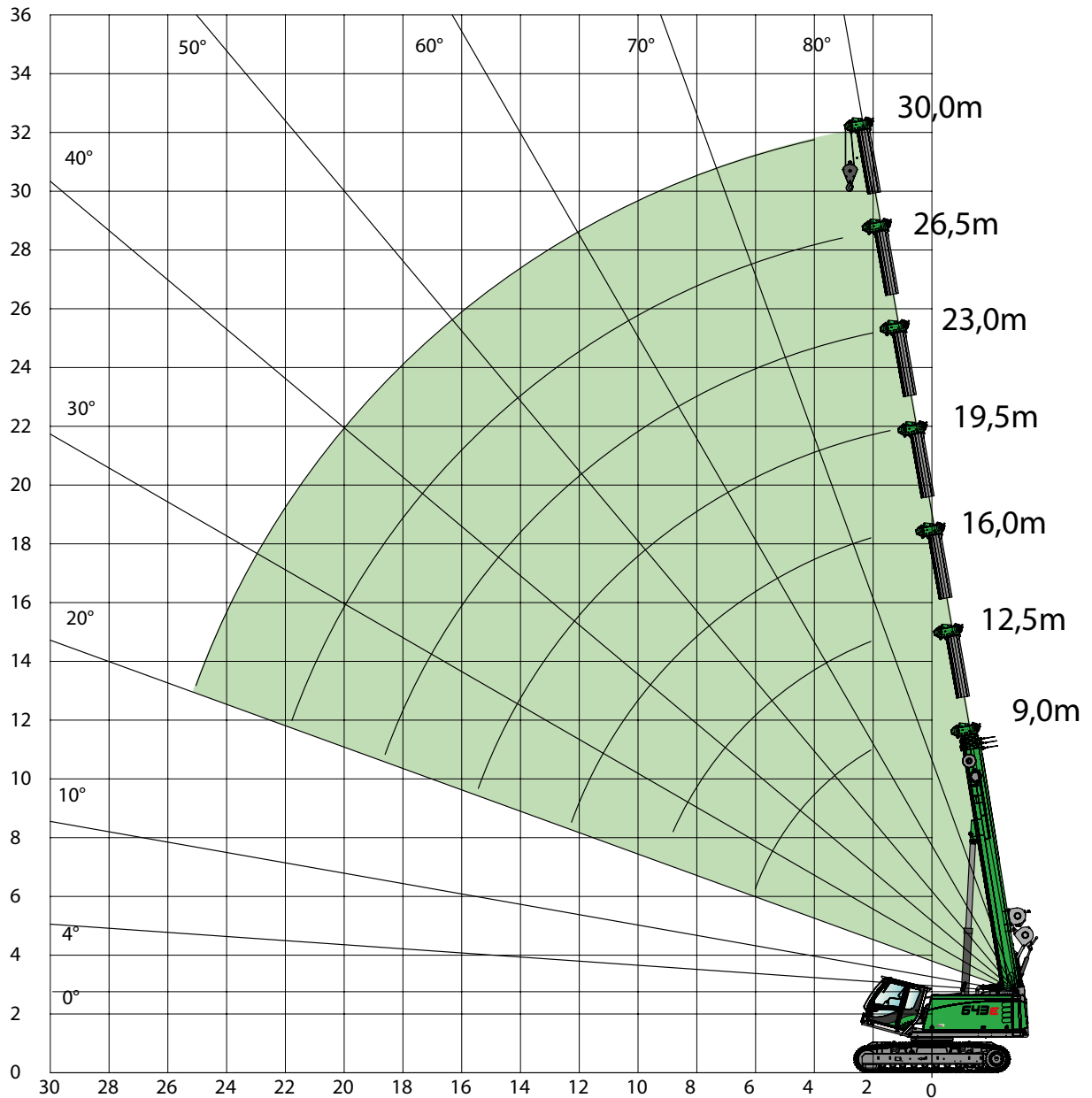


## CRANE EQUIPMENT



**MAIN BOOM  
HA 30 m**

CRANE EQUIPMENT



### HOOK

CAPACITY [t]	WEIGHT [kg]	NUMBER OF FALLS								
		9	8	7	6	5	4	3	2	1
<b>32 t (4-roll)</b>	<b>300 kg</b>	31,500 kg	28,000 kg	24,500 kg	21,000 kg	17,500 kg	14,000 kg	10,500 kg	7,000 kg	3,500 kg
<b>25 t (3-roll)</b>	<b>220 kg</b>			24,500 kg	21,000 kg	17,500 kg	14,000 kg	10,500 kg	7,000 kg	3,500 kg
<b>4 t (0-roll)</b>	<b>40 kg</b>									3,500 kg

# LOAD RATINGS



**MAIN BOOM**  
HA 30 m



**BALLAST**  
7.0 t



**DIN ISO**



**360°**



**UNDERCARRIAGE**  
BALLAST 4.0 t



**TRACK WIDTH**  
3.8 m / 3.0 m / 2.3 m

		BOOM LENGTH [m]																					
		9.0			12.5			16.0			19.5			23.0			26.5			30.0			
RADIUS [m]	Undercarriage track width [m]																						
		2.0		40.0*	40.0*	40.0*																	
3.0		35.0	35.0	33.0	20.0	20.0	20.0	15.0	15.0	15.0	14.0	14.0	14.0	11.0	11.0	11.0	8.9	8.9	8.9	5.0	5.0	5.0	
4.0		30.2	27.7	20.2	20.0	20.0	19.9	15.0	15.0	15.0	14.0	14.0	14.0	11.0	11.0	11.0	8.9	8.9	8.9	5.0	5.0	5.0	
5.0		25.5	18.9	14.2	20.0	18.7	14.0	15.0	15.0	13.9	13.3	13.3	13.3	11.0	11.0	11.0	8.6	8.6	8.6	5.0	5.0	5.0	
6.0		18.0	14.1	10.7	18.5	13.9	10.5	14.9	13.8	10.5	12.0	12.0	10.9	10.3	10.3	10.3	8.3	8.3	8.3	5.0	5.0	5.0	
7.0		11.8/6.2	13.4/6.2	10.2/6.2	14.3	10.9	8.3	13.2	10.8	8.2	10.9	10.9	8.6	9.5	9.5	8.9	7.8	7.8	7.8	5.0	5.0	5.0	
8.0					11.5	8.8	6.7	11.4	8.7	6.6	9.8	9.1	7.0	8.7	8.7	7.3	7.4	7.4	7.4	5.0	5.0	5.0	
9.0					9.5	7.3	5.5	9.4	7.2	5.4	9.0	7.6	5.8	7.9	7.8	6.1	6.9	6.9	6.2	5.0	5.0	5.0	
10.0					7.5/9.6	6.5/9.6	4.9/9.6	8.0	6.1	4.5	8.3	6.4	4.9	7.1	6.7	5.1	6.4	6.4	5.3	5.0	5.0	5.0	
11.0								6.8	5.1	3.7	7.2	5.5	4.1	6.5	5.7	4.4	5.9	5.9	4.5	5.0	5.0	4.7	
12.0								5.9	4.4	3.1	6.2	4.7	3.5	5.9	5.0	3.7	5.5	5.2	3.9	5.0	5.0	4.1	
13.0								5.0	3.7	2.6	5.4	4.1	3.0	5.5	4.3	3.2	5.1	4.5	3.4	4.7	4.7	3.5	
14.0											4.8	3.6	2.6	5.0	3.8	2.8	4.8	4.0	3.0	4.4	4.1	3.1	
15.0											4.2	3.1	2.2	4.5	3.3	2.4	4.5	3.5	2.6	4.1	3.7	2.7	
16.0											3.7	2.7	1.9	4.0	2.9	2.1	4.2	3.1	2.3	3.8	3.3	2.4	
17.0											3.5/16.6	2.5/16.6	1.7/16.6	3.6	2.6	1.8	3.7	2.8	2.0	3.6	2.9	2.1	
18.0														3.2	2.3	1.6	3.4	2.5	1.7	3.3	2.6	1.9	
19.0														2.9	2.0	1.3	3.0	2.2	1.5	3.1	2.3	1.6	
20.0														2.6	1.8	1.1	2.7	2.0	1.3	2.9	2.1	1.4	
21.0														2.5/20.1	1.8/20.1	1.1/20.1	2.5	1.8	1.1	2.6	1.9	1.3	
22.0																	2.2	1.6	1.0	2.4	1.7	1.1	
23.0																	1.9/23.6	1.3/23.6	0.7/23.6	2.2	1.5	0.9	
24.0																				2.0	1.3	0.8	
25.0																				1.8	1.2	0.7	
26.0																				1.6	1.1	0.6	
27.0																				1.5	1.0	0.5	
28.0																				1.5/27.1	0.9/27.1	0.5/27.1	
<b>Number of falls</b>		10	10	10	6	6	6	5	5	5	4	4	4	4	4	4	3	3	3	2	2	2	
<b>I</b>		0 %			50 %			100 %			100 %			100 %			100 %			100 %			
<b>II</b>		0 %			0 %			0 %			25 %			50 %			100 %			100 %			
<b>III</b>		0 %			0 %			0 %			25 %			50 %			100 %			100 %			

The load ratings must be reduced if there's a 13 m fly jib folded to the side of the main boom.

Load capacity reduction [kg]	9.0	12.5	16.0	19.5	23.0	26.5	30.0
	570	420	330	280	240	210	180

\* only possible with special equipment

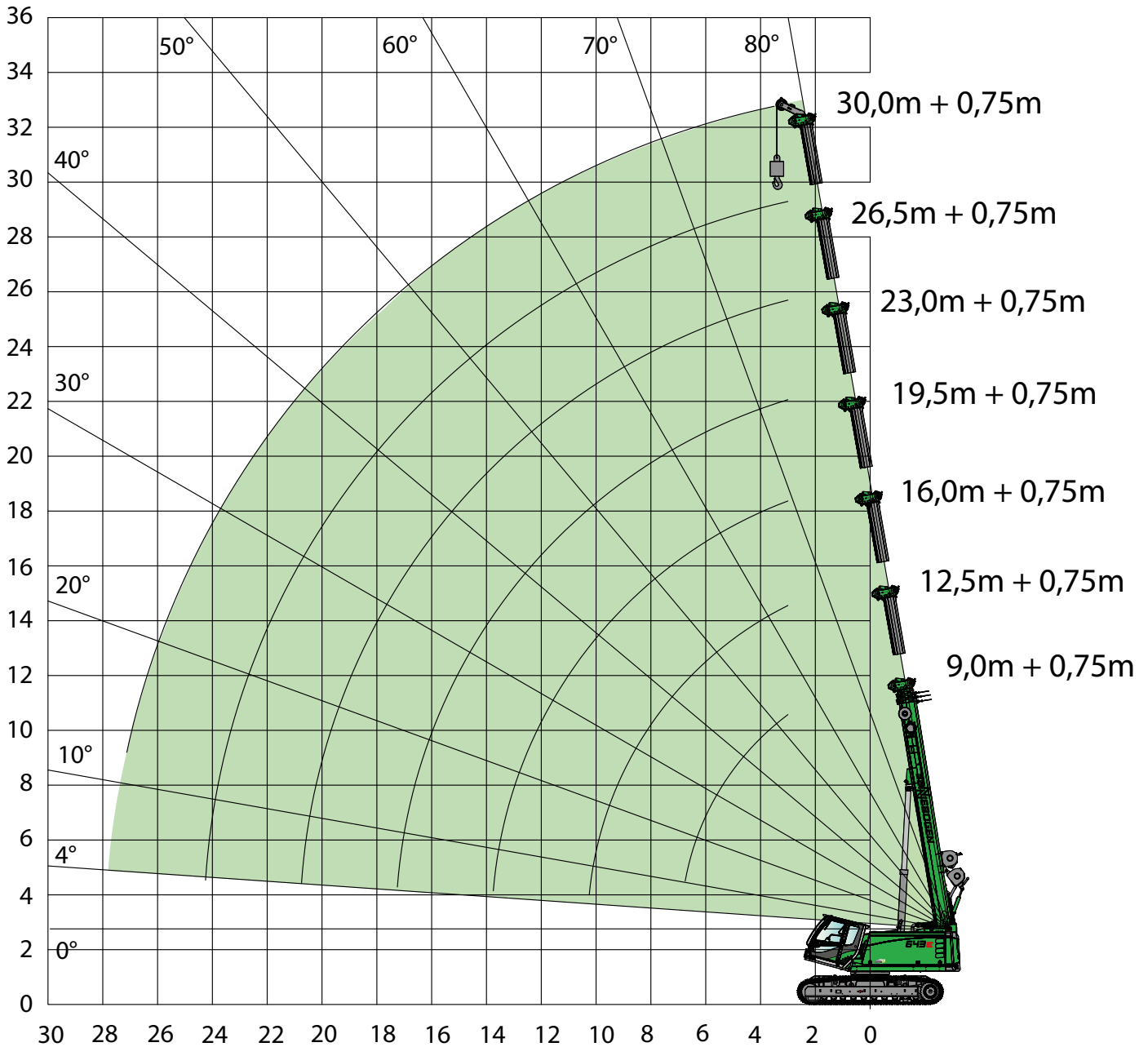
Subject to technical changes. See page 25 for notes on load charts.

# CRANE EQUIPMENT



**AUXILIARY JIB  
HA-S**

CRANE EQUIPMENT



## LOAD RATINGS



**AUXILIARY JIB  
HA-S**



**BALLAST  
7.0 t**



**DIN  
ISO**



**360°**



**UNDERCARRIAGE  
BALLAST 4.0 t**



**TRACK WIDTH  
3.8 m / 2.3 m**

RADIUS [m]		BOOM LENGTH [m]													
		9.0		12.5		16.0		19.5		23.0		26.5		30.0	
		0.75		0.75		0.75		0.75		0.75		0.75		0.75	
Undercarriage track width [m]	3.8 2.3		3.8 2.3		3.8 2.3		3.8 2.3		3.8 2.3		3.8 2.3		3.8 2.3		
	3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5/3.5	3.5/3.5
4.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
5.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
6.0	3.5/6.7	3.5/6.7	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
7.0			3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
8.0			3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
9.0			3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
10.0			3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
11.0			3.5/10.2	3.5/10.2	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
12.0					3.5	3.0	3.5	3.4	3.5	3.5	3.5	3.5	3.5	3.5	
13.0					3.5	2.5	3.5	2.9	3.5	3.5	3.5	3.5	3.5	3.5	
14.0					3.5/13.7	2.1/13.7	3.5	2.5	3.5	3.1	3.5	3.3	3.5	3.4	
15.0							3.5	2.1	3.5	2.7	3.5	2.9	3.5	3.0	
16.0							3.5	1.8	3.5	2.3	3.5	2.5	3.5	2.6	
17.0							3.1	1.5	3.5	2.0	3.5	2.2	3.5	2.3	
18.0							3.0/17.2	1.4/17.2	3.1	1.7	3.5	1.9	3.2	2.0	
19.0									2.8	1.5	3.3	1.6	3.0	1.8	
20.0									2.5	1.2	2.9	1.4	2.8	1.5	
21.0									2.2/20.7	1.0	2.6	1.2	2.5	1.3	
22.0										0.8/20.7	2.4	1.0	2.3	1.2	
23.0											2.1	0.9	2.1	1.0	
24.0											1.8	0.7	1.9	0.8	
25.0											1.7/24.2	0.6/24.2	1.7	0.7	
26.0													1.5	0.6	
27.0													1.4	0.5	
28.0													1.4/27.1		
Number of falls	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
I	0 %		50 %		100 %		100 %		100 %		100 %		100 %		
II	0 %		0 %		0 %		25 %		50 %		100 %		100 %		
III	0 %		0 %		0 %		25 %		50 %		100 %		100 %		
The load ratings must be reduced if there's a 13 m fly jib folded to the side of the main boom.															
Load capacity reduction [kg]	570		420		330		280		240		210		180		

Tab. no.: 643R-30.0/75/1977/0/12.16 HA-S  
Tab. No.: 643R-30.0/75/1227/0/12.16 HA-S

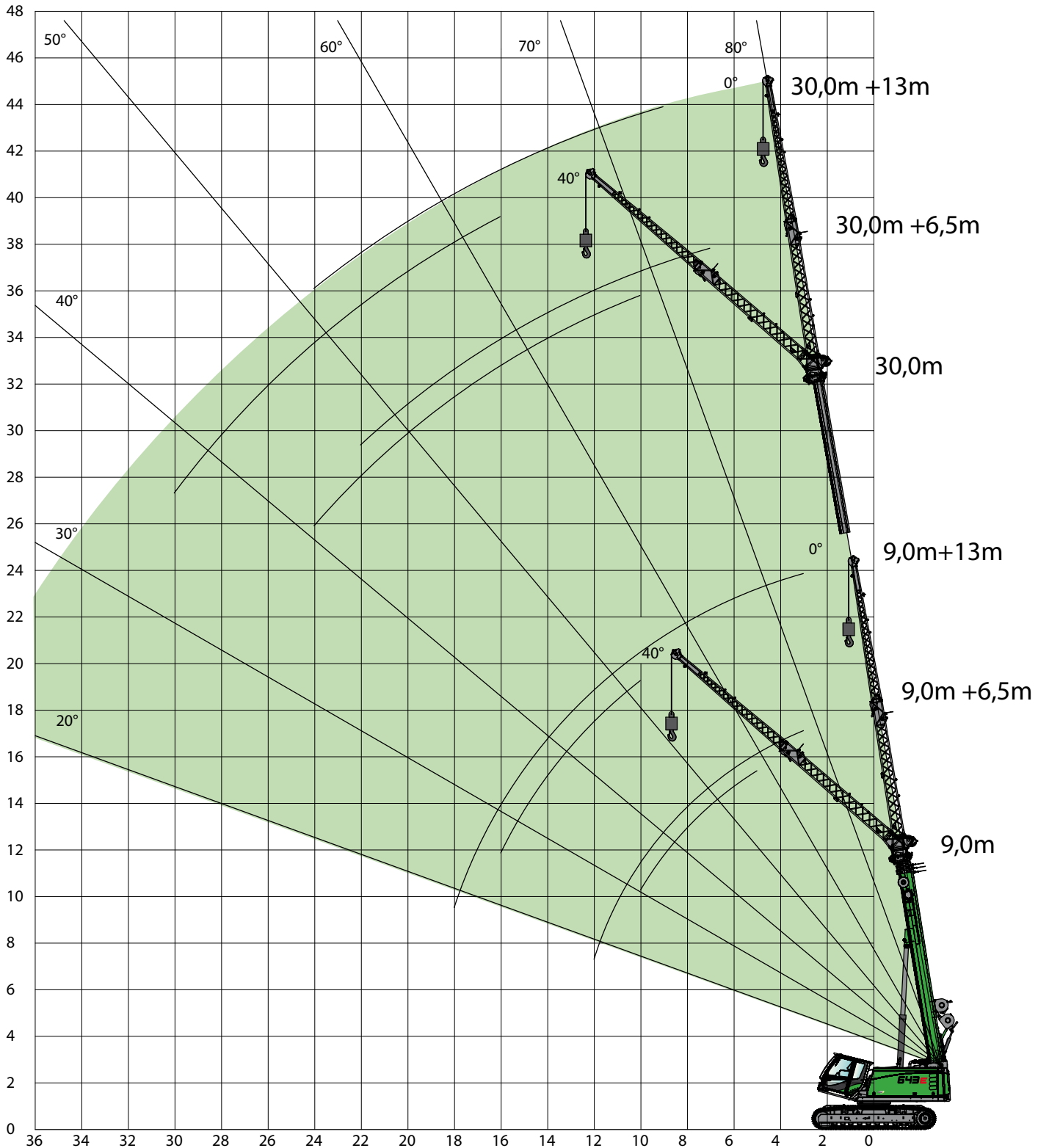
CRANE EQUIPMENT

# CRANE EQUIPMENT



**FLY JIB**  
SA 6.5 m / SA 13 m

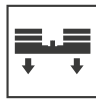
CRANE EQUIPMENT



## LOAD RATINGS



FLY JIB  
SA 6.5 m



BALLAST  
7.0 t



DIN  
ISO



360°



UNDERCARRIAGE  
BALLAST 4 t



TRACK WIDTH  
3.8 m

RADIUS [m]		BOOM LENGTH [m]										
		9.0		16.0		23.0		30.0				
		6.5		6.5		6.5		6.5				
3.8 m	0°		40°		0°		40°		0°		40°	
	2.0											
3.0	6.0				6.0							
4.0	6.0				6.0							
5.0	5.5	3.5			6.0		6.0					
6.0	4.9	3.3			6.0	3.6	6.0					
7.0	4.4	3.1			5.9	3.4	6.0		3.5			
8.0	4.0	2.9			5.4	3.3	5.9	3.4	3.5			
9.0	3.7	2.8			5.0	3.2	5.6	3.3	3.5			
10.0	3.4	2.7			4.6	3.1	5.3	3.2	3.5	3.2		
11.0	3.1				4.3	3.0	5.0	3.2	3.5	3.0		
12.0	2.8				4.1	2.8	4.7	3.1	3.5	2.9		
13.0					3.9	2.8	4.4	3.0	3.5	2.8		
14.0					3.7	2.8	4.2	2.9	3.3	2.7		
15.0					3.5		3.9	2.9	3.0	2.5		
16.0					3.3		3.7	2.8	2.8	2.4		
18.0					2.9		3.3	2.7	2.4	2.3		
20.0							2.7	2.6	2.1	2.1		
22.0							2.2		1.9	1.9		
24.0							1.7		1.8	1.7		
26.0							1.4		1.5	1.6		
28.0									1.2			
30.0									0.9			
32.0									0.7			
Number of falls	1	1	1	1	1	1	1	1	1	1		
I		0 %			100 %			100 %			100 %	
II		0 %			0 %			50 %			100 %	
III		0 %			0 %			50 %			100 %	

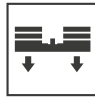
Tab no.: 643R-30.0/75/1977/7.0/08.06 SA6.5

CRANE EQUIPMENT

## LOAD RATINGS



FLY JIB  
SA 13 m



BALLAST  
7.0 t



DIN  
ISO



360°



UNDERCARRIAGE  
BALLAST 4 t



TRACK WIDTH  
3.8 m

RADIUS [m]		BOOM LENGTH [m]							
		9.0		16.0		23.0		30.0	
		13.0		13.0		13.0		13.0	
3.8 m		—	△	—	△	—	△	—	△
		0°	40°	0°	40°	0°	40°	0°	40°
3.0		3.0							
4.0		3.0							
5.0		3.0		3.0					
6.0		3.0		3.0					
7.0		2.9		3.0		3.0			
8.0		2.6		3.0		3.0			
9.0		2.3		2.9		3.0		2.0	
10.0		2.1	1.6	2.7		2.9		2.0	
11.0		2.0	1.5	2.5		2.7		2.0	
12.0		1.8	1.4	2.4	1.5	2.6		2.0	
13.0		1.7	1.4	2.2	1.5	2.5		2.0	
14.0		1.6	1.3	2.1	1.5	2.4	1.5	2.0	
15.0		1.6	1.3	2.0	1.4	2.3	1.5	2.0	
16.0		1.5	1.3	1.9	1.4	2.2	1.4	2.0	1.5
18.0		1.1		1.7	1.3	2.0	1.4	2.0	1.4
20.0				1.6	1.3	1.8	1.3	1.9	1.4
22.0				1.4		1.7	1.3	1.7	1.3
24.0				1.3		1.6	1.3	1.6	1.3
26.0						1.4	1.3	1.4	1.2
28.0						1.3		1.3	1.2
30.0						1.3		1.2	1.1
32.0						1.1		1.1	1.1
34.0								0.9	
36.0								0.7	
38.0								0.6	
Number of falls		1	1	1	1	1	1	1	1
I		0 %		100 %		100 %		100 %	
II		0 %		0 %		50 %		100 %	
III		0 %		0 %		50 %		100 %	

Tab. no.: 643R-30.0/15/1977/70/08.06 SA13.0



# LOAD CAPACITY SCHEDULES

		MAIN BOOM HA			AUXILIARY JIB HA-S		FLY JIB SA 6.5 m			FLY JIB SA 13 m		
UNDERCARRIAGE TRACK WIDTH		3.8 m	3.0 m	2.3 m	3.8 m	2.3 m	3.8 m	3.0 m	2.3 m	3.8 m	3.0 m	2.3 m
Counterweight [t]	Undercarriage ballast [t]											
7.0 t	4.0 t	360°	360°	360°	360°	360°	360°	-	-	360°	-	-

CRANE EQUIPMENT

**Notes:**

1. The specified load ratings given apply when the machine is on a firm and level ( $\pm 0.3^\circ$ ) surface.
2. The load ratings are given in tons and apply for 360°.
3. The load ratings take the DIN 15019.2 and ISO 4305 standards into account.
4. The weight of the load handling equipment (hooks, suspension gear) should be deducted from the load capacities.
5. Load capacities must be limited or reduced in adverse conditions such as soft or uneven ground, slopes, wind, side loads, swinging loads, jolts or sudden stopping of loads, personnel and operators not experienced in handling loads.
6. Permissible cable pull per strand in crane mode for a cable diameter of 14 mm is 3,500 kg.
7. The load capacities given are for reference only. Please refer to the tables in the operating instructions for the relevant applicable load ratings.
8. Load capacities for tilts of 2°/4° are also available on request.

## OPTIONAL EQUIPMENT

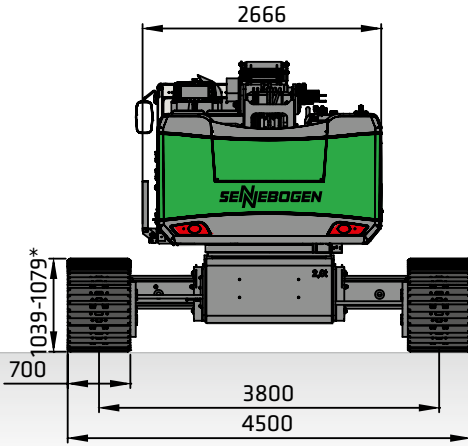


**FLY JIB 6.5 m**  
max. 2-strand, possible offset angles 0°/40°

**FLY JIB EXTENSION TO 13 m**  
6.5 m with 6.5 m extension, single strand, offset angle 0°/40°

**AUXILIARY JIB**  
3.5 t load capacity, 1-strand, 2nd hook

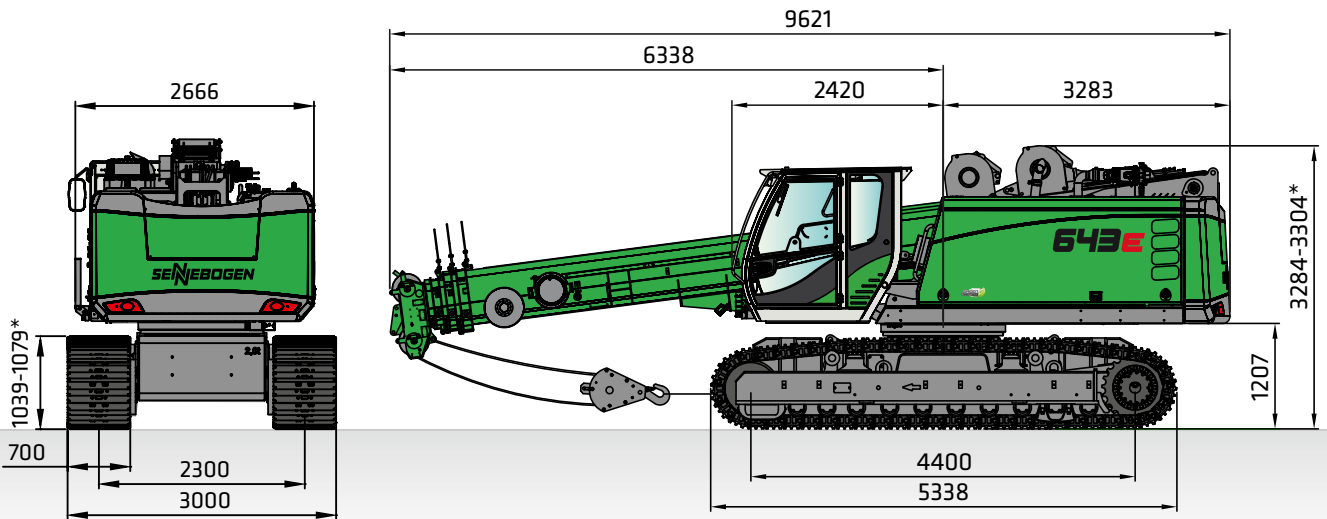
## TRANSPORT DIMENSIONS



BASE PLATES	MIN. TRANSPORT WIDTH
700 mm	3000 mm
800 mm	3300 mm
900 mm	3400 mm

### 643 WITH T41/380 UNDERCARRIAGE AND 700 mm TRIPLE GROUSER SHOES

**i** **Operating weight:**  
 approx. 42 t (with 13 m fly jib, 2 hoisting winches, 7.0 t counterweight and 4.0 t undercarriage ballast as well as 35 t hook)



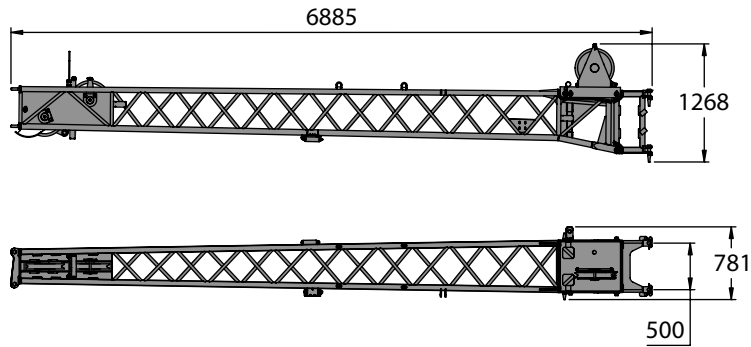
**i** **Transport weight:**  
 approx. 38 t (13 m fly jib, 2 hoisting winches, without undercarriage ballast)  
 approx. 42 t (13 m fly jib, 2 hoisting winches, with undercarriage ballast)

Dimensions in [mm]

# ATTACHMENTS

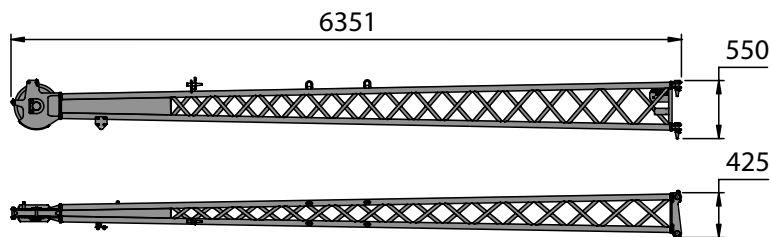
## FLY JIB 6.5 m

**i** Weight: 600 kg



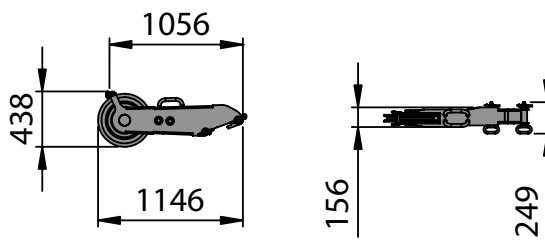
## FLY JIB EXTENSION 6.5 m

**i** Weight: 250 kg



## AUXILIARY JIB

**i** Weight: 50 kg



Dimensions in [mm]



Construction site service crane; Germany



Hall construction; Great Britain



Cableway construction; Italy



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Duty cycle crane  
13.5-300 t

Crawler crane  
50-300 t

Telescopic crane  
16-130 t

Port crane  
300 t

# 643E | Crawler

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643R-E-072110

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