



653E | Crawler

SENEBOGEN

50 t
TELESCOPIC
CRAWLER
CRANE



 129 kW

 50 t

 30.4 + 13 m

 MAX CAB

Stage V



653 E

The powerhouse.

The 653 E 50 t telescopic crawler crane is the ideal crane for pick and carry applications in many industries, as it can handle tight spaces as well as extensive construction sites.

Its compact design, paired with a strong 50 t load capacity, makes it a real powerhouse. Like most of SENNEBOGEN's flexible telescopic cranes, it is also equipped with the continuous telescoping Full-Power boom. It reliably and safely lifts, moves and positions up to 100% of the specified load capacity. This makes it a popular helper, especially in structural and civil engineering, and in bridge construction.

On site and ready to use fast

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

Ultimate ease of use

With the 15° tiltable comfort Maxcab, the back-friendly comfort seat, the adjustable armrests and the optimally arranged resonant control elements.

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.

More variety

Always work optimally with loading hook, auxiliary jib, 6.5 m fly jib or fly jib extension to 13 m. With the fly jib, boom lengths of up to 43.3 m are possible.

Maintenance & service

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



The photo shows the 653 E with 13 m fly jib in bridge construction, Germany.

Advanced. The E Series



LONG SERVICE LIFE, HIGH VALUE RETENTION

- Reliable and powerful thanks to its robust construction and high-quality components.
- High resale value, even after many years of use

SOPHISTICATED, STATE-OF-THE-ART TECHNOLOGY

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



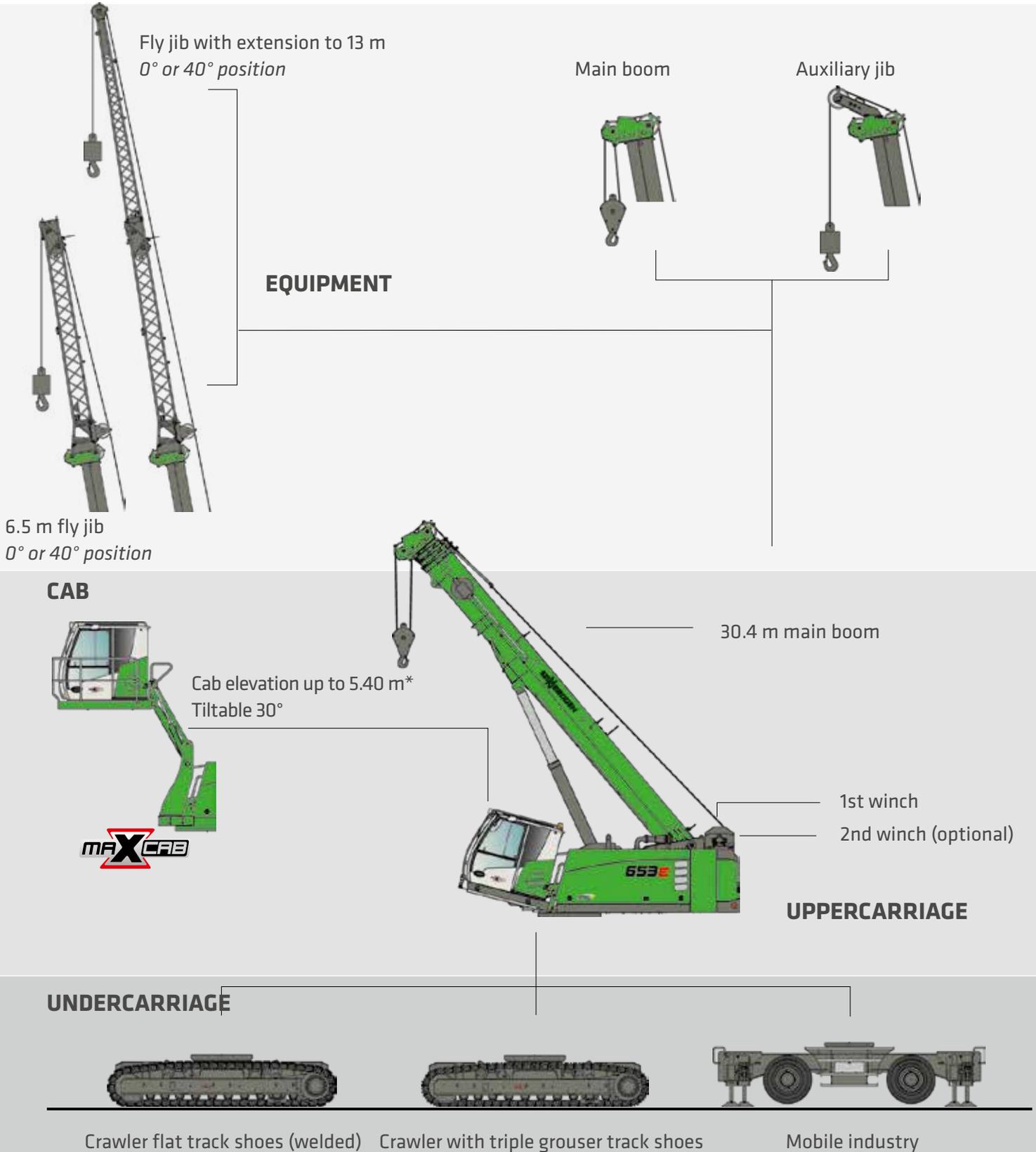
SIMPLE TO MAINTAIN AND SERVICE

- 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. OPTIMUM EQUIPMENT OPTIONS.



OUTSTANDING FLEXIBILITY. WITH THE FULL-POWER BOOM

Up to
43 m
boom length**

FULL-POWER BOOM

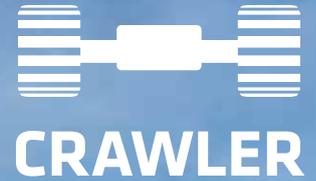
- Convincing: the robust boom system can telescope easily and safely even with a load on the hook.
- Simple and convenient: can be operated using the joystick for any boom length, without needing to preselect length and load.
- Automatically optimal: always the best load capacity for each boom length.
 - Steep things: can work on inclines of up to 4°.*
 - Comfortable work area: Maximum main boom length 30.4 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

38 t

at 4.0 m
radius


CRAWLER



**COMPACT AND
STRONG.
WITH MAXIMUM
OFF-ROAD
MOBILITY.**

- Pick & Carry: With up to 100 % load
- High stability and optimum maneuverability even on narrow construction sites thanks to telescopic crawler undercarriage
- Optimal overview when lifting loads thanks to cab with 15° tilt as standard
- Coverage of a large work area and flexibility due to a wide range of equipment options
- Operation by radio remote control available



**Pick & Carry
Industry**

21.8 t

**at 4.0 m
radius**



**50 t MOBILE
CRANE.
THE INDUSTRIAL
VERSION 653 MI.**

- Real mobile alternative: Design focused on optimizing stability and load capacity when moving load with mobile undercarriage
- Ideal for particularly heavy pick & carry tasks in storage space management, industrial relocations and industrial assembly
- The 653 MI is an optional special version. Detailed load capacity tables are available on request in the event of a project

BETTER VIEW.
BETTER SAFETY.
MAXIMUM COMFORT.



THE BEST IN
ITS CLASS.

- Excellent all-round and upward view thanks to large window panes, optionally with FOPS guard and bullet proof glass
- Safe and comfortable access due to the tried-and-tested sliding doors incl. sliding window
- Work without fatigue thanks to the back-friendly comfort seat, adjustable armrests and ergonomic, resonant controls
- Automatic heating/air conditioning with optimum air flow for a pleasant indoor climate all year round
- Noise reduced through sound-absorbing materials and design solutions
- Option for cab to hydraulically elevate up to an eye level of 5.40 m and tilt by up to 30°
- Radio with Bluetooth®



PANORAMIC VIEW

Tiltable
up to **15°**
as standard

Particularly spacious for
maximum operator comfort
(inner width: 87 cm)

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

With a transport width of just 3.0 m, the 653 E fits easily on any standard low-loader.



approx. 50 t*

Complete

Thanks to its weight of approximately 50 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 clearly arranged 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) 653 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 300 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



Optional: Customized paint finish

UPPERCARRIAGE

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

ELECTRIC 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 headlamps
 - 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: 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



CAB TYPE	Maxcab, tiltable 15°
CAB FEATURES	Comfortable operator cab with sliding door incl. sliding window, vibration damper, tinted safety glass, opening windshield, skylight, front and rear windshield wipers, 12 V/ 24 V connections, 2 floodlights integrated into the front of the roof. Air-sprung comfort operator's seat with seat heating and headrest. Sunblind for skylight. Parking brake via foot pedal.
OPTIONS	Hydraulically elevating cab type E270, can elevate up to 2.70 m and tilt by 30° Auxiliary heating system with timer Activated-carbon filter for cab FOPS protective front grating Protective roof grating FOPS protective roof grating Glazing in bulletproof glass Radio with USB and SD connections, MP3 and Bluetooth® functions



Optional: protective roof grating

TECHNICAL DATA, EQUIPMENT



Option: elevating cab



Optional: radio remote control



Optional: 6.5 m + 6.5 m fly jib



Optional: Auxiliary jib

EQUIPMENT

BOOM 4-section with pulley head, hydraulically telescopic end-to-end from 9.4 to 30.4 m, swivel from 0° to 80° in approx. 50 seconds; complete telescopic extension in 100 sec. Telescope in 115 seconds.

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
SENtrack telemetry system

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 the basic boom when not in use

Fly jib extension to 13 m, 6.5 m extension, load capacity 6.6 t, tiltable (0°, 40°), can be bolted to basic boom when not in use

Auxiliary jib 5 t load capacity, 1-strand

Customized paint finish

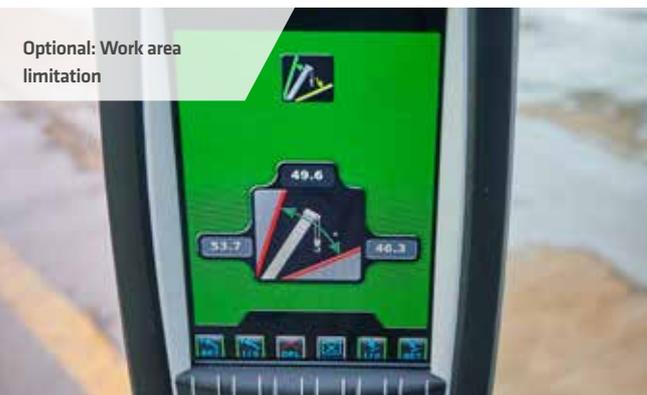
Electro-hydraulic emergency unit

Radio remote control

Programmable working limit

Additional load charts accepted for 2°/4° incline position

Ballast support



Optional: Work area limitation

TECHNICAL DATA, EQUIPMENT

UNDERCARRIAGE



DESIGN	Crawler undercarriage T41/380, hydraulically telescopic and with integrated, protected drive gears
DRIVE	Strong travel drive with 2-stage variable-displacement hydraulic engine with directly attached automatically functioning brake valve and compact planetary gear on each running gear side
PARKING BRAKE	Spring-loaded multi-disk brake
CRAWLER TRACKS	Maintenance-free tractor running gear with hydraulic chain tension, 700 mm 3-grouser base plates
SPEED	0 - 2.9 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 spring-loaded, maintenance-free, low-wear, designed as multiple disc brakes running in oil bath, oil-cooled

50 kN tensile force (4th position), cable speed 0 - 115 m/min., cable diameter 16 mm, max. cable length 170 m

SAFETY BRAKE Spring-loaded multi-disk brake

OPTIONS 2nd winch: 50 kN tensile force (4th position), cable speed 0 - 115 m/min., cable diameter 16 mm, max. cable length 170 m

Optional: 2nd crane winch



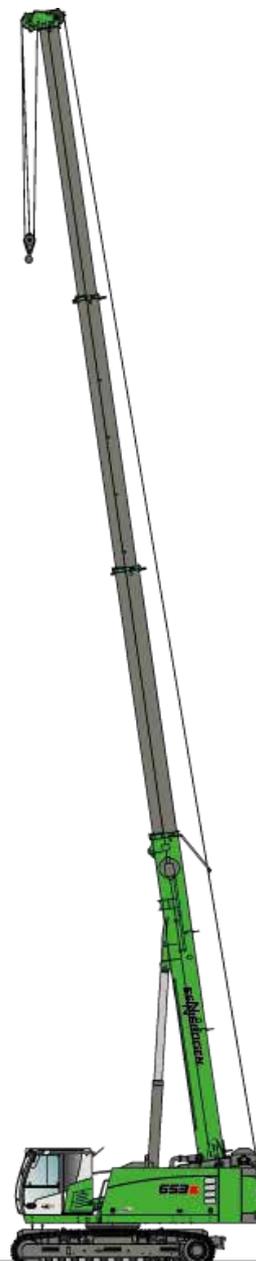
OPERATING WEIGHT



MASS Approx. 50,200 kg
With 30.4 m telescopic boom, 13 m fly jib, 35 t hook, 3 triple grouser shoes 700 mm, 2 hoisting winches, with hydraulic telescopic undercarriage, ballast 8.9 t, undercarriage ballast 5.5 t

NOTE Operating weight varies by model and equipment.

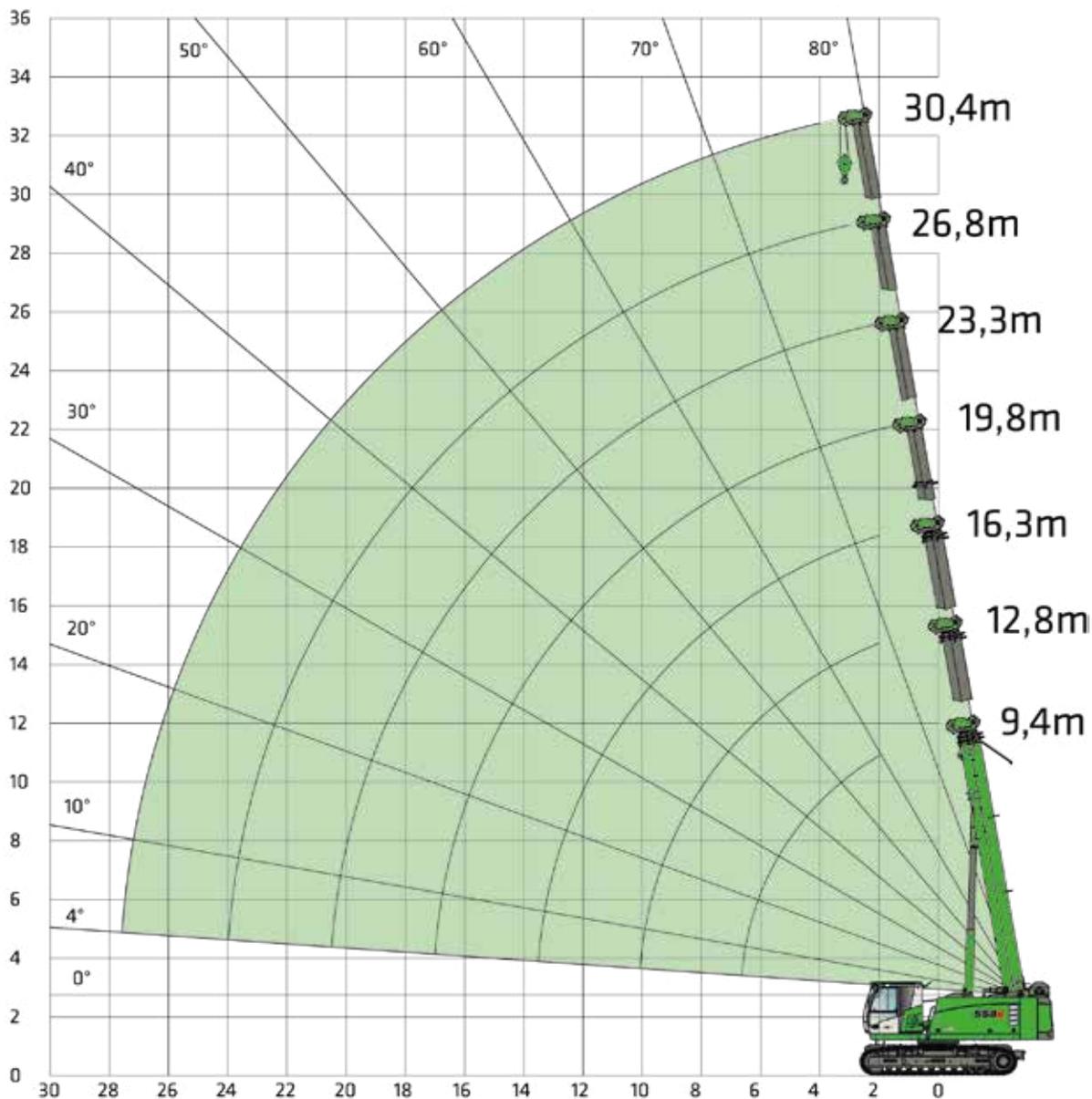
Subject to technical changes.



CRANE EQUIPMENT



MAIN BOOM
HA 30.4 m



HOOK

CAPACITY [t]	WEIGHT [kg]	CABLE REEVING AND MAX. LOAD CAPACITY										
		10	9	8	7	6	5	4	3	2	1	
5 t	80 kg											5,000 kg
15 t (1-roll)	190 kg								15,000 kg	10,000 kg	5,000 kg	
35 t (3-roll)	260 kg				35,000 kg	30,000 kg	25,000 kg	20,000 kg	15,000 kg	10,000 kg	5,000 kg	
60 t (6-roll)	540 kg	50,000 kg	45,000 kg	40,000 kg	35,000 kg	30,000 kg	25,000 kg	20,000 kg	15,000 kg	10,000 kg	5,000 kg	

CRANE EQUIPMENT



MAIN BOOM
HA 30.4 m



UNDERCARRIAGE
BALLAST
5.5 T



BALLAST
8.9 t



MAX. INCLINATION
0.3°

RADIUS [m]	BOOM LENGTH [m]																				
	9.4			12.8			16.3			19.8			23.3			26.8			30.4		
Undercarriage track width [m]	3.8	3.0	2.3	3.8	3.0	2.3	3.8	3.0	2.3	3.8	3.0	2.3	3.8	3.0	2.3	3.8	3.0	2.3	3.8	3.0	2.3
2.0	50.0	40.0		31.0	31.0		28.0	26.0		15.6	15.6		14.5	14.5							
3.0	45.0	40.0		31.0	31.0		25.0	24.4		15.6	15.6		14.5	14.5		12.7	12.7				
4.0	38.0	30.0	24.0	31.0	30.0	22.7	22.0	21.7	20.0	15.6	15.6	15.6	14.5	14.5	14.5	12.6	12.6	12.6	9.2	9.2	9.2
5.0	30.0	22.5	17.0	28.0	22.6	17.3	19.3	19.3	16.0	15.6	15.6	15.5	14.2	14.2	14.2	12.4	12.4	12.4	9.2	9.2	9.2
6.0	22.0	17.0	13.0	22.5	17.0	13.2	16.9	16.6	12.8	14.9	14.9	12.6	13.6	13.6	12.3	11.9	11.9	11.9	9.2	9.2	9.2
7.0	18.9/ 6.7m	14.5/ 6.7m	11.2/ 6.7m	17.5	13.4	10.4	15.0	13.3	10.3	13.6	13.4	10.4	12.5	12.5	10.2	11.1	11.1	10.0	9.1	9.1	9.1
8.0				14.2	10.9	8.4	13.5	10.8	8.3	12.2	11.2	8.7	11.2	11.2	8.7	10.3	10.3	8.6	8.7	8.7	8.4
9.0				11.7	9.0	7.0	11.7	8.9	6.9	11.1	9.3	7.3	10.2	9.6	7.5	9.4	9.4	7.4	8.2	8.2	7.3
10.0				9.9	7.5	5.8	9.9	7.5	5.8	10.1	7.9	6.1	9.3	8.2	6.4	8.6	8.3	6.4	7.8	7.8	6.4
11.0							8.5	6.4	4.9	8.9	6.8	5.2	8.5	7.0	5.5	8.0	7.2	5.6	7.3	7.3	5.6
12.0							7.4	5.5	4.1	7.7	5.9	4.5	7.9	6.1	4.7	7.3	6.3	4.9	6.8	6.4	5.0
13.0							6.4	4.7	3.5	6.8	5.1	3.9	7.1	5.4	4.1	6.8	5.5	4.3	6.4	5.7	4.4
14.0							6.2/ 13.5m	4.6/ 13.5m	3.4/ 13.5m	6.0	4.5	3.4	6.2	4.7	3.6	6.3	4.9	3.8	5.9	5.0	3.9
15.0										5.4	3.9	2.9	5.6	4.2	3.2	5.8	4.4	3.3	5.6	4.5	3.5
16.0										4.8	3.5	2.5	5.0	3.7	2.8	5.2	3.9	2.9	5.2	4.0	3.1
17.0										4.5	3.3	2.4	4.5	3.3	2.4	4.7	3.5	2.6	4.9	3.6	2.7
18.0													4.1	2.9	2.1	4.3	3.1	2.3	4.4	3.2	2.4
19.0													3.7	2.6	1.8	3.9	2.8	2.0	4.1	2.9	2.1
20.0													3.3	2.3	1.5	3.6	2.5	1.7	3.7	2.6	1.9
21.0													3.3/ 20.5m	2.2/ 20.5m	1.5/ 20.5m	3.3	2.2	1.5	3.4	2.4	1.6
22.0																3.0	2.0	1.3	3.1	2.1	1.4
23.0																2.7	1.8	1.1	2.9	1.9	1.2
24.0																2.6	1.7	1.1	2.6	1.7	1.1
25.0																			2.4	1.5	0.9
26.0																			2.2	1.3	0.7
27.0																			0.3/ 27.5m	0.3/ 27.5m	0.3/ 27.5m
Number of falls	10	8	8	7	7	6	6	6	5	4	4	4	3	3	3	3	3	3	2	2	2
I		0%			50%			100%			100%			100%			100%			100%	
II		0%			0%			0%			25%			50%			75%			100%	
III		0%			0%			0%			25%			50%			75%			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]	580	420	330	270	230	200	180
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CRANE EQUIPMENT



MAIN BOOM
HA 30.4 m



UNDERCARRIAGE
BALLAST
5.5 T



BALLAST
8.9 t



MAX. INCLINATION
2°



TRACK WIDTH
3.8 m

CRANE EQUIPMENT

RADIUS [m]	BOOM LENGTH [m]						
	9.4	12.8	16.3	19.8	23.3	26.8	30.4
2.0	40.0	24.8	22.4	12.5	11.6		
3.0	36.0	24.8	20.0	12.5	11.6	10.2	
4.0	30.4	24.8	17.6	12.5	11.6	10.1	6.0
5.0	24.0	22.4	15.4	12.5	11.4	9.9	6.0
6.0	17.6	18.0	13.5	11.9	10.9	9.5	6.0
7.0		14.0	12.0	10.9	10.0	8.9	6.0
8.0		11.4	10.8	9.8	9.0	8.2	6.0
9.0		9.4	9.4	8.9	8.2	7.5	6.0
10.0			7.9	8.1	7.4	6.9	5.9
11.0			6.8	7.1	6.8	6.4	5.7
12.0			5.9	6.2	6.3	5.8	5.4
13.0			5.1	5.4	5.7	5.4	5.1
14.0				4.8	5.0	5.0	4.7
15.0				4.3	4.5	4.6	4.5
16.0				3.8	4.0	4.2	4.2
17.0					3.6	3.8	3.8
18.0					3.3	3.4	3.2
19.0					3.0	3.0	2.6
20.0					2.6	2.6	2.1
21.0						2.1	1.7
22.0						1.7	1.3
23.0						1.3	0.9
24.0							0.6
Number of falls	10	8	6	4	4	4	4
I	0 %	50 %	100 %	100 %	100 %	100 %	100 %
II	0 %	0 %	0 %	25 %	50 %	75 %	100 %
III	0 %	0 %	0 %	25 %	50 %	75 %	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]	580	420	330	270	230	200	180

Tab. no.: 653R-75/1977/8.9+5.5/0215 HA 2°

CRANE EQUIPMENT



MAIN BOOM
HA 30.4 m



UNDERCARRIAGE
BALLAST
5.5 T



BALLAST
8.9 t



MAX. INCLINATION
4 °



TRACK WIDTH
3.8 m

RADIUS [m]	BOOM LENGTH [m]						
	9.4	12.8	16.3	19.8	23.3	26.8	30.4
2.0	32.0	19.8	17.9	10.0	9.3		
3.0	28.8	19.8	16.0	10.0	9.3	7.0	
4.0	24.3	19.8	14.1	10.0	9.3	7.0	4.4
5.0	19.2	17.9	12.4	10.0	9.1	7.0	4.4
6.0	14.1	14.4	10.8	9.5	8.7	7.0	4.4
7.0		11.2	9.6	8.7	8.0	7.0	4.4
8.0		9.1	8.6	7.8	7.2	6.6	4.4
9.0		7.5	7.5	7.1	6.5	6.0	4.4
10.0			6.3	6.5	6.0	5.5	4.4
11.0			5.4	5.7	5.4	5.1	4.4
12.0			4.7	4.9	5.1	4.7	4.4
13.0			4.1	4.4	4.5	4.4	4.1
14.0				3.8	4.0	4.0	3.8
15.0				3.5	3.6	3.7	3.5
16.0				3.1	3.2	3.1	3.0
17.0					2.7	2.7	2.5
18.0					2.3	2.2	2.0
19.0					1.9	1.8	1.6
20.0					1.6	1.5	1.3
21.0						1.2	1.0
22.0						0.9	0.7
23.0						0.6	
Number of falls	10	8	6	4	4	4	4
I	0 %	50 %	100 %	100 %	100 %	100 %	100 %
II	0 %	0 %	0 %	25 %	50 %	75 %	100 %
III	0 %	0 %	0 %	25 %	50 %	75 %	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]	580	420	330	270	230	200	180

Tab. no.: 653R-75/1977/8.9+5.5/02.15 HA 4°

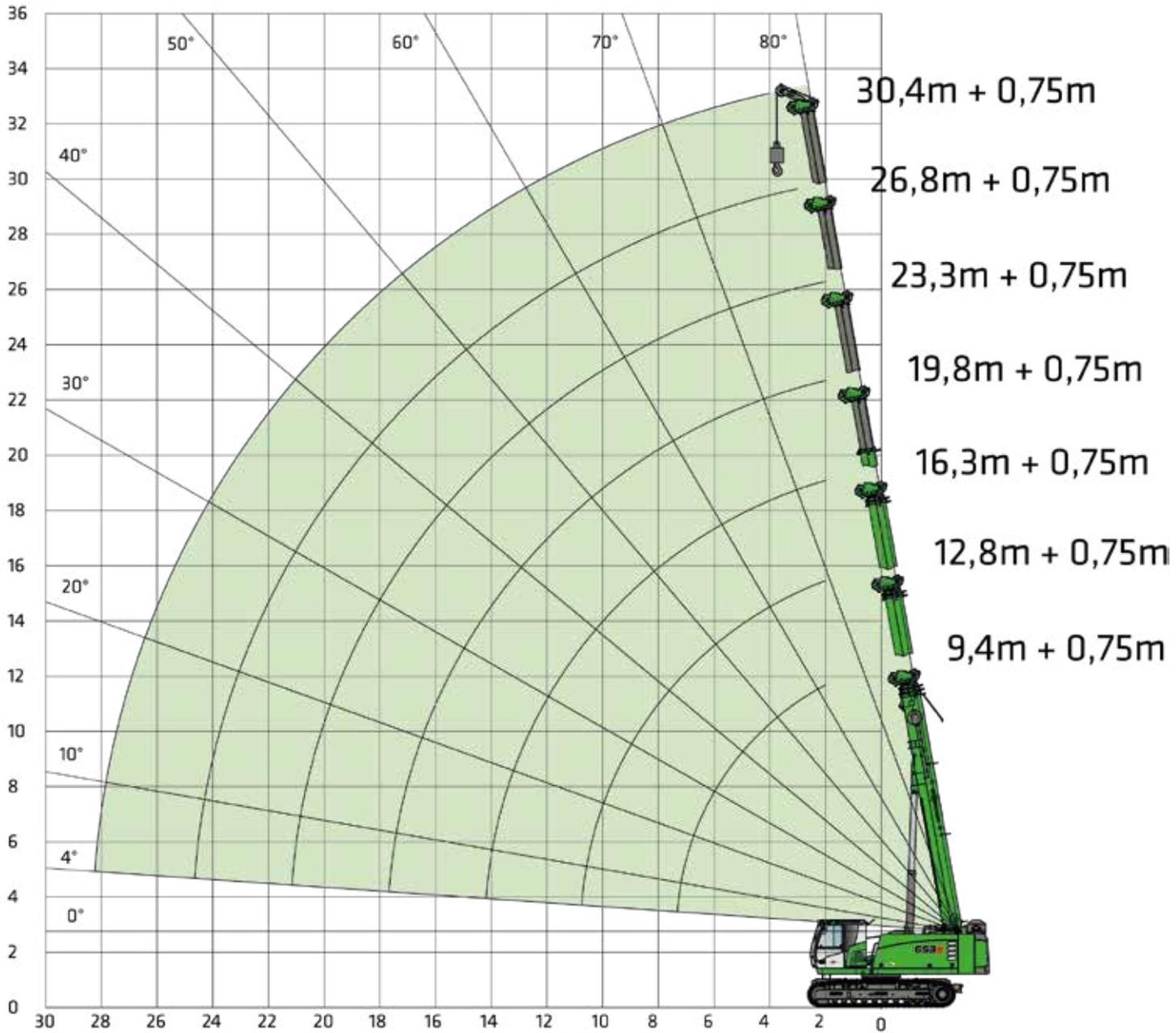
CRANE EQUIPMENT

CRANE EQUIPMENT



AUXILIARY JIB
HA-S

CRANE EQUIPMENT



CRANE EQUIPMENT



AUXILIARY JIB
HA-S



UNDERCARRIAGE
BALLAST
5.5 t



BALLAST
8.9 t



MAX. INCLINATION
0.3°

RADIUS [m]	BOOM LENGTH [m]																							
	9.4			12.8			16.3			19.8			23.3			26.8			30.4					
	3.8	3.0	2.3	3.8	3.0	2.3	3.8	3.0	2.3	3.8	3.0	2.3	3.8	3.0	2.3	3.8	3.0	2.3	3.8	3.0	2.3			
Undercarriage track width [m]	3.8	3.0	2.3	3.8	3.0	2.3	3.8	3.0	2.3	3.8	3.0	2.3	3.8	3.0	2.3	3.8	3.0	2.3	3.8	3.0	2.3	3.8	3.0	2.3
2.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0											
3.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0								
4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		
5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
6.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
7.0	5.0 / 7.3m	5.0 / 7.3m	5.0 / 7.3m	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
8.0				5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
9.0				5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
10.0				5.0 / 10.7m	5.0 / 10.7m	5.0 / 10.7m	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
11.0							5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
12.0							5.0	5.0	4.3	5.0	5.0	4.6	5.0	5.0	4.8	5.0	5.0	4.8	5.0	5.0	5.0	5.0	5.0	5.0
13.0							5.0	4.9	3.7	5.0	5.0	4.0	5.0	5.0	4.2	5.0	5.0	4.4	5.0	5.0	4.4	5.0	5.0	4.4
14.0							5.0 / 14.1m	4.7 / 14.1m	3.6 / 14.1m	5.0	4.6	3.5	5.0	4.8	3.7	5.0	5.0	3.8	5.0	5.0	3.8	5.0	5.0	4.0
15.0										5.0	4.0	3.0	5.0	4.3	3.2	5.0	4.4	3.4	4.4	4.5	3.5			
16.0										4.2	3.6	2.6	4.4	3.8	2.8	4.9	4.0	3.0	4.1	4.1	3.1			
17.0										4.2 / 17.6m	3.1 / 17.6m	2.2 / 17.6m	3.9	3.4	2.5	4.1	3.5	2.6	3.9	3.7	2.8			
18.0													3.6	3.0	2.1	3.7	3.2	2.3	3.8	3.3	2.5			
19.0													3.2	2.7	1.8	3.4	2.9	2.0	3.5	3.0	2.2			
20.0													2.8	2.4	1.6	3.0	2.6	1.8	3.2	2.7	1.9			
21.0													3.1 / 21.1m	2.3 / 21.1m	1.5 / 21.1m	2.8	2.3	1.5	2.8	2.4	1.7			
22.0																2.5	2.0	1.3	2.7	2.2	1.5			
23.0																2.3	1.8	1.1	2.4	1.9	1.3			
24.0																2.3 / 24.6m	1.6 / 24.6m	0.9 / 24.6m	2.2	1.7	1.1			
25.0																			2.0	1.5	0.9			
26.0																			1.8	1.4	0.8			
27.0																			0.3 / 28.1m	0.3 / 28.1m	0.3 / 28.1m			
Number of falls	1	1	1	1	1	1	1	1	1	1	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 %			75 %			100 %					
III	0 %			0 %			0 %			25 %			50 %			75 %			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]	580	420	330	270	230	200	180
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Tab. no.: 653R-75/1977/8 9+5.5/10.14 HA-S 0.3°
 Tab. no.: 653R-75/1577/8 9+5.5/10.14 HA-S 0.3°
 Tab. no.: 653R-75/1227/8 9+5.5/10.14 HA-S 0.3°

CRANE EQUIPMENT



AUXILIARY JIB
HA-S



UNDERCARRIAGE
BALLAST
5.5 T



BALLAST
8.9 t



MAX. INCLINATION
2°



TRACK WIDTH
3.8 m

CRANE EQUIPMENT

RADIUS [m]	BOOM LENGTH [m]						
	9.4	12.8	16.3	19.8	23.3	26.8	30.4
2.0	5.0	5.0	5.0	5.0			
3.0	5.0	5.0	5.0	5.0	5.0		
4.0	5.0	5.0	5.0	5.0	5.0	5.0	
5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.5
6.0	5.0	5.0	5.0	5.0	5.0	5.0	4.5
7.0	5.0	5.0	5.0	5.0	5.0	5.0	4.5
8.0	5.0	5.0	5.0	5.0	5.0	5.0	4.5
9.0		5.0	5.0	5.0	5.0	5.0	4.5
10.0		5.0	5.0	5.0	5.0	5.0	4.5
11.0		4.5	4.5	5.0	5.0	5.0	4.5
12.0			4.0	5.0	5.0	5.0	4.5
13.0			3.8	5.0	5.0	5.0	4.5
14.0				4.5	4.5	4.5	4.5
15.0				4.0	4.0	4.0	3.9
16.0				3.8	3.9	3.9	3.7
17.0				3.4	3.5	3.7	3.5
18.0					3.2	3.4	3.4
19.0					2.9	3.0	3.1
20.0					2.6	2.7	2.1
21.0						2.1	1.7
22.0						1.7	1.3
23.0						1.3	0.9
24.0							0.6
Number of falls	1	1	1	1	1	1	1
I	0 %	50 %	100 %	100 %	100 %	100 %	100 %
II	0 %	0 %	0 %	25 %	50 %	75 %	100 %
III	0 %	0 %	0 %	25 %	50 %	75 %	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]	580	420	330	270	230	200	180

Tab. no.: 653R-75/1977/8.9+5.5/0215 HA-S 2°

CRANE EQUIPMENT



**AUXILIARY JIB
HA-S**



**UNDERCARRIAGE
BALLAST
5.5 T**



**BALLAST
8.9 t**



**MAX. INCLINATION
4°**



**TRACK WIDTH
3.8 m**

RADIUS [m]	BOOM LENGTH [m]						
	9.4	12.8	16.3	19.8	23.3	26.8	30.4
2.0	5.0	5.0	5.0	5.0			
3.0	5.0	5.0	5.0	5.0	5.0		
4.0	5.0	5.0	5.0	5.0	5.0	4.3	
5.0	5.0	5.0	5.0	5.0	5.0	4.3	3.3
6.0	5.0	5.0	5.0	5.0	5.0	4.3	3.3
7.0	5.0	5.0	5.0	5.0	5.0	4.3	3.3
8.0	5.0	5.0	5.0	5.0	5.0	4.3	3.3
9.0		4.5	4.5	5.0	5.0	4.3	3.3
10.0		4.0	4.0	4.5	5.0	4.3	3.3
11.0		3.6	3.6	4.0	4.5	4.3	3.3
12.0			3.2	4.0	4.0	4.3	3.3
13.0			3.0	4.0	4.0	4.0	3.3
14.0				3.6	3.6	3.6	3.3
15.0				3.2	3.2	3.2	3.1
16.0				3.0	3.1	3.1	2.9
17.0				2.7	2.8	2.7	2.5
18.0					2.3	2.2	2.0
19.0					1.9	1.8	1.6
20.0						1.5	1.3
21.0						1.2	1.0
22.0						0.9	0.7
23.0						0.6	
Number of falls	1	1	1	1	1	1	1
I	0 %	50 %	100 %	100 %	100 %	100 %	100 %
II	0 %	0 %	0 %	25 %	50 %	75 %	100 %
III	0 %	0 %	0 %	25 %	50 %	75 %	100 %
Load capacity reduction [kg]	580	420	330	270	230	200	180

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

Tab. no.: 653R-75/1977/8.9+5.5/0215 HA-S 4°

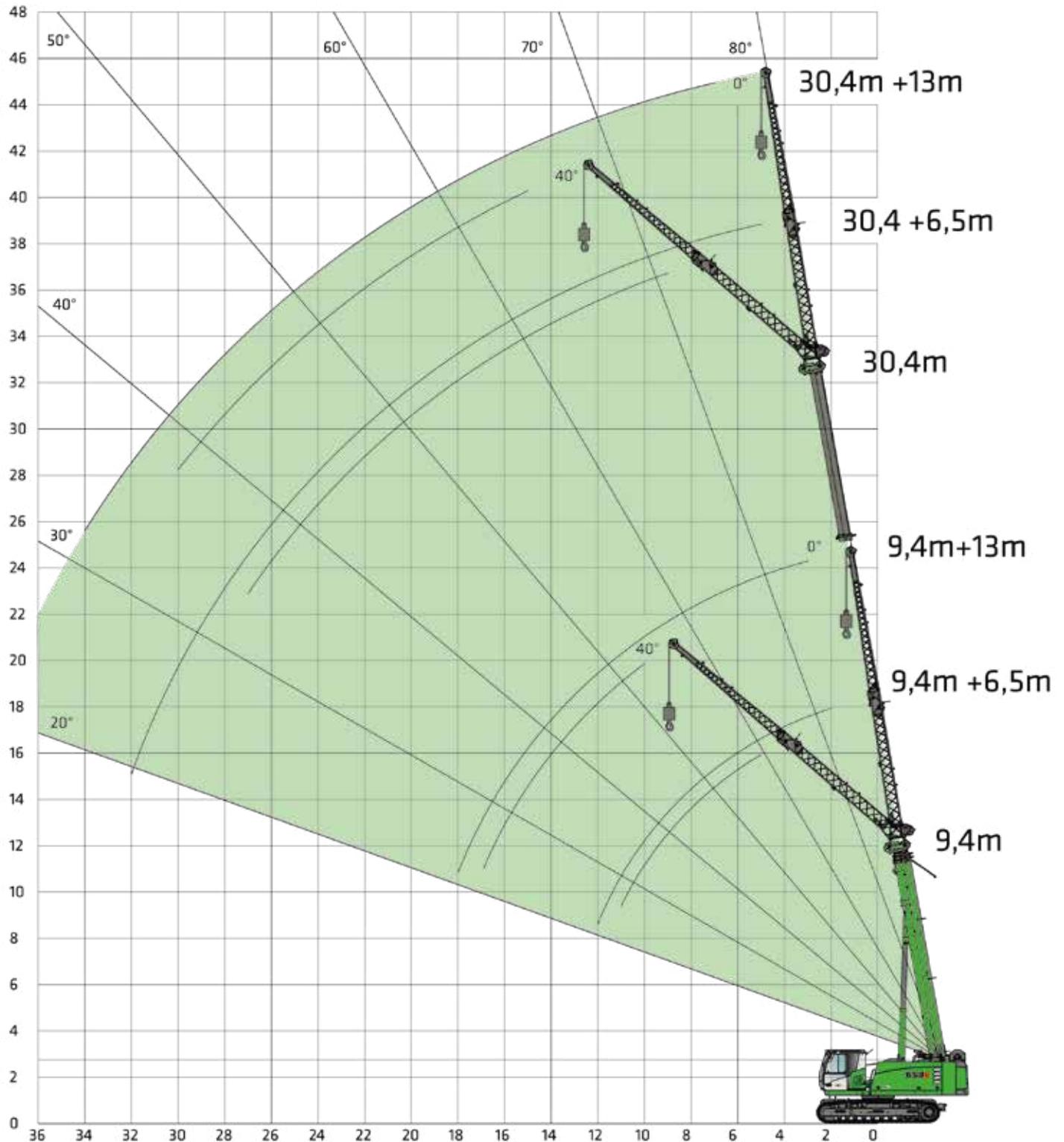
CRANE EQUIPMENT

CRANE EQUIPMENT



FLY JIB
SA 6.5 m / SA 13 m

CRANE EQUIPMENT



CRANE EQUIPMENT



FLY JIB
SA 6.5 m



UNDERCARRIAGE
BALLAST
5.5 T



BALLAST
8.9 t



MAX. INCLINATION
0.3°



TRACK WIDTH
3.8 m

RADIUS [m]	BOOM LENGTH [m]							
	9.4		16.3		23.3		30.4	
	0°	40°	0°	40°	0°	40°	0°	40°
2.0	10.0							
3.0	9.9		10.0		9.9			
4.0	8.6		9.9		9.4			
5.0	7.7	4.6	9.4		9.0		4.9	
6.0	6.9	4.4	8.7	4.6	8.5		4.8	
7.0	6.3	4.2	8.0	4.5	8.0	4.4	4.8	
8.0	5.7	4.0	7.4	4.3	7.6	4.3	4.7	
9.0	5.2	3.9	6.9	4.2	7.2	4.2	4.7	4.0
10.0	4.8	3.8	6.4	4.1	6.8	4.1	4.7	4.0
11.0	4.5	3.7	6.0	4.0	6.5	4.0	4.7	3.9
12.0	4.1		5.7	3.9	6.2	3.9	4.7	3.8
13.0			5.3	3.8	5.9	3.9	4.6	3.8
14.0			5.0	3.8	5.7	3.8	4.4	3.7
15.0			4.8	3.7	5.4	3.7	4.2	3.7
16.0			4.6	3.7	5.0	3.7	4.0	3.6
17.0			4.2		4.6	3.6	3.8	3.5
18.0			4.0		4.2	3.6	3.7	3.4
19.0					3.7	3.6	3.5	3.3
20.0					3.5	3.5	3.4	3.2
21.0					3.2	3.3	3.2	3.1
22.0					2.9		3.0	3.0
23.0					2.6		2.7	2.8
24.0					2.4		2.4	2.6
25.0							2.2	2.4
26.0							2.0	2.2
27.0							1.8	2.0
28.0							1.7	
29.0							1.5	
30.0							1.4	
31.0							1.2	
32.0							1.1	
Number of falls	2	1	2	1	2	1	2	1
I	0 %		100 %		100 %		100 %	
II	0 %		0 %		50 %		100 %	
III	0 %		0 %		50 %		100 %	

Tab. no.: 653R-75/19778-9 t + 5.5/10.14 SA6-5 0.3°

CRANE EQUIPMENT

CRANE EQUIPMENT



FLY JIB
SA 13 m



UNDERCARRIAGE
BALLAST
5.5 T



BALLAST
8.9 t



MAX. INCLINATION
0.3°



TRACK WIDTH
3.8 m

CRANE EQUIPMENT

RADIUS [m]	BOOM LENGTH [m]							
	9.4		16.3		23.3		30.4	
	0°	40°	0°	40°	0°	40°	0°	40°
3.0	4.6							
4.0	4.4		4.6					
5.0	4.0		4.4		3.8			
6.0	3.7		4.1		3.7			
7.0	3.4		3.8		3.6		2.1	
8.0	3.1		3.6		3.4		2.1	
9.0	2.9		3.4		3.3		2.1	
10.0	2.7	1.8	3.2		3.1		2.1	
11.0	2.5	1.7	3.0		3.0		2.1	
12.0	2.3	1.7	2.8	1.7	2.9		2.1	
13.0	2.2	1.7	2.6	1.7	2.7	1.7	2.1	
14.0	2.0	1.6	2.5	1.7	2.6	1.6	2.1	
15.0	1.9	1.6	2.4	1.6	2.5	1.6	2.1	1.5
16.0	1.8	1.5	2.3	1.6	2.4	1.6	2.1	1.5
17.0	1.7	1.5	2.1	1.5	2.3	1.5	2.1	1.5
18.0	1.6		2.0	1.5	2.2	1.5	2.1	1.5
19.0			2.0	1.5	2.1	1.5	2.0	1.4
20.0			1.9	1.5	2.1	1.5	2.0	1.4
21.0			1.8		2.0	1.4	1.9	1.4
22.0			1.7		1.9	1.4	1.9	1.4
23.0			1.6		1.8	1.4	1.8	1.4
24.0			1.5		1.8	1.4	1.8	1.3
25.0					1.7	1.4	1.7	1.3
26.0					1.7	1.4	1.7	1.3
27.0					1.6		1.6	1.3
28.0					1.4		1.6	1.3
29.0					1.4		1.6	1.3
30.0							1.3	1.1
31.0							1.1	
32.0							0.9	
33.0							0.7	
34.0							0.6	
Number of falls	2	1	2	1	2	1	2	1
I	0%		100%		100%		100%	
II	0%		0%		50%		100%	
III	0%		0%		50%		100%	

Tab. no.: 653R-75/1977/8-9+5/10.14 SA13 0.3°

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	3.0 m	2.3 m	3.8 m	3.0 m	2.3 m	3.8 m	3.0 m	2.3 m
Ballast [t]	Under-carriage ballast [t]												
8.9 t	5.5 t	360°	360°	360°	360°	360°	360°	360°	-	-	360°	-	-

CRANE EQUIPMENT

Notes:

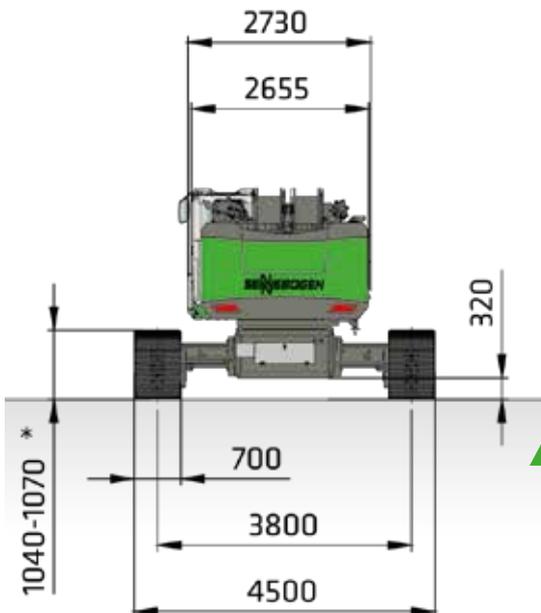
1. The load ratings are given in tons and apply for a 360° swing angle.
2. The load capacities correspond to EN 13000.
3. The weight of the load handling equipment (hooks, cable) should be deducted from the load ratings.
4. Load capacities must be limited or reduced in adverse conditions such as soft or uneven ground, slopes, wind, side loads, swinging loads, jolts or sudden stopping of loads, personnel and operators not experienced in handling loads.
5. Permissible cable pull per strand in crane mode for cable diameter 16 mm -5,000 kg.
6. The load ratings given are for reference only. Please refer to the tables in the operating instructions for the relevant applicable load ratings.
7. Other load capacities are available as an option.

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**
5 t load capacity, single strand

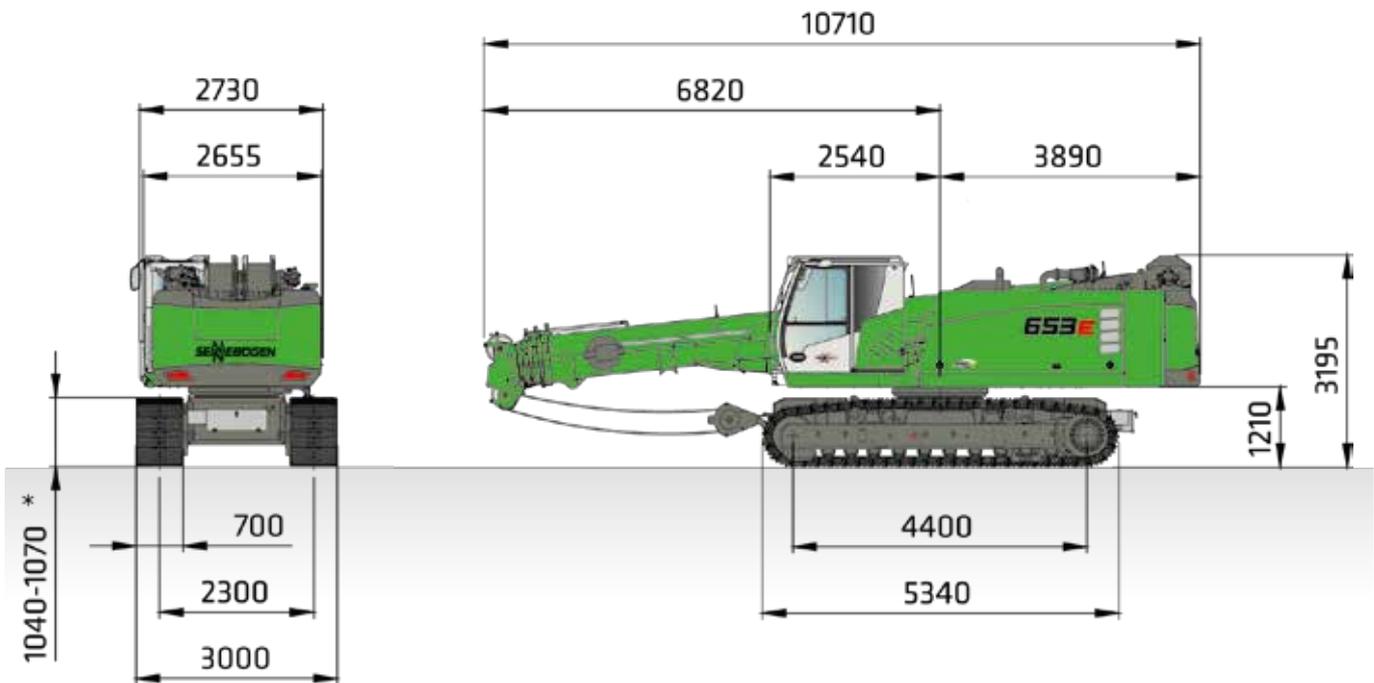
TRANSPORT DIMENSIONS



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

i **Operating weight:** approx. 50,200 kg (13 m fly jib, 2 hoisting winches, 8.9 t counterweight and 5.5 t undercarriage ballast and 35 t hook)

653 WITH T41/380 UNDERCARRIAGE T41/380 AND 700 mm TRIPLE GROUSER SHOES



i **Transport weight:** approx. 44,700 kg (13 m fly jib, 2 hoisting winches, without undercarriage ballast)
 approx. 50,200 kg (13 m fly jib, 2 hoisting winches, with undercarriage ballast)

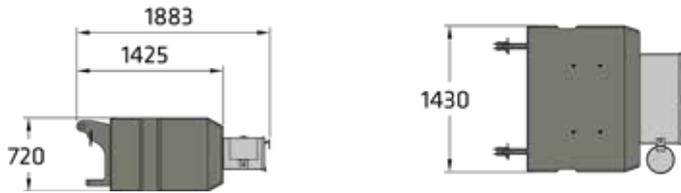
TRANSPORT DIMENSIONS

Dimensions in [mm]

ATTACHMENTS

UNDERCARRIAGE BALLAST

i Weight: 2x 2750 kg



COUNTER WEIGHT

i Weight: 8900 kg
(with the ballast support option, 1.9 t counterweight remains on the device)

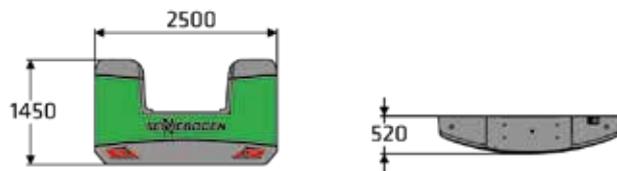
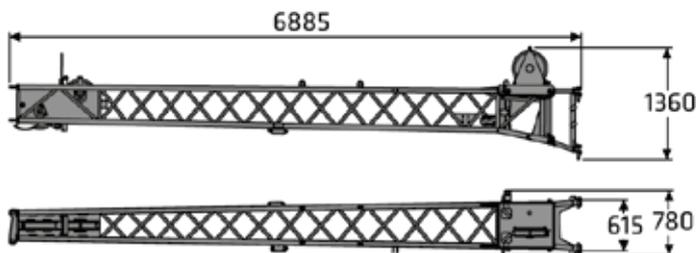


Figure shows removable 7 t counterweight

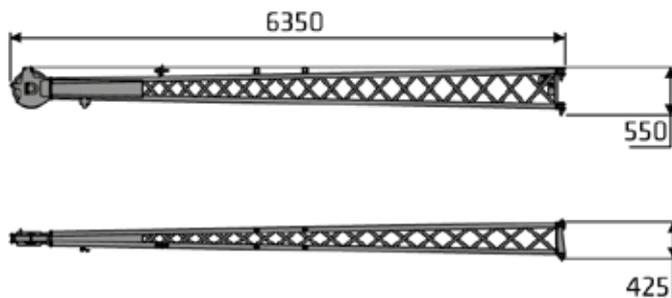
FLY JIB 6.5 m

i Weight: 600 kg



FLY JIB EXTENSION 6.5 m

i Weight: 250 kg



AUXILIARY JIB

i Weight: 50 kg



Dimensions in [mm]



www.sennebogen.com/653



Sewer construction;
Singapore



Coastal protection; France



Sheet pile installation; Belgium



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4
production plants in
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worldwide

11
different
telescopic cranes



Telehandler
4-5.5 t

Balancer
130-300 t

Material handler
17-420 t

Duty cycle crane
13.5-300 t

Crawler crane
50-300 t

Telescopic crane
16-130 t

Port crane
300 t

653E | Crawler

Order no. 187550
653R-E-02210

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