SENNEBOGEN

50 t TELESCOPIC CRAWLER CRANE

129 kW / 50 t / 30.4 + 13 m / maXCAB

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.

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.

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 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

GREEN EFFICIENCY

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.

Fly jib with extension to 13 m
0° or 40° position

Main boom

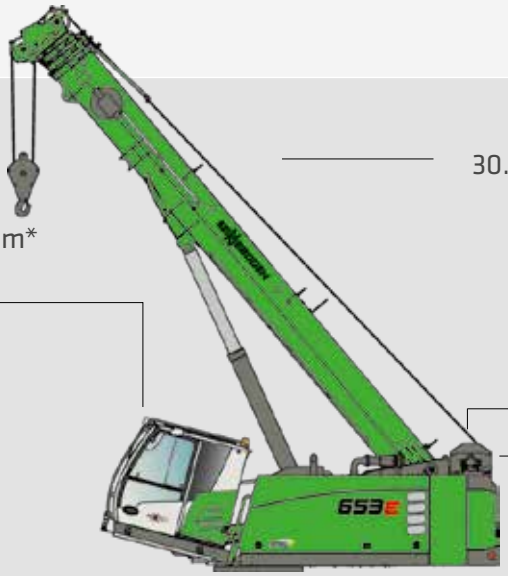
Auxiliary jib

EQUIPMENT

6.5 m fly jib
0° or 40° position

CAB

Cab elevation up to 5.40 m*
Tiltable 30°



30.4 m main boom

1st winch

2nd winch (optional)

UPPERCARRIAGE

UNDERCARRIAGE

Crawler flat track shoes (welded)

Crawler with triple grouser track shoes

Mobile industry

* Eye level

OUTSTANDING FLEXIBILITY. WITH THE FULL-POWER BOOM

Up to
43 m
boom length**

- 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)

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

50 t MOBILE CRANE.
THE INDUSTRIAL VERSION 653 MI.

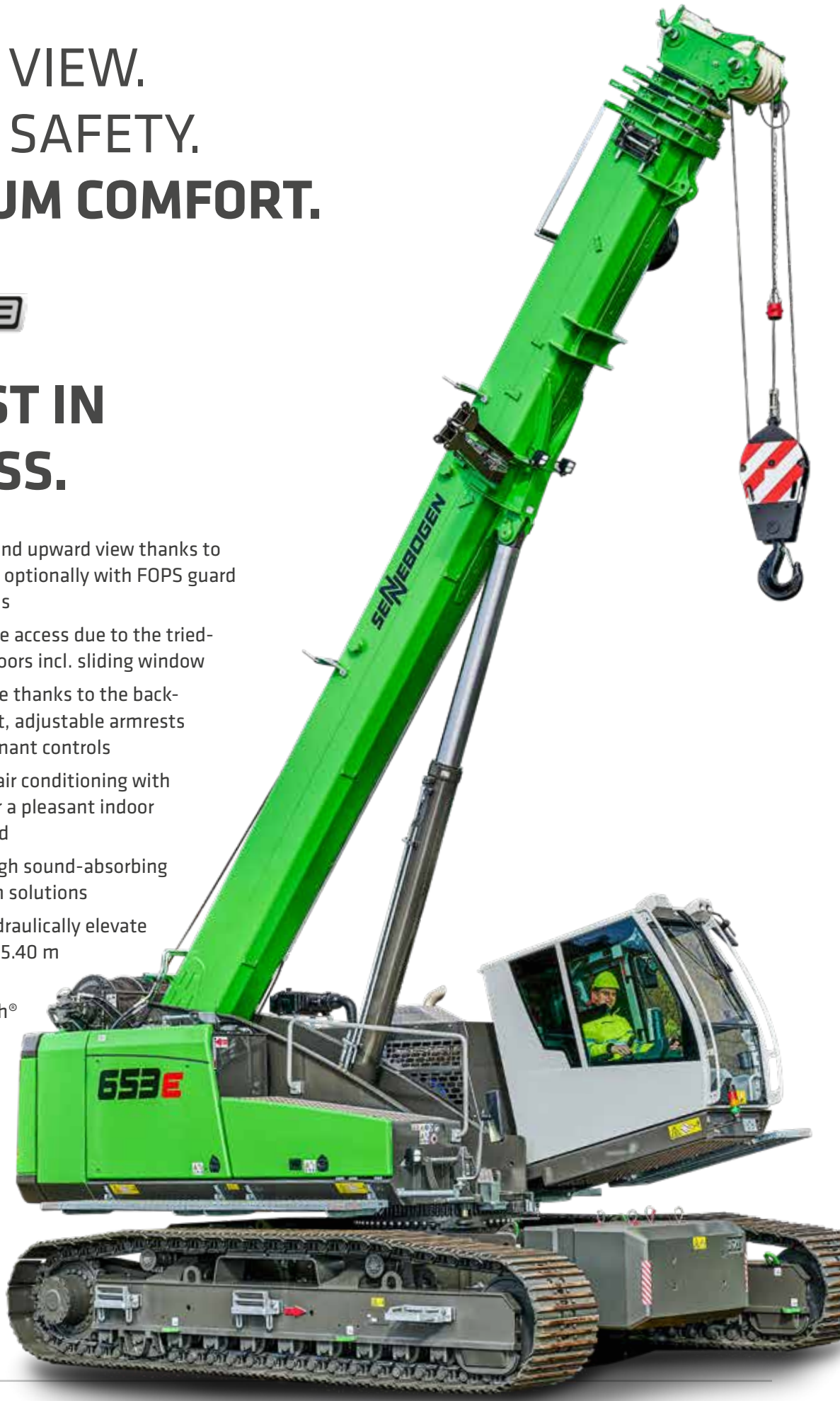
- Real mobile alternative: Design focused on optimizing stability and load capacity when moving load with mobile undercarriage
- Ideal for particularly heavy pick & carry tasks in storage space management, industrial relocations and industrial assembly
- The 653 MI is an optional special version. Detailed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

BETTER VIEW.
BETTER SAFETY.
MAXIMUM COMFORT.

maXCAB

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®



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.

* not including attachments

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

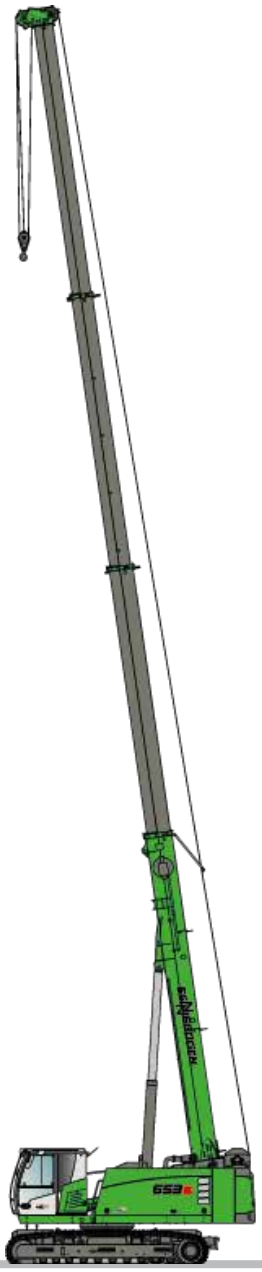
50 kN tensile force (4th position), cable speed 0 - 115 m/min., cable diameter 16 mm, max. cable length 170 m

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

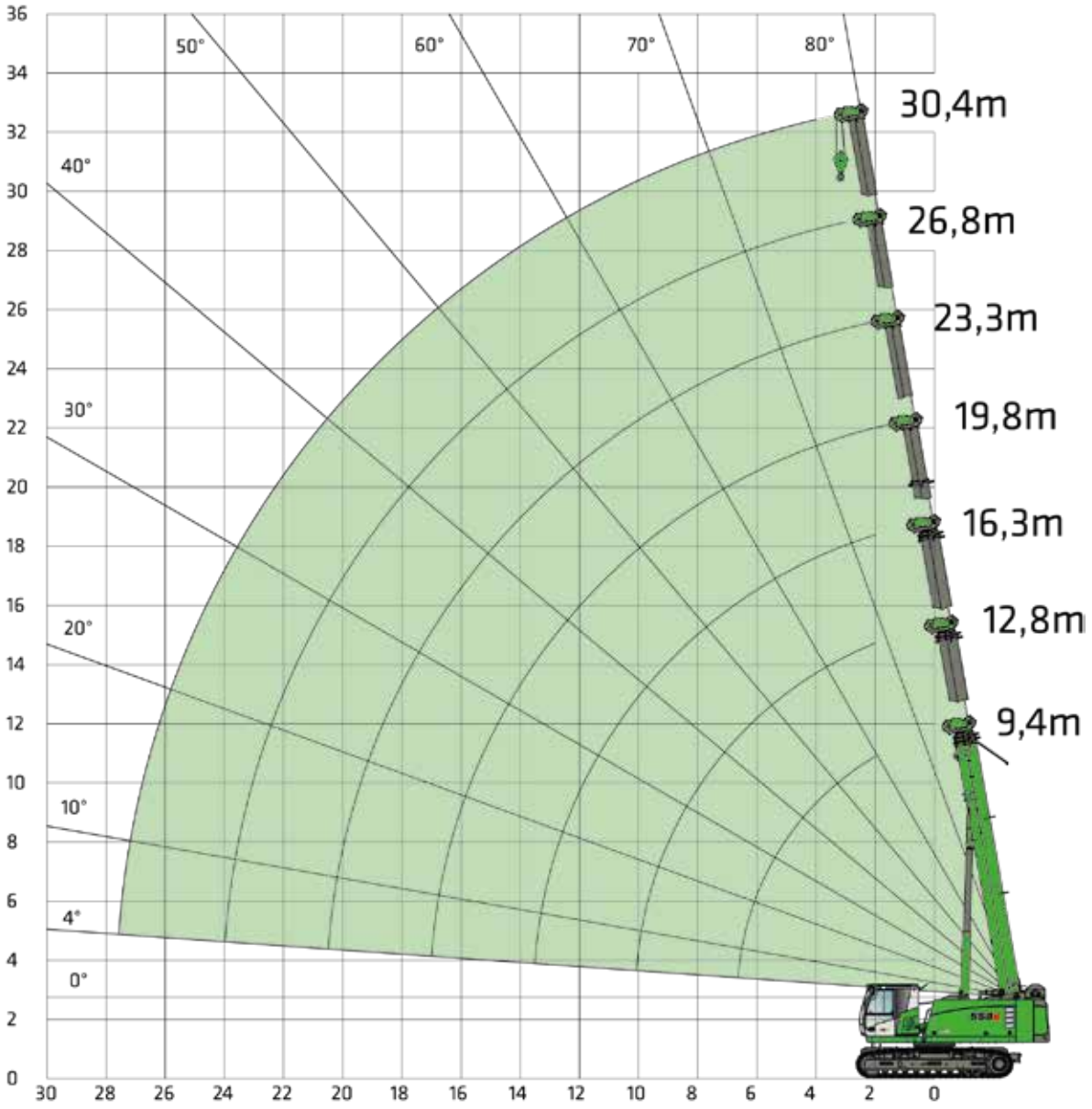
OPERATING WEIGHT

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

Subject to technical changes. See page 29 for notes on load charts.

CRANE EQUIPMENT

MAIN BOOM
HA 30.4 m

UNDERCARRIAGE
BALLAST
5.5 T

BALLAST
8.9 t

EN

MAX. INCLINATION
0.3 °

	BOOM LENGTH [m]																				
RADIUS [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 / 13.5 m	4.6 / 13.5 m	3.4 / 13.5 m	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		

Tab. no.: 653R-75/1977/8.9+5.5/10.14 HA 0.3°
Tab. no.: 653R-75/1577/8.9+5.5/10.14 HA 0.3°
Tab. no.: 653R-75/1227/8.9+5.5/10.14 HA 0.3°

CRANE EQUIPMENT

MAIN BOOM
HA 30.4 m

UNDERCARRIAGE
BALLAST
5.5 T

BALLAST
8.9 t

EN

MAX. INCLINATION
2 °

TRACK WIDTH
3.8 m

	BOOM LENGTH [m]						
RADIUS [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-7S/1977/8.9+5.5/02.15 HA 2°

Subject to technical changes. See page 29 for notes on load charts.

CRANE EQUIPMENT

MAIN BOOM
HA 30.4 m

UNDERCARRIAGE
BALLAST
5.5 T

BALLAST
8.9 t

EN

MAX. INCLINATION
4 °

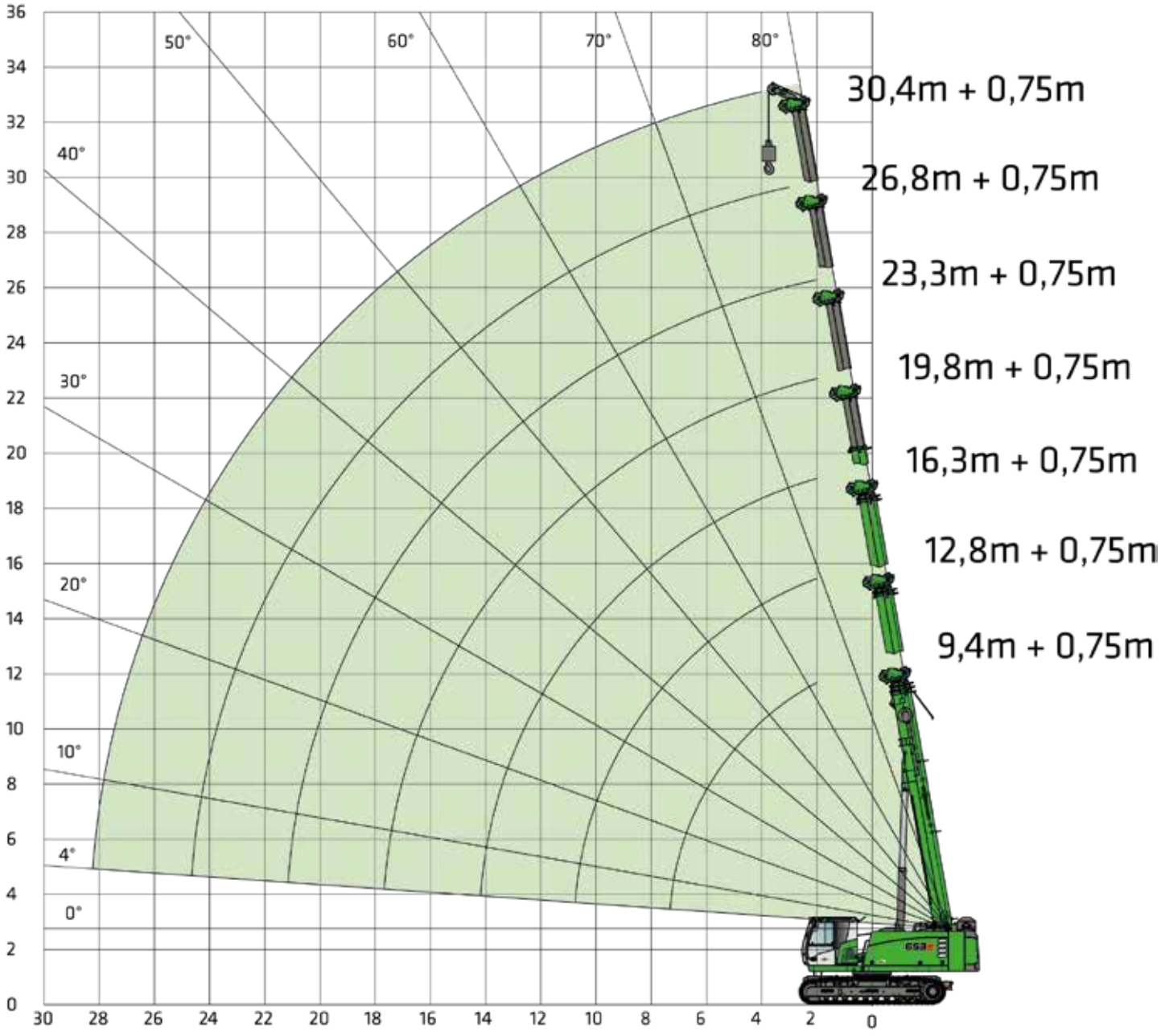
TRACK WIDTH
3.8 m

	BOOM LENGTH [m]						
RADIUS [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

AUXILIARY JIB HA-S



Subject to technical changes. See page 29 for notes on load charts.

CRANE EQUIPMENT

AUXILIARY JIB
HA-S

UNDERCARRIAGE
BALLAST
5.5 t

BALLAST
8.9 t

EN

360°

MAX. INCLINATION
0.3 °

	BOOM LENGTH [m]																				
RADIUS [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	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
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
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
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
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
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
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
12.0							5.0	5.0	4.3	5.0	5.0	4.6	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
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	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
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.

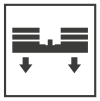
Load capacity reduction [kg]	580	420	330	270	230	200	180

Tab. no.: 653R-75/1977/8.9+5.5/10.14 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

EN

MAX. INCLINATION
2 °

TRACK WIDTH
3.8 m

	BOOM LENGTH [m]						
RADIUS [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+5.5/02.15 HA-S 2°

Subject to technical changes. See page 29 for notes on load charts.

CRANE EQUIPMENT

AUXILIARY JIB
HA-S

UNDERCARRIAGE
BALLAST
5.5 T

BALLAST
8.9 t

EN

MAX. INCLINATION
4 °

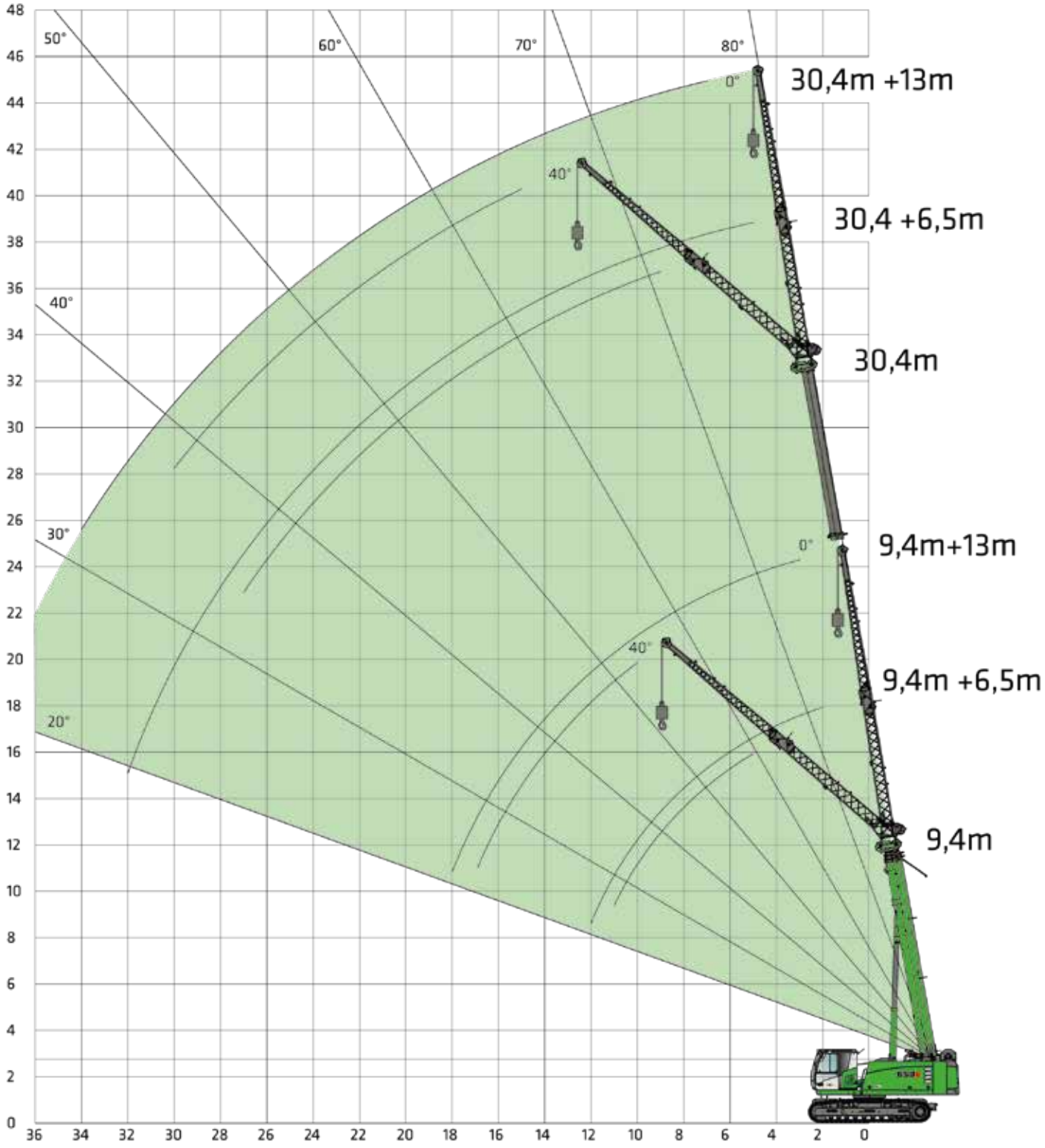
TRACK WIDTH
3.8 m

	BOOM LENGTH [m]						
RADIUS [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 %
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-S 4°

CRANE EQUIPMENT

FLY JIB
SA 6.5 m / SA 13 m



Subject to technical changes. See page 29 for notes on load charts.

CRANE EQUIPMENT

FLY JIB
SA 6.5 m

UNDERCARRIAGE
BALLAST
5.5 T

BALLAST
8.9 t

EN

MAX. INCLINATION
0.3 °

TRACK WIDTH
3.8 m

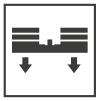
RADIUS [m]	BOOM LENGTH [m]							
	9.4		16.3		23.3		30.4	
	0°	40°	0°	40°	0°	40°	0°	40°
2.0	10.0							
3.0	9.9		10.0		9.9			
4.0	8.6		9.9		9.4			
5.0	7.7	4.6	9.4		9.0		4.9	
6.0	6.9	4.4	8.7	4.6	8.5		4.8	
7.0	6.3	4.2	8.0	4.5	8.0	4.4	4.8	
8.0	5.7	4.0	7.4	4.3	7.6	4.3	4.7	
9.0	5.2	3.9	6.9	4.2	7.2	4.2	4.7	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-75/1977/8.9 t + 5.5/10.14 SA6.5 0.3°

CRANE EQUIPMENT

FLY JIB
SA 13 m

UNDERCARRIAGE
BALLAST
5.5 T



BALLAST
8.9 t

EN

360°

MAX. INCLINATION
0.3 °

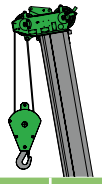
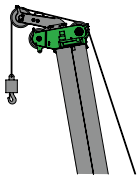
TRACK WIDTH
3.8 m

RADIUS [m]	BOOM LENGTH [m] 9.4		16.3		23.3		30.4	
	0°	40°	0°	40°	0°	40°	0°	40°
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+5.5/10.14 SA13 0.3°

Subject to technical changes. See page 29 for notes on load charts.

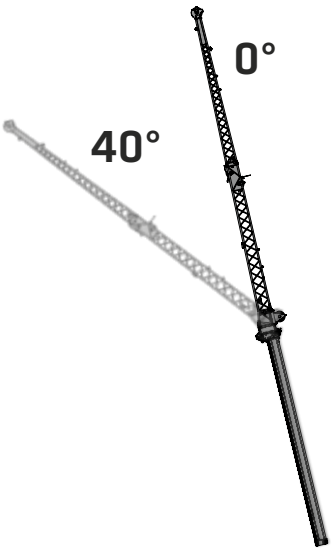
LOAD CAPACITY SCHEDULES

		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]	Undercarriage ballast [t]												
8.9 t	5.5 t	360°	360°	360°	360°	360°	360°	360°	–	–	360°	–	–

Notes:

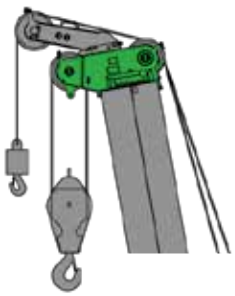
1. The load ratings are given in tons and apply for a 360° swing angle.
2. The load capacities correspond to EN 13000.
3. The weight of the load handling equipment (hooks, cable) should be deducted from the load ratings.
4. Load capacities must be limited or reduced in adverse conditions such as soft 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



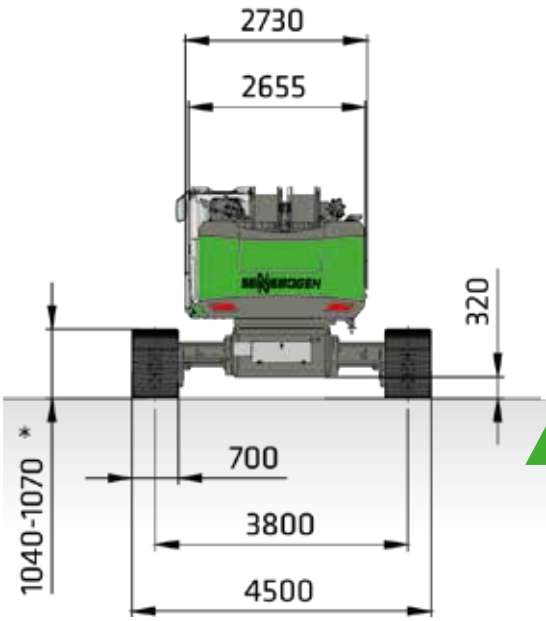
FLY JIB 6.5 m
Max. 2-strand, possible offset angles 0°/40°

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

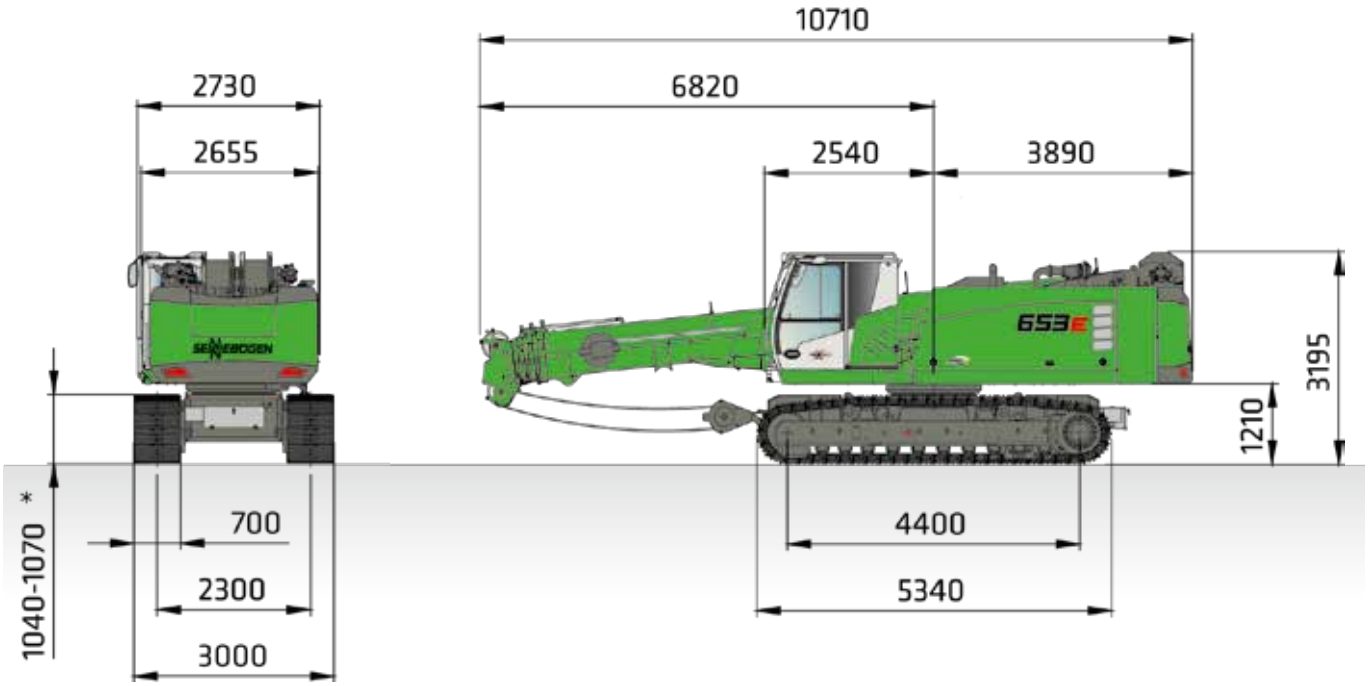
TRANSPORT DIMENSIONS



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

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



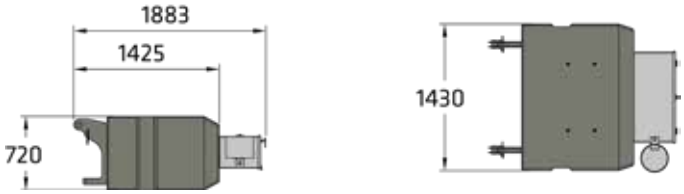
Transport weight: approx. 44,700 kg (13 m fly jib, 2 hoisting winches, without undercarriage ballast)
approx. 50,200 kg (13 m fly jib, 2 hoisting winches, with undercarriage ballast)

Dimensions in [mm]

* depending on base plate
Subject to technical changes.

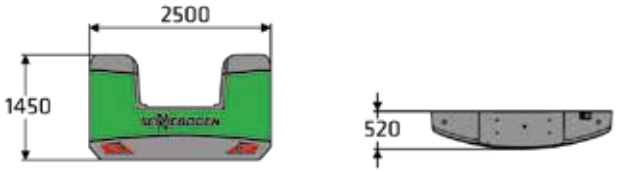
ATTACHMENTS

UNDERCARRIAGE BALLAST



Weight: 2x 2750 kg

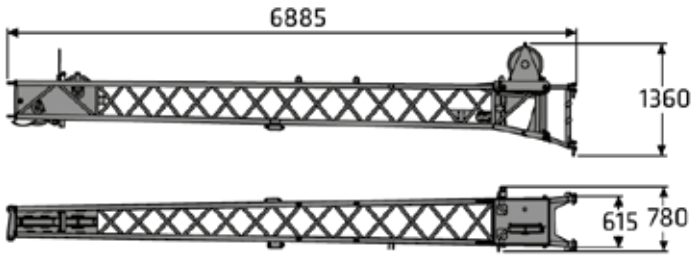
COUNTER WEIGHT



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

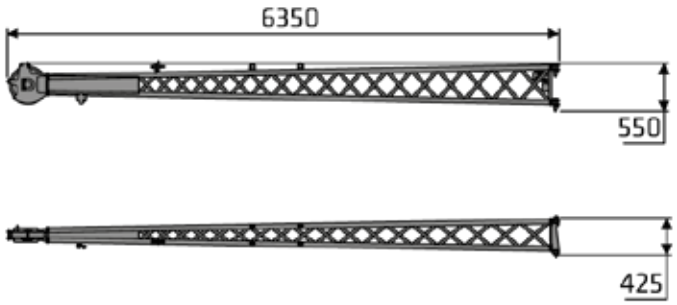
Figure shows removable 7 t counterweight

FLY JIB 6.5 m



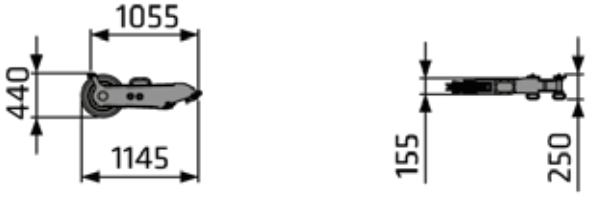
Weight: 600 kg

FLY JIB EXTENSION 6.5 m



Weight: 250 kg

AUXILIARY JIB



Weight: 50 kg

Dimensions in [mm]

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653E | Crawler

Order no. 187550
653R-E-022210

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