

# SENEBOGEN



**119** kW (Stage IIIa)

**129** kW (Stage IV)



**50** t



**30.4** m



**MAX CAB**

# 653E

Telescopic crawler crane

Stage IV

# 653E Advanced. The E-Series.



TX10 telescopic crane

## What makes up the E-Series

- Over 25 years of experience in construction and building of highly specialized telescopic cranes
- Uncompromisingly high performance in all areas
- Technology that can be mastered: High-quality components without over-engineering
- Long service life and high value stability

## Your top benefits:

### 1 Green Efficiency

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



### 2 Peak performance

Robust boom system – work on an incline of up to 4°

### 3 Maximum usability

Comfortable Maxcab operator cab – relaxed work  
SENCON – work program selection made easy



### 4 Flexibility in service

Operate under full load – less space required  
Strong undercarriage traction – good off-road capability

### 5 Easy transport

Mobile undercarriage with outrigger – ready to go in no time

### 6 Maintenance and service made easy

SENNEBOGEN control system – easy error diagnostics  
Simple maintenance – clear labeling

### 7 Consultation and support in your area

3 production sites – 2 subsidiaries  
130 sales partners – over 350 service stations



**Stage IV**

- Powerful, state-of-the-art engine
- Fuel efficient
- Low emissions

# 653E Powerful.

# Effective.

## Strong telescopic boom for demanding tasks

- Full power boom
- Work on inclines of up to 4° possible\*
- Telescoping under load

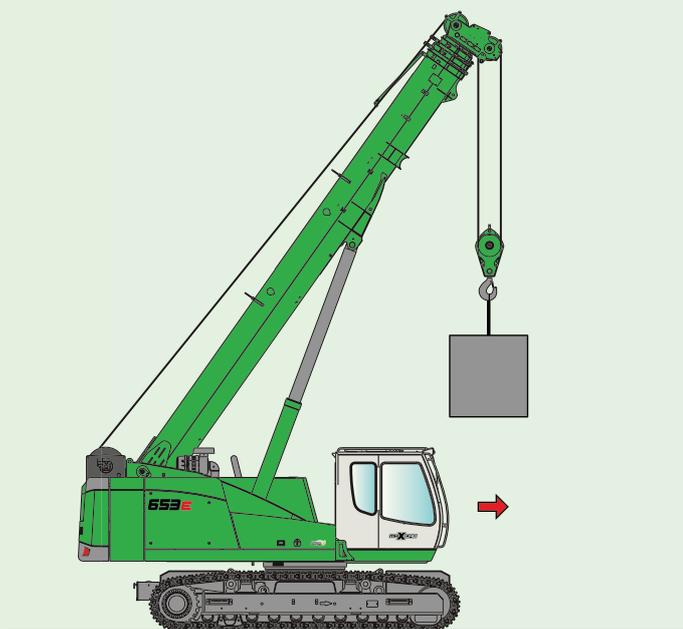
## Large operating range

- 30.4-meter boom length
- With fly boom extendable to 36.9 m or 43.4 m

## Easy and flexible work - saves time

- Precision hydraulics allow telescoping to any boom length quickly
- Intuitive joystick control
- Ready to go in no time, even with varying work heights
- Always the ideal boom length in no time at all

Unlimited telescoping from 9.4 - 30.4 m



## Unique flexibility on site

- Moveable even under high loads
- Excellent maneuverability thanks to strong undercarriage traction
- Easy, inexpensive transport and short setup time

## Telescopic undercarriage

- Maximum stability due to long, telescopic crawler chassis with large outrigger area
- Low ground pressure due to wide crawler shoes, reliable stability even during dynamic tasks
- Robust tractor chassis and well sized travel drive for maximum all-terrain movement

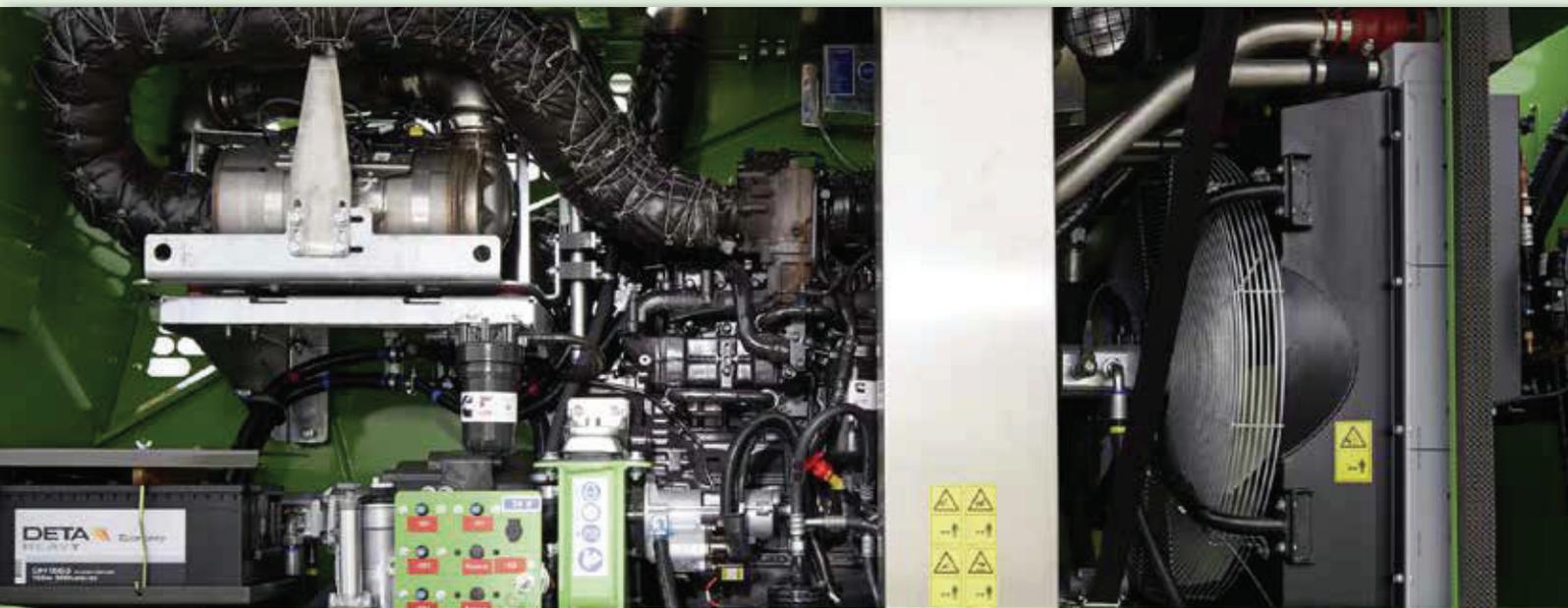


# 653E Modern. Flexible.



## Hoisting winches

- Two hoisting winches working side by side
- Compact machine with small rear radius



## Quiet operation

- Consistently quiet operation due to decoupled engine mounts and soundproofing
- Sound pressure level in accordance with 2000/14/EC lower than required

## Straightforward engine compartment

- Service-friendly design
- Engine Stage IIIa emission standards
- Engine Stage IV emission standards incl. AdBlue supply



The premium cab.

Panoramic view

## Features

- optimum cab climate with automatic air conditioning system, partial tinted glass
- pleasant and equal temperature dispersion by means of 9 nozzles
- panoramic view
- climatic comfort seat with air suspension and air conditioning\*
- very quiet through optimized noise insulation
- Highest safety & comfort with sliding door, wide door opening
- ergonomically arranged operating controls for fatigue-free and relaxed working
- 12 V, 24 V, and USB charging sockets hands-free telephone preparation, document box
- various options: electric cooler behind`s, protective covers, seat air conditioning

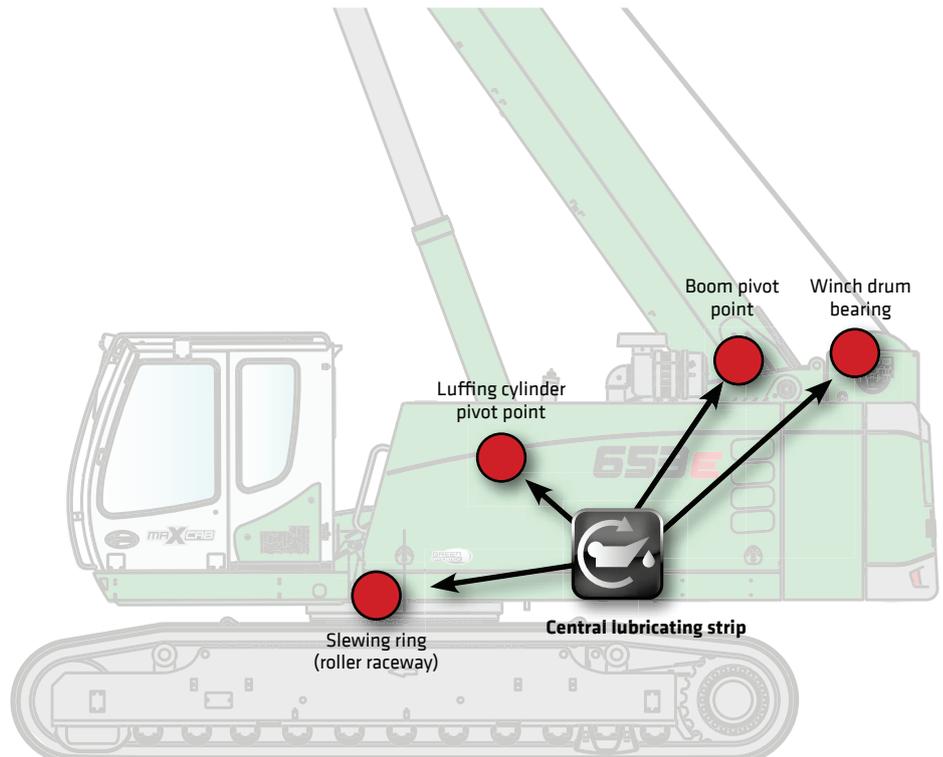
## Our SENNEBOGEN joysticks

- consoles and ergonomic joysticks that move with the seat
- pleasant grip through ergonomic design
- precise control of all movements through direct and sensitive function activation
- quick access to all operating controls through optimized design of all push-buttons and switches

# 653E Maintenance and service made easy

## Simplest service

- Central, easily accessible lubricating strip
- Optional: central lubrication system for automatic lubrication



## HydroClean\*

- 3- $\mu$ m microfilter for optimal protection of hydraulic components
- Cleaner hydraulic oil, extended oil service life
- With water separator



## Walkways on both sides

- Platform next to cab for more safety while entering and exiting
- Platforms along left and right sides of uppercarriage for safe maintenance



## Optimized for maintenance

- Fast and easy troubleshooting thanks to straightforward and clearly labeled electrical distributor
- Easy access to all service points on the machine

\* Option

# 653E Technical data, equipment

## MACHINE TYPE

Model (type) **653**

## ENGINE

Model	Cummins QSB 4.5 diesel motor, <b>119 kW/162 hp at 2,200 rpm</b> Stage IIIa emission standard
	Cummins QSB 4.5 diesel motor, <b>129 kW/175 hp at 2,200 rpm</b> Stage IV emission standard
	Direct injection, turbo-charged, charge air cooling, reduced emissions
Cooling	Water-cooled
Diesel filter	With water separator and heating system
Air filter	Dry filter with integrated pre-separator, automatic dust discharge, main element and safety element, contamination indicator
Fuel tank	<b>360 l</b>
AdBlue tank	<b>38 l</b>
Electrical system	<b>24 V</b>
Batteries	<b>2 x 155 AH</b> battery disconnect switch
Options	<ul style="list-style-type: none"> <li>■ Low-temperature package with engine pre-heating and heated diesel filter for temperatures below -20 °C</li> <li>■ Electric fuel pump</li> </ul>

## UPPERCARRIAGE

Design	Torsion-resistant box design, precision crafted, steel bushings for boom bearings. Extremely service-friendly design, longitudinal engine
Electrical system	Central electrical distributor, battery disconnect switch
Cooling system	3-circuit cooling system with high cooling capacity, electronically regulated fan drive for water, charge air and oil cooler
Safety	Rearview and right sideview cameras, LED lighting package
Options	<ul style="list-style-type: none"> <li>■ Additional LED headlights</li> <li>■ Up to 2 additional cameras</li> <li>■ Anti-corrosive maritime climate varnish</li> <li>■ Low-temperature package for use at temperatures below -20 °C</li> </ul>

Options	<ul style="list-style-type: none"> <li>■ Automatic central lubrication for boom pivot point, luffing cylinder, slewing ring track and winch drum bearing</li> <li>■ Pinion tooth lubrication for slewing ring</li> </ul>
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## HYDRAULIC SYSTEM

Load sensing/LUDV hydraulic system, electrohydraulic pilot-controlled work functions, load limit sensing control	
Pump type	Swashplate-type variable-displacement piston pump, load pressure-independent flow distribution for simultaneous, independent control of work functions
Pump control	Zero-stroke control, on-demand flow control – the pumps only pump as much oil as will actually be used, pressure purging, load limit sensing control
Operating pressure	<b>max. 330 bar</b>
Filtration	High-performance filtration with long change interval
Hydraulic tank	<b>500 l</b>
Control system	Proportional, precision electrohydraulic actuation of work movements, 2 electric servo joysticks for work functions, including winch motion display via vibration transducer, additional functions via switches and pedals
Safety	Hydraulic circuits secured with safety valves Pipe fracture safety valve for luffing and telescoping cylinders
Options	<ul style="list-style-type: none"> <li>■ Bio-oil</li> <li>■ SENNEBOGEN HydroClean 3-µm hydraulic microfilter</li> <li>■ Electric heater for hydraulic tank for temperatures below -20 °C</li> </ul>

## SLEWING DRIVE

Gearbox	Compact planetary gear with slant-axis hydraulic motor, integrated brake valves
Slewing gear brake	Spring-loaded disk brake, pedal for individual braking
Slewing ring	Externally geared slewing ring, sealed
Slewing speed	<b>0 – 2 rpm, variable</b>

# 653E Technical data, equipment

CAB 	
Cab type	Maxcab, 15° tiltable
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 USB connections, SENCON, roof window, sliding windows on the driver's side
Options	<ul style="list-style-type: none"> <li>■ Cab type E270, can be elevated 270 cm</li> <li>■ Cab can be tilted 15°</li> <li>■ Auxiliary heating system with timer</li> <li>■ Cabs with active carbon filter inside/outside air</li> <li>■ Armored-glass windshield</li> <li>■ Armored-glass sunroof</li> <li>■ Safety side window and rear window</li> <li>■ Sunblind for windshield</li> <li>■ Protective roof grating</li> <li>■ FOPS protective roof grating</li> <li>■ Protective front grating</li> <li>■ Radio with speakers</li> <li>■ electrical cooler</li> </ul>

ATTACHMENTS	
Design	Decades of experience, state-of-the-art computer simulation, maximum stability, longest service life, oversized, low-maintenance bearing points, sealed special bearing bushes, precision-crafted
Telescopic boom	4-piece with pulley head, continuous hydraulic telescoping from 9.4 - 30.4 m
Hoisting winch	Slant-axis hydraulic motor drive with compact planetary gear, 50 kN pulling power (4th layer), 0 - 115 m/min. cable speed, 16 mm cable diameter, 170 m cable length. Winch motion display via vibration transducers in the joysticks
Safety brake	Spring-loaded disk brake
Crane safety	Next-generation load moment monitoring, straightforward panel displaying all important data through SENCON display, lifting limit switch, cable exit protection, pressure relief valves and pipe fracture safety device with event recorder
Cylinders	Hydraulic cylinders with high-quality sealing and guide elements

Options	<ul style="list-style-type: none"> <li>■ 6.5-m fly boom, tiltable (0°, 40°), extremely fast and easy setup without auxiliary devices, locked on basic boom when not in use</li> <li>■ Fly boom extension to 13 m, tiltable (0°, 40°)</li> <li>■ Auxiliary jib, 5-t load capacity, 1-strand</li> <li>■ 2nd crane winch with 50 kN pulling power (4th layer), 0 - 115 m/min. cable speed, 16 mm cable diameter and 170 m cable length</li> <li>■ Additional load charts accepted for 2°/4° incline position</li> <li>■ 7,5-kW electrohydraulic emergency unit</li> <li>■ Remote radio control</li> <li>■ Working range restriction</li> </ul>
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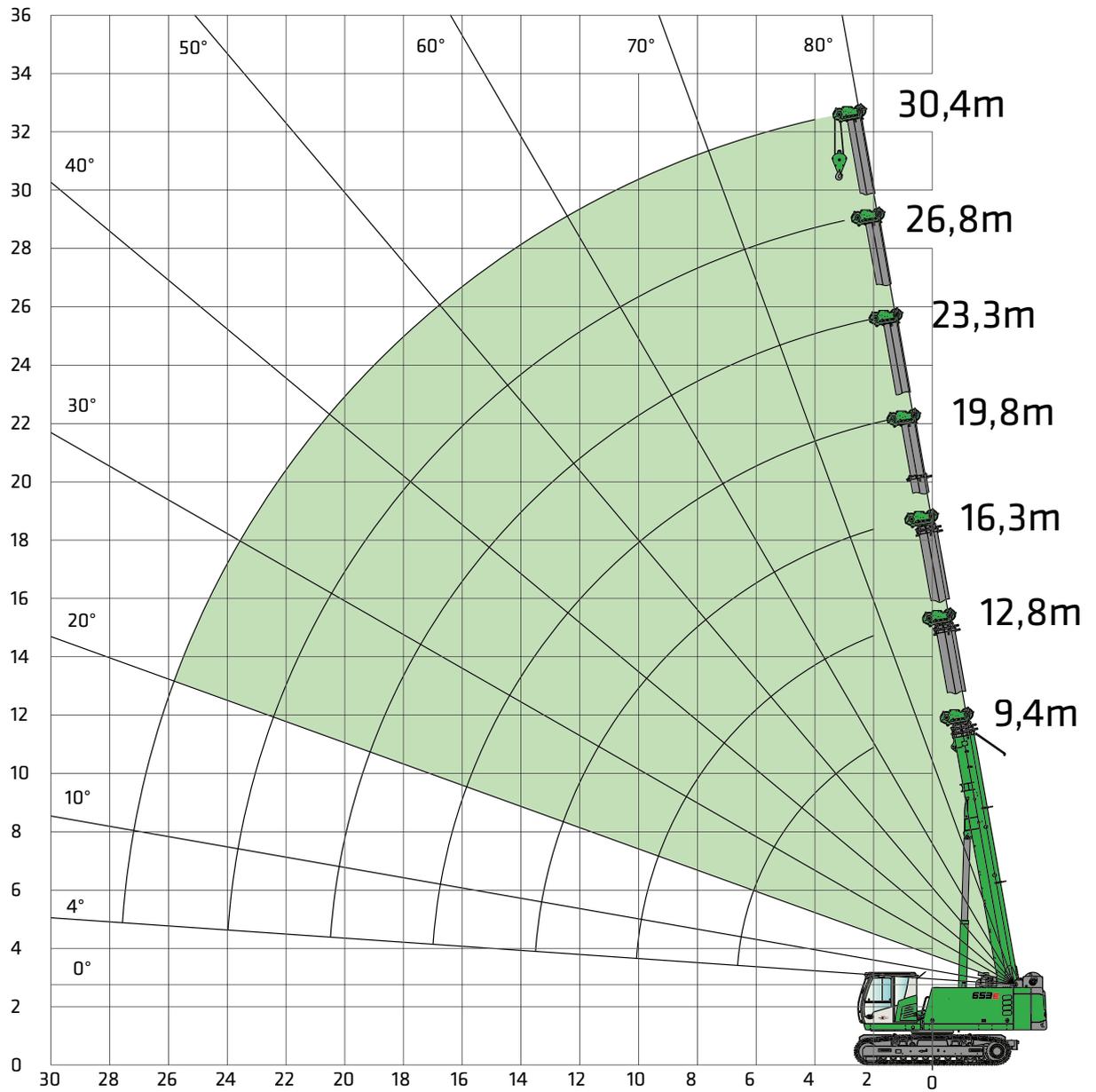
UNDERCARRIAGE	
Design	<b>T41/380</b> crawler undercarriage with hydraulically extendable track width. Stable welded construction.
Drive	Hydraulic travel drive for each running gear side, variable displacement hydraulic travel motors
Parking brake	Spring-loaded, hydraulically ventilated disk brake
Traveling gear	700-mm 3-grouser crawler shoes, maintenance-free tractor chassis
Speed	<b>0 - 2.9 kph</b>
Options	Available crawler shoe types: <ul style="list-style-type: none"> <li>■ 800-mm triple-bar-shoes</li> <li>■ 900-mm triple-bar-shoes</li> <li>■ 700-mm flat crawler shoes</li> </ul>

OPERATING WEIGHT	
Mass	<p><b>Approx. 50,200 kg</b></p> <p>With 30.4-m telescopic boom, 13-m fly boom, 35-t hook, 700-mm 3-grouser crawler shoes, 2 hoisting winches, hydraulically telescoping undercarriage, 8.9-t ballast, 5.5-t undercarriage ballast</p>
Note	<p>The operating weight varies according to model type.</p> 

# 653E Crane equipment



30.4-m main boom (HA)



Hook

Capacity	Weight	Rope 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-pulley	190 kg								15,000 kg	10,000 kg	5,000 kg	
35 t 3-pulley	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-pulley	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	

# 653E Load ratings



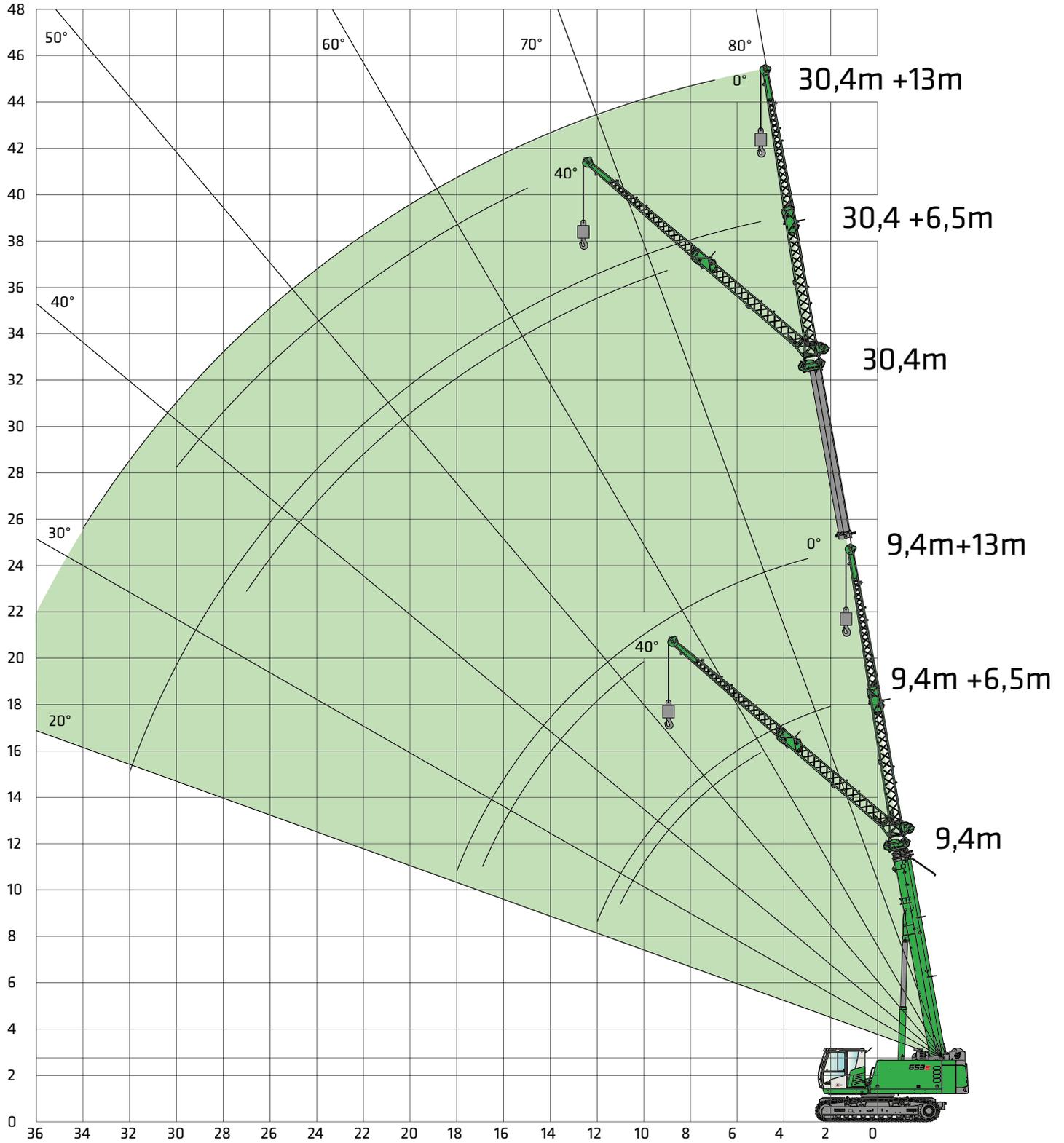
30.4-m main boom (HA)

	Boom length [m]																				
	9.4			12.8			16.3			19.8			23.3			26.8			30.4		
Counterweight [t]																					
Carbody counterweight [t]																					
Undercarriage track width [m]																					
<b>Outreach [m]</b>																					
<b>2.0</b>	50,0	40,0		31,0	31,0		28,0	26,0		15,6	15,6		14,5	14,5							
<b>3.0</b>	45,0	40,0		31,0	31,0		25,0	24,4		15,6	15,6		14,5	14,5		12,7	12,7				
<b>4.0</b>	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
<b>5.0</b>	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
<b>6.0</b>	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
<b>7.0</b>				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
<b>8.0</b>				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
<b>9.0</b>				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
<b>10.0</b>							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
<b>11.0</b>							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
<b>12.0</b>							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
<b>13.0</b>							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
<b>14.0</b>										6,0	4,5	3,4	6,2	4,7	3,6	6,3	4,9	3,8	5,9	5,0	3,9
<b>15.0</b>										5,4	3,9	2,9	5,6	4,2	3,2	5,8	4,4	3,3	5,6	4,5	3,5
<b>16.0</b>										4,8	3,5	2,5	5,0	3,7	2,8	5,2	3,9	2,9	5,2	4,0	3,1
<b>17.0</b>													4,5	3,3	2,4	4,7	3,5	2,6	4,9	3,6	2,7
<b>18.0</b>													4,1	2,9	2,1	4,3	3,1	2,3	4,4	3,2	2,4
<b>19.0</b>													3,7	2,6	1,8	3,9	2,8	2,0	4,1	2,9	2,1
<b>20.0</b>													3,3	2,3	1,5	3,6	2,5	1,7	3,7	2,6	1,9
<b>21.0</b>																3,3	2,2	1,5	3,4	2,4	1,6
<b>22.0</b>																3,0	2,0	1,3	3,1	2,1	1,4
<b>23.0</b>																2,7	1,8	1,1	2,9	1,9	1,2
<b>24.0</b>																			2,6	1,7	1,1
<b>25.0</b>	Tab.-Nr.: 653R-75/1977/8.9+5,5/10.14 HA 0,3°																		2,4	1,5	0,9
<b>26.0</b>	Tab.-Nr.: 653R-75/1577/8.9+5,5/10.14 HA 0,3°																		2,2	1,3	0,7
<b>Parts reeving</b>	4	10	10	3	8	8	3	6	6	2	4	4	2	4	4	2	4	4	1	4	4
I	0%			50%			100%			100%			100%			100%					
II	0%			0%			0%			25%			50%			75%					
III	0%			0%			0%			25%			50%			75%					
<i>Reduction of load</i>	580			420			330			270			230			200			180		

# 653E Crane equipment



6.5-m or 13-m fly jib (SA)



# 653E Load ratings



6.5-m fly jib (SA)

8.9 t	5.5 t	Telescopic boom length [m]							
		9.4		16.3		23.8		30.3	
3.8 m		0°	40°	0°	40°	0°	40°	0°	40°
<b>Working radius [m]</b>									
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	
33.0									
<b>Parts reeving</b>		<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>
I		0%		100%		100%		100%	
II		0%		0%		50%		100%	
III		0%		0%		50%		100%	

Table no.: 653R-75/1977/8.9 t + 5.5/10.14 SA6.5 0.3°

# 653E Load ratings



13-m fly jib (SA)

8.9 t	5.5 t	Telescopic boom length [m]							
		9.4		16.3		23.8		30.3	
3.8 m		0°	40°	0°	40°	0°	40°	0°	40°
<b>Working radius [m]</b>									
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	
<b>Parts reeving</b>		<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>
I		0%		100%		100%		100%	
II		0%		0%		50%		100%	
III		0%		0%		50%		100%	

Table no.: 653R-75/1977/8.9+5.5/10.14 SA13 0.3°

# 653E Load ratings



Auxiliary jib (HA-S)

	Boom length [m]																				
	9.4			12.8			16.3			19.8			23.3			26.8			30.4		
Counterweight [t]	8.9  8.9  8.9  8.9  8.9  8.9  8.9  8.9  8.9  8.9  8.9  8.9  8.9  8.9  8.9  8.9  8.9  8.9																				
Carbody counterweight [t]	5.5  5.5  5.5  5.5  5.5  5.5  5.5  5.5  5.5  5.5  5.5  5.5  5.5  5.5  5.5  5.5  5.5  5.5  5.5																				
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																				
Working radius [m]																					
2.0	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					
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7.0		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		
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		
10.0				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		
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		
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		
14.0										5,0	4,6	3,5	5,0	4,8	3,7	5,0	5,0	3,8	5,0		
15.0										5,0	4,0	3,0	5,0	4,3	3,2	5,0	4,4	3,4	4,4		
16.0										4,2	3,6	2,6	4,4	3,8	2,8	4,9	4,0	3,0	4,1		
17.0										3,7	3,1	2,2	3,9	3,4	2,5	4,1	3,5	2,6	3,9		
18.0													3,6	3,0	2,1	3,7	3,2	2,3	3,8		
19.0													3,2	2,7	1,8	3,4	2,9	2,0	3,5		
20.0													2,8	2,4	1,6	3,0	2,6	1,8	3,2		
21.0																2,8	2,3	1,5	2,8		
22.0																2,5	2,0	1,3	2,7		
23.0																2,3	1,8	1,1	2,4		
24.0																2,0	1,6	0,9	2,2		
25.0	Tab.-Nr.: 653R-75/1977/8.9+5.5/10.14 HA-S 0,3°																				
26.0	Tab.-Nr.: 653R-75/1577/8.9+5.5/10.14 HA-S 0,3°																				
Parts reeving	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%					
II	0%			0%			0%			25%			50%			75%					
III	0%			0%			0%			25%			50%			75%					
Reduction of load	580			420			330			270			230			200			180		



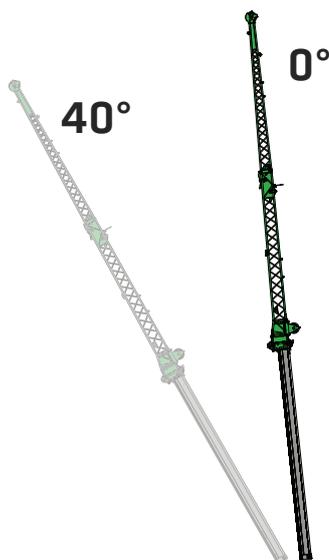
# 653E Load capacity programs

		Main boom (HA)			Auxiliary jib (HA-S)			6.5-m fly jib (SA)			13-m fly jib (SA)		
Counterweight [t]	Carbody counterweight [t]												
		Undercarriage track width			Undercarriage track width			Undercarriage track width			Undercarriage track width		
		360° 	360° 	360° 	360° 	360° 	360° 	360° 	-	-	360° 	-	-

## Note:

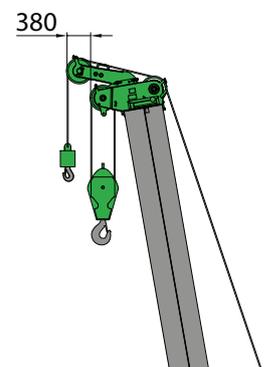
1. Specified load ratings only apply when machine is level ( $\pm 0.3^\circ$ ) and stable.
2. Load ratings are in tons (t) and apply for 360 degrees.
3. Load ratings are in accordance with EN 13000.
4. The weight of the load handling devices (e.g., hook, cable) must be subtracted from the load ratings.
5. 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 load, operator inexperience, driving with load.
6. Permissible cable pull per strand in crane mode for cable diameter 16 mm – 5,000 kg.
7. Specified load ratings are for reference only. See the tables in the operating manual for the applicable load rating.
8. Optional load capacities available for 2° and 4° incline positions.

## 653E Fly boom

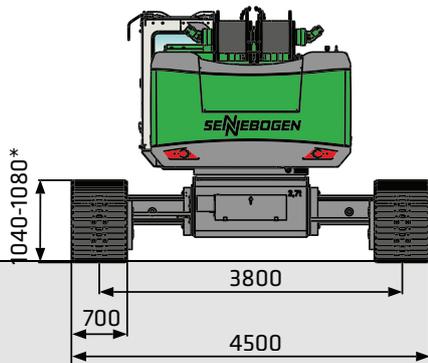


### Fly boom variants

- **6.5 m fly boom**  
Max. 2-strand, possible offset angle 0°/40°
- **13 m fly boom**  
with 6.5 m extension,  
1-strand, offset angle 0°/40°
- **Auxiliary jib**  
5 t load capacity, 1-strand



# 653E Transport dimensions and weights

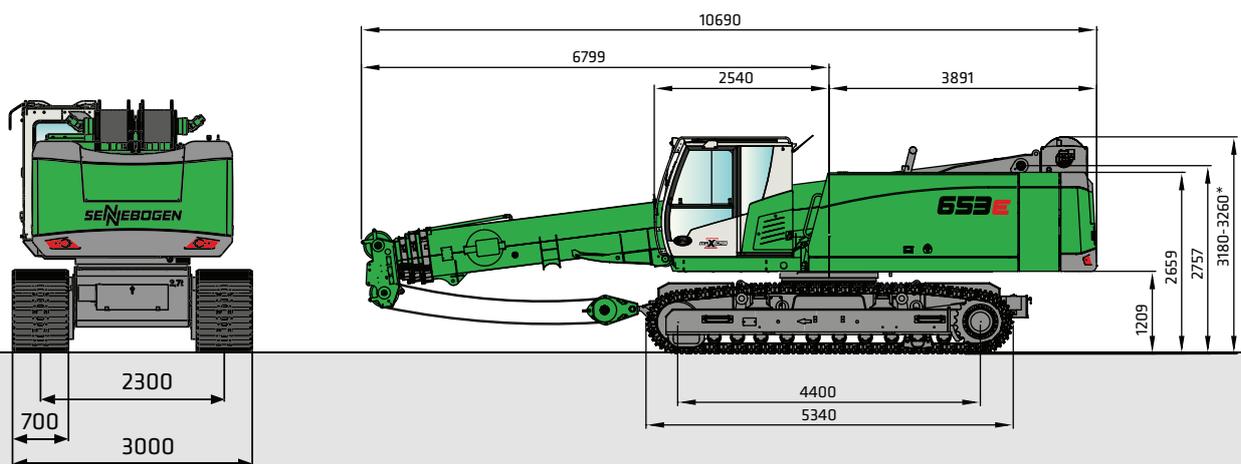


crawler shoes	min. transport width
700 mm	3000 mm
800 mm	3300 mm
900 mm	3400 mm

653 with T41/380 undercarriage and 700-mm 3-grouser crawler shoes

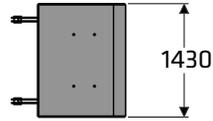
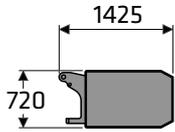
Operating weight: approx. 50,200 kg

(with 13-m fly boom, 2 hoisting winches, 8.9-t counterweight, 5.5-t undercarriage ballast and 35-t hook)



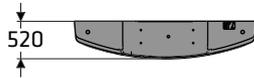
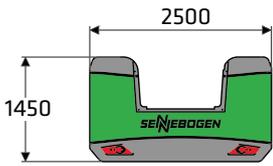
Transport weight: approx. 44,700 kg (13-m fly boom, 2 hoisting winches, without undercarriage ballast)  
 approx. 50.200 kg (13-m fly boom, 2 hoisting winches, with undercarriage ballast)

# 653E Transport dimensions and weights



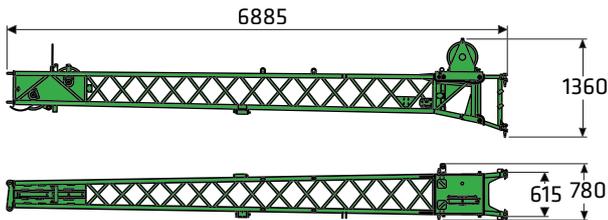
**Undercarriage ballast**

2x 2,750 kg



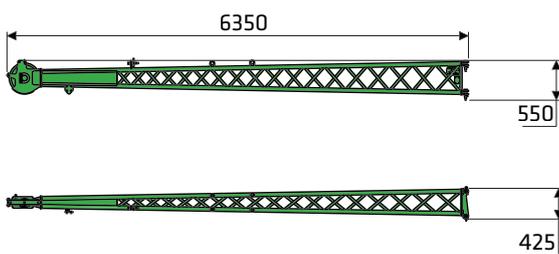
**Counterweight**

7,000 kg



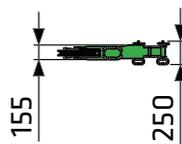
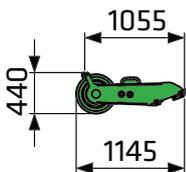
**6.5-m fly boom**

600 kg



**6.5-m fly boom extension**

250 kg



**5-t auxiliary jib**

50 kg

# 653E



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 in a tolerance range depending on the country to which the machines are delivered, especially in regard to standard and optional equipment

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