



**283** kW



**55** t



**49.5** m



**MAXCAB**

# 655E

Heavy-Duty Cycle Crane

# 655E Advanced. The E-Series.



## What makes up the E-Series

- 65 years of experience in designing and constructing duty cycle cranes
- Uncompromisingly high performance in all areas
- Technology that can be mastered: High-quality components without over-engineering
- Long service life and high value retention

1969: The first fully hydraulic duty cycle crane anywhere in the world, SK 15

## Your top benefits

1

### Green Efficiency

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



2

### Top-level performance

Durable mechanical systems - stressed parts optimized  
High speeds - high load capacities

3

### Ultimate ease of use

Maxcab comfort cab - work in comfort  
SENCON - work program selection made easy



4

### Flexible operation

Drive with a full load - small space requirements  
Strong undercarriage traction - good off-road mobility

5

### Easy to transport

Telescopic undercarriage - quickly deployable  
Ballast filling system - short set-up time

6

### Maintenance and service made easy

SENNEBOGEN control system - easy diagnosis  
Simple maintenance - clear labeling

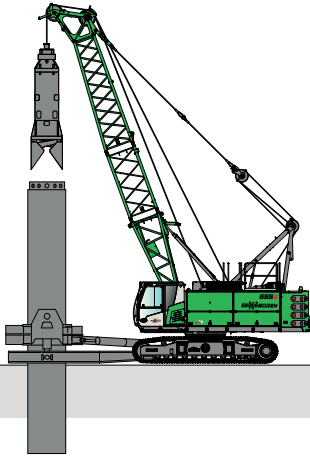
7

### Consultation and support in your area

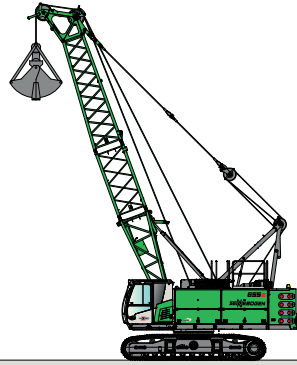
3 production sites - 2 subsidiaries  
180 sales partners - over 350 service stations

Subject to technical changes. Additional options available upon request.

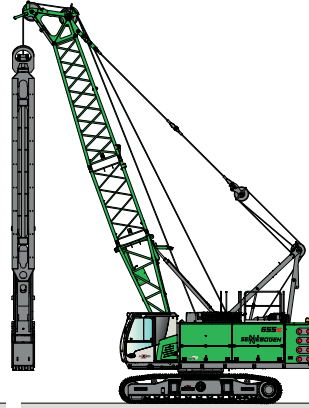
with casing machine



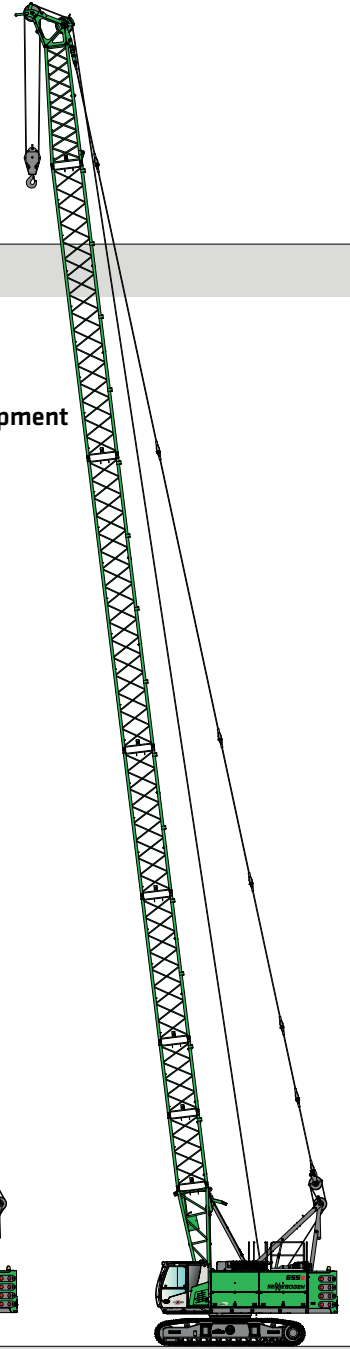
with grab equipment



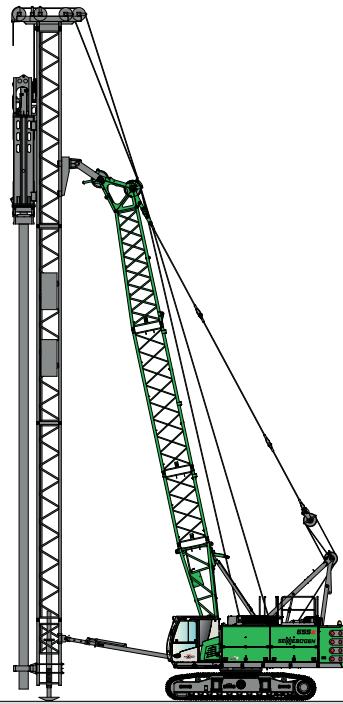
with diaphragm wall grab



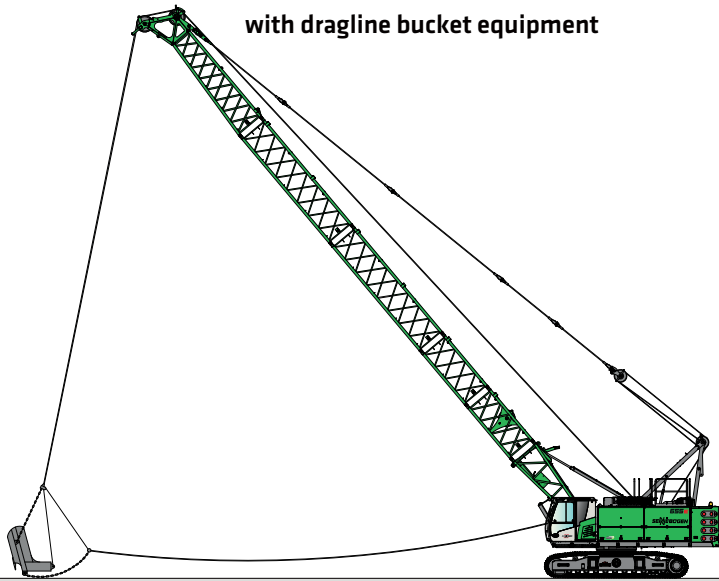
with crane equipment



with leader



with dragline bucket equipment



# 655E Technical data, equipment

## MACHINE TYPE

Model (type) **655**

## ENGINE

Power	<b>283 kW / 385 hp at 1800 min<sup>-1</sup></b>
Model	<b>Cummins L9 283 kW at 1800 min<sup>-1</sup> (Stage V)</b> <b>Cummins QSL9 254 kW at 1800 min<sup>-1</sup> (Stage IIIa)</b> Direct injection, turbocharged, charge air cooling, reduced emissions
Cooling	water-cooled
Air filter	Dry filter with pre-separator, automatic dust discharge, main element and safety element, contamination indicator
Fuel tank	<b>460 l</b>
Electr. system	<b>24 V</b>
Batteries	<b>2 x 155 Ah</b> , main switch

## UPPERCARRIAGE

Design	Torsion-resistant box design, precision crafted, bronze bushings for boom mountings  Clear, service-friendly design, engine installed in the longitudinal direction
Lighting	LED headlights for optimal lighting of the work area
Safety	Camera monitoring of rear area and right-hand side
Options	<ul style="list-style-type: none"> <li>■ Low-temperature package for use at temperatures below -20 °C</li> <li>■ Automatic pinion tooth lubrication for slewing ring</li> <li>■ Automatic internal central lubrication system for equipment and slewing ring</li> <li>■ Sea climate resistant coating as corrosion protection</li> <li>■ Walkways on left and right of uppercarriage with railings</li> <li>■ Ballast support fixture</li> </ul>

## HYDRAULIC SYSTEM

**Multi-circuit hydraulic system** for optimum functionality and performance, all movements can be operated simultaneously. The hydraulic pumps are variable displacement piston pumps with individual control and energy-saving flow-on-demand control. The pumps only pump as much oil as will actually be used. Pressure purging, load limit control

Flow rate	<b>max. 3 x 310 l/min</b>
Operating pressure	<b>up to 330 bar</b>

Filtration	High-performance filtration with long change interval, contamination indicator
Hydraulic tank	<b>690 l (565 l up to middle of sight glass)</b>
Control system	Proportional, precision hydraulic servo control of the movements, 2 servo joysticks for work functions, additional functions via switches and foot pedals - arranged clearly and ergonomically
Options	<ul style="list-style-type: none"> <li>■ Bio-oil filling</li> <li>■ SENNEBOGEN HydroClean micro-filter system with water separator</li> <li>■ Potentiometer for casing machine and other attachments</li> <li>■ Grab filling mechanism</li> <li>■ Auxiliary hydraulics with 1 x 200 l/min</li> </ul>

## ROTARY DRIVE

Gearbox	Compact planetary gears with bent-axis hydraulic engine, integrated brake valves - positionable swing bearing brake
Parking brake	Spring-loaded multi-disk brake
Slewing ring	Ball bearing supported ring with external teething
Slewing speed	0-4.5 min <sup>-1</sup> , 3 adjustable slewing speeds
Options	<ul style="list-style-type: none"> <li>■ Second turning drive</li> <li>■ Reinforced slewing ring for heavy dynamic operations</li> </ul>

## CAB



Cab type	Maxcab, fixed
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, skylight, sliding window in operator door
Options	<ul style="list-style-type: none"> <li>■ 270 cm hydraulically elevating cab type E270</li> <li>■ Cab tiltable by 20°</li> <li>■ Auxiliary heating system with timer</li> <li>■ In cab active carbon filter for internal/external air</li> <li>■ Bullet proof windshield</li> <li>■ Bullet proof skylight</li> <li>■ Safety side window and rear window</li> <li>■ Sunblind for windshield</li> <li>■ Protective roof grating, FOPS protective roof grating</li> <li>■ Protective front grating</li> <li>■ Radio with speakers</li> <li>■ Electric cooling box</li> </ul>



# 655E Technical data, equipment

## EQUIPMENT

Design	Decades of experience, state-of-the-art computer simulation, greatest degree of stability and longest service life
Boom adjustment winch	Bent-axis hydraulic engine drive with compact planetary gear, 52 kN tensile force, cable diameter 14 mm, adjustment speed 30° to 80° in approx. 40 sec.
Safety brake	Spring-loaded multi-disk brake
Boom	Boom length up to 49.5 m
Options	<ul style="list-style-type: none"> <li>■ Auxiliary boom for load capacities of up to 12 t</li> <li>■ Fixed fly up to 18 m</li> <li>■ Steel cable rollers</li> <li>■ Auxiliary cable rollers for grab operation</li> <li>■ HD cable rollers for working with optimized cable guidance</li> <li>■ Load moment limitation for lifting gear operation: latest generation of load moment monitoring, display shows all important data, lifting limit switch, pressure relief valves, cable exit protection</li> </ul>

## UNDERCARRIAGE

Design	Heavy-duty T47/370 crawler undercarriage with hydraulically extendable track width and integrated protected drive transmission. Stable welded construction.
Drive	Strong travel drive with axial piston hydraulic engine and directly attached automatically functioning brake valve and compact planetary gears on each running gear side
Parking brake	Spring-loaded multi-disk brake
Traveling gear	Maintenance-free B6 tractor chassis with hydraulic chain tension, triple grouser shoes, chain width 700 mm
Speed	<b>0 - 2.0 km/h</b>
Options	<ul style="list-style-type: none"> <li>■ 700 mm flat track shoes (transport width 3000 mm)</li> <li>■ 800 mm flat track shoes (transport width 3200 mm)</li> <li>■ 800 mm triple grouser shoes (transport width 3200 mm)</li> <li>■ Pipework connections on undercarriage</li> <li>■ Undercarriage version T47/340</li> </ul>

## WINCH

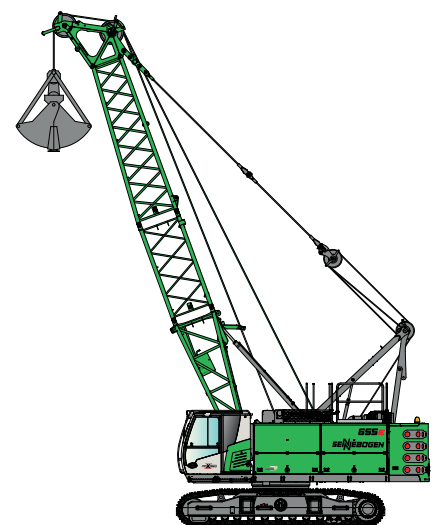
The winches are driven via high-pressure-regulated adjustable hydraulic engines, so there is always optimal pulling force speed control. Hydraulic lowering brake valves for sensitive, wear-free braking. Strong oil bath planetary gears, low-maintenance.

Crane brake and free-fall brake are spring-loaded, maintenance-free, low-wear disc brakes run in the oil bath, oil-cooled. The individual, variably adjustable free-fall brakes actively support the operator, prevent slack cable and protect the machine

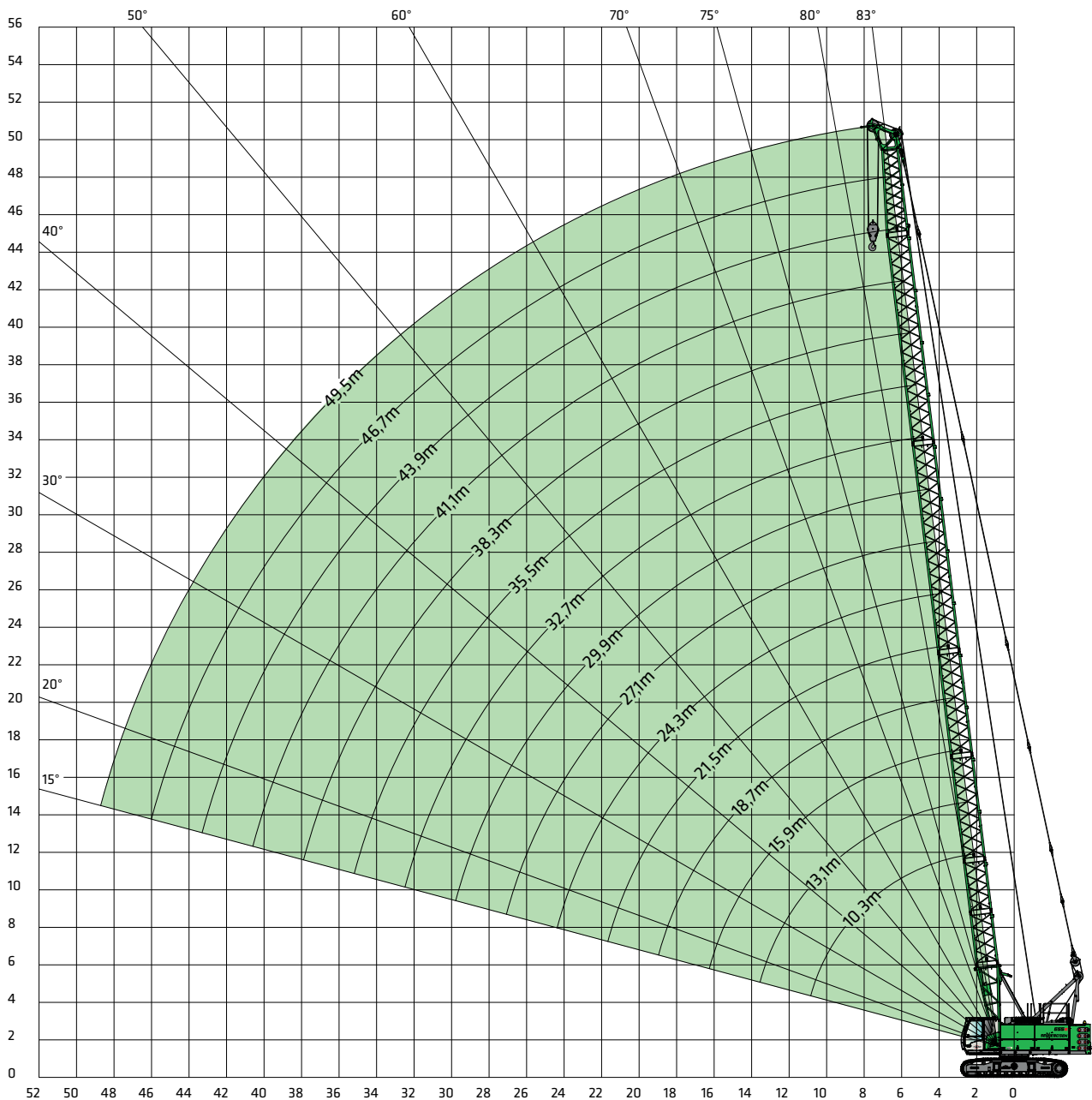
	<b>Standard</b>
<b>Winches</b>	16 t
Cable pull (nominal load) 1st position	160 kN
Cable diameter	26 mm
Cable speed 2nd position	0-115 m/min
Options	<ul style="list-style-type: none"> <li>■ Tagline winch 18 kN</li> <li>■ Tagline winch 30 kN</li> <li>■ Cable tension pulley</li> <li>■ Depth measuring device</li> <li>■ Winch synchronization</li> </ul>

## OPERATING WEIGHT

Mass	<b>approx. 59,000 kg</b>
	655 HD with 2 x 16 t freefall winches, basic boom 10.3 m, counter weight 18 t, 40 t loading hook, 700 mm triple grouser shoes
Note	Operating weight varies by model and equipment.



# 655E Load capacities SH - main boom



		Boom configuration														
Boom length		10.3	13.1	15.9	18.7	21.5	24.3	27.1	29.9	32.7	35.5	38.3	41.1	43.9	46.7	49.5
Boom lower section type 1402.52	4.4 m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boom section type 1402.52 (DL) *	2.8 m	0	0 (1)	0 (1)	0 (1)	0 (1)	0 (1)	0 (1)	0	0	0	0	0	0	0	0
Boom section type 1402.52	2.8 m	0	1 (0)	2 (1)	1 (0)	2 (1)	1 (0)	2 (1)	1	2	1	2	1	2	1	2
Boom section type 1402.52	5.6 m	0	0	0	1	1	2	2	1	1	2	2	1	1	2	2
Boom section type 1402.52	11.2 m	0	0	0	0	0	0	0	1	1	1	1	2	2	2	2
Boom head piece type 1402.52	5.9 m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
S12.4 auxiliary boom (optional)	12.0 t	x	x	x	x	x	x	x	x	x	x	x	x	x	x	

\* The 2.8 m type 1402.52 (DL) boom section is only needed to use the dragline bucket; the ratings in ( ) apply to dragline bucket operation

# 655E Load capacities SH - main boom

# HD



with telescoping undercarriage T47/370

Reach [m]	Boom length [m]														
	10.3	13.1	15.9	18.7	21.5	24.3	27.1	29.9	32.7	35.5	38.3	41.1	43.9	46.7	49.5
2.7	55.0														
3.0	55.0	55.0	55.0/3.4	52.0/3.7											
4.0	47.9	47.9	47.8	47.8	47.7	41.6/4.4	36.8/4.8								
5.0	40.8	40.8	40.8	40.1	38.2	36.5	34.9	32.9/5.1	29.7/5.4	27.0/5.8					
6.0	33.7	33.6	33.5	32.7	31.4	30.2	29.1	28.0	27.1	26.0	24.8/6.1	22.5/6.4	19.8/6.8		
7.0	26.8	26.7	26.6	26.5	26.3	25.6	24.8	23.9	236.5	22.4	21.7	21.0	19.5	16.8/7.1	13.0/7.5
8.0	22.2	22.0	21.9	21.8	21.6	21.6	21.4	20.8	20.2	19.5	19.0	18.4	17.9	15.8	12.7
9.0	18.8	18.7	18.5	18.4	18.3	18.2	18.1	18.1	19.9	17.3	16.9	16.3	15.9	14.6	12.0
10.0	16.3	16.2	16.0	15.9	15.7	15.7	15.5	15.6	15.4	15.3	15.1	14.5	14.3	13.5	11.3
11.0	14.0	14.2	14.1	14.0	13.8	13.8	13.6	13.6	13.4	13.3	13.2	13.1	12.8	12.3	10.6
12.0		12.7	12.5	12.4	12.2	12.1	12.0	12.0	11.9	11.7	11.6	11.6	11.5	11.2	9.9
13.0		11.4	11.2	11.1	10.9	10.9	10.7	10.7	10.6	10.4	10.3	10.3	10.2	10.0	9.2
14.0		10.7/13.7	10.2	10.0	9.9	9.8	9.6	9.6	9.5	9.3	9.2	9.2	9.1	8.9	8.5
15.0			9.3	9.1	9.0	8.9	8.7	8.7	8.6	8.4	8.3	8.3	8.1	8.0	7.8
16.0			8.5	8.4	8.2	8.1	7.9	7.9	7.8	7.6	7.6	7.5	7.4	7.2	7.1
17.0			8.2/16.4	7.7	7.5	7.4	7.3	7.3	7.1	7.0	6.8	6.8	6.7	6.5	6.4
18.0				7.1	6.9	6.8	6.7	6.7	6.5	6.4	6.2	6.2	6.1	5.9	5.8
19.0				6.7	6.4	6.3	6.1	6.1	6.0	5.8	5.7	5.7	5.5	5.4	5.3
20.0				6.6/19.1	6.0	5.9	5.7	5.7	5.5	5.4	5.2	5.2	5.1	4.9	4.8
22.0					5.3/21.8	5.1	4.9	4.9	4.7	4.6	4.4	4.4	4.3	4.1	4.0
24.0						4.5	4.3	4.3	4.1	3.9	3.8	3.8	3.6	3.5	3.3
26.0						4.3/24.5	3.8	3.7	3.6	3.4	3.2	3.2	3.1	2.9	2.8
28.0							3.5/27.2	3.3	3.1	3.0	2.8	2.8	2.6	2.5	2.3
30.0								2.9/29.9	2.7	2.6	2.4	2.4	2.2	2.1	1.9
32.0									2.4	2.3	2.1	2.1	1.9	1.8	1.6
34.0									23/32.6	2.0	1.8	1.8	1.6	1.5	1.3
36.0										1.8/35.3	1.6	1.5	1.4	1.2	1.0
38.0											1.4	1.3	1.1	1.0	0.8
40.0												1.1	0.9	0.8	
42.0	Table no. 655R-80/1927/18.0/10.11 SH-HD											1.0/40.7	0.8		
<b>Number of falls</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>

**Notes:**

1. The load ratings given apply when the machine is on a firm and level surface.
2. The load ratings are given in tons and apply 360 degrees.
3. The load capacities are in observance of standards ISO 4305 Tab. 1+2 as well as the tilt angle method (4° tilt angle)
4. The weight of the load handling equipment (hooks, suspension gear) should be deducted from the load capacities.
5. The load ratings apply for the maximum undercarriage track width.
6. 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.
7. Permissible cable pull per strand in crane mode for cable diameter 26 mm - 12,000 kg
8. The load ratings apply to the SH boom (boom assembly as per operating instructions)
9. The load ratings apply for optimal boom assembly and pulley head with plastic rollers.
10. The load ratings given are for reference only. Please refer to the operating instructions for the relevant applicable load ratings.

# 655E Load capacities SH - main boom

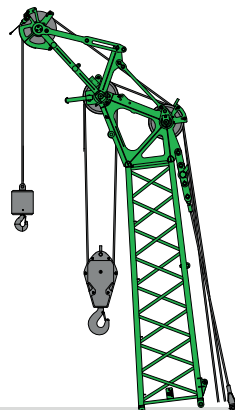


with telescoping undercarriage T47/340

18 t 3.4 m		Boom length [m]														
Reach [m]	10.3	13.1	15.9	18.7	21.5	24.3	27.1	29.9	32.7	35.5	38.3	41.1	43.9	46.7	49.5	
2.7																
3.0				50.8/3.7												
4.0			49.4	47.0	43.6/4.1	38.2/4.4	33.8/4.8									
5.0		39.0	38.8	36.9	35.2	33.6	32.2	30.3/5.1	27.4/5.4	25.0/5.8						
6.0	30.9	30.8	30.6	30.2	29.0	27.9	26.8	25.9	24.9	24.1	22.9/6.1	21.0/6.4	19.4/6.8			
7.0	24.7	24.6	24.4	24.3	24.2	23.7	22.9	22.1	21.4	20.7	20.1	19.5	18.9	16.8/7.1	13.0/7.5	
8.0	20.5	20.4	20.2	20.1	20.0	19.9	19.8	19.3	18.7	18.1	17.6	17.0	16.5	15.6	12.6	
9.0	17.5	17.3	17.2	17.1	17.0	16.8	16.8	16.7	16.5	16.0	15.5	15.1	14.7	14.2	11.8	
10.0	15.2	15.0	14.9	14.8	14.7	14.5	14.4	14.4	14.2	14.1	13.9	13.5	13.1	12.7	11.1	
11.0	13.4	13.3	13.1	13.0	12.8	12.7	12.6	12.6	12.4	12.3	12.2	12.1	11.8	11.4	10.3	
12.0		11.8	11.6	11.5	11.4	11.3	11.2	11.1	11.0	10.8	10.8	10.7	10.6	10.3	9.5	
13.0		10.6	10.5	10.3	10.2	10.1	10.0	9.9	9.8	9.6	9.6	9.5	9.4	9.2	8.0	
14.0		9.9/13.7	9.5	9.3	9.2	9.1	9.0	8.9	8.8	8.6	8.6	8.5	8.3	8.2	8.0	
15.0			8.6	8.5	8.4	8.2	8.1	8.1	7.9	7.8	7.7	7.6	7.5	7.4	7.2	
16.0			7.9	7.8	7.6	7.5	7.4	7.3	7.2	7.0	7.0	6.9	6.8	6.6	6.5	
6.9			7.7/16.4	7.2	7.0	6.9	6.8	6.7	6.5	6.4	6.3	6.3	6.1	6.0	5.8	
18.0				6.6	6.5	6.3	6.2	6.2	6.0	5.9	5.8	5.7	5.6	5.4	5.3	
19.0				6.2	6.0	5.9	5.7	5.7	5.5	5.4	5.3	5.2	5.1	4.9	4.8	
20.0				6.1/19.1	5.6	5.4	5.3	5.2	5.1	4.9	4.9	4.8	4.6	4.5	4.3	
22.0					4.9/21.8	4.7	4.6	4.5	4.3	4.2	4.1	4.0	3.9	3.7	3.6	
24.0						4.1	4.0	3.9	3.7	3.6	3.5	3.4	3.3	3.1	3.0	
26.0						4.0/24.5	3.5	3.4	3.2	3.1	3.0	2.9	2.8	2.6	2.5	
28.0							3.2/27.2	3.0	2.8	2.7	2.6	2.5	2.3	2.2	2.0	
30.0								2.7/29.9	2.5	2.3	2.2	2.1	2.0	1.8	1.7	
32.0									2.2	2.0	1.9	1.8	1.6	1.5	1.3	
34.0									2.1/32.6	1.8	1.6	1.5	1.4	1.2	1.1	
36.0										1.6/35.3	1.4	1.3	1.1	1.0	0.8	
38.0											1.2	1.1	0.9	0.8		
40.0												0.9				
42.0	Table no. 655R-80/1777/18.0/10.11 SH-HD											0.8/40.7				
Number of falls	3	4	5	5	4	3	3	3	3	3	3	2	2	2	2	

## Auxiliary boom S12.4

max. lifting load 12.0 t  
(cable diameter 26 mm)



# 655E Load capacities SH - main boom



with telescoping undercarriage T47/340

Reach [m]	Boom length [m]													
	10.3	13.1	15.9	18.7	21.5	24.3	27.1	29.9	32.7	35.5	38.3	41.1	43.9	
2.7	55.0													
3.0	55.0	55.0	50.8/3.4	42.5/3.7										
4.0	44.4	44.6	41.8	39.3	36.5/4.1	31.9/4.4	28.3/4.8							
5.0	33.9	33.8	32.4	30.8	29.4	28.1	26.9	25.3/5.1	22.8/5.4	20.7/5.8				
6.0	25.5	25.4	25.3	25.2	24.2	23.2	22.3	21.5	20.7	20.0	19.0/6.1	17.4/6.4	16.0/6.8	
7.0	20.4	20.2	20.1	20.0	19.9	19.7	19.0	18.4	17.7	17.2	16.6	16.1	15.6	
8.0	16.9	16.7	16.6	16.5	16.4	16.2	16.2	15.9	15.4	14.9	14.4	14.0	13.6	
9.0	14.3	14.2	14.0	13.9	13.8	13.7	13.6	13.6	13.4	13.1	12.7	12.3	12.0	
10.0	12.4	12.3	12.1	12.0	11.9	11.8	11.7	11.6	11.5	11.4	11.3	10.9	10.6	
11.0	11.0	10.8	10.6	10.5	10.4	10.3	10.2	10.1	10.0	9.8	9.8	9.7	9.5	
12.0		9.6	9.4	9.3	9.2	9.0	8.9	8.9	8.7	8.6	8.6	8.5	8.3	
13.0		8.6	8.4	8.3	8.2	8.0	7.9	7.9	7.7	7.6	7.5	7.5	7.3	
14.0		8.0/13.7	7.6	7.5	7.3	7.2	7.1	7.1	6.9	6.8	6.7	6.6	6.5	
15.0			6.9	6.8	6.6	6.5	6.4	6.3	6.2	6.1	6.0	5.9	5.8	
16.0			6.3	6.2	6.0	5.9	5.8	5.7	5.6	5.4	5.4	5.3	5.2	
6.9			6.1/16.4	5.7	5.5	5.4	5.3	5.2	5.1	4.9	4.8	4.8	4.6	
18.0				5.2	5.1	4.9	4.8	4.8	4.6	4.5	4.4	4.3	4.2	
19.0				4.9	4.7	4.5	4.4	4.3	4.2	4.0	4.0	3.9	3.7	
20.0				4.8/19.1	4.3	4.2	4.0	4.0	3.8	3.7	3.6	3.5	3.4	
22.0					3.8/21.8	3.6	3.4	3.4	3.2	3.1	3.0	2.9	2.8	
24.0						3.1	2.9	2.9	2.7	2.6	2.5	2.4	2.2	
26.0						3.0/24.5	2.5	2.5	2.3	2.1	2.1	2.0	1.8	
28.0							2.3/27.2	2.1	1.9	1.8	1.7	1.6	1.5	
30.0								1.8/29.9	1.7	1.5	1.4	1.3	1.2	
32.0									1.4	1.3	1.1	1.0	0.9	
34.0									1.3/32.6	1.0	0.9	0.8	0.7	
36.0										0.9/35.3	0.7			
38.0														
40.0														
42.0														
Table no. 655R-80/1777/12.5/10.11 SH-HD														
Number of falls	3	4	5	5	4	3	3	3	3	3	3	2	2	



Hook

For 160 kN winch with 26 mm cable diameter

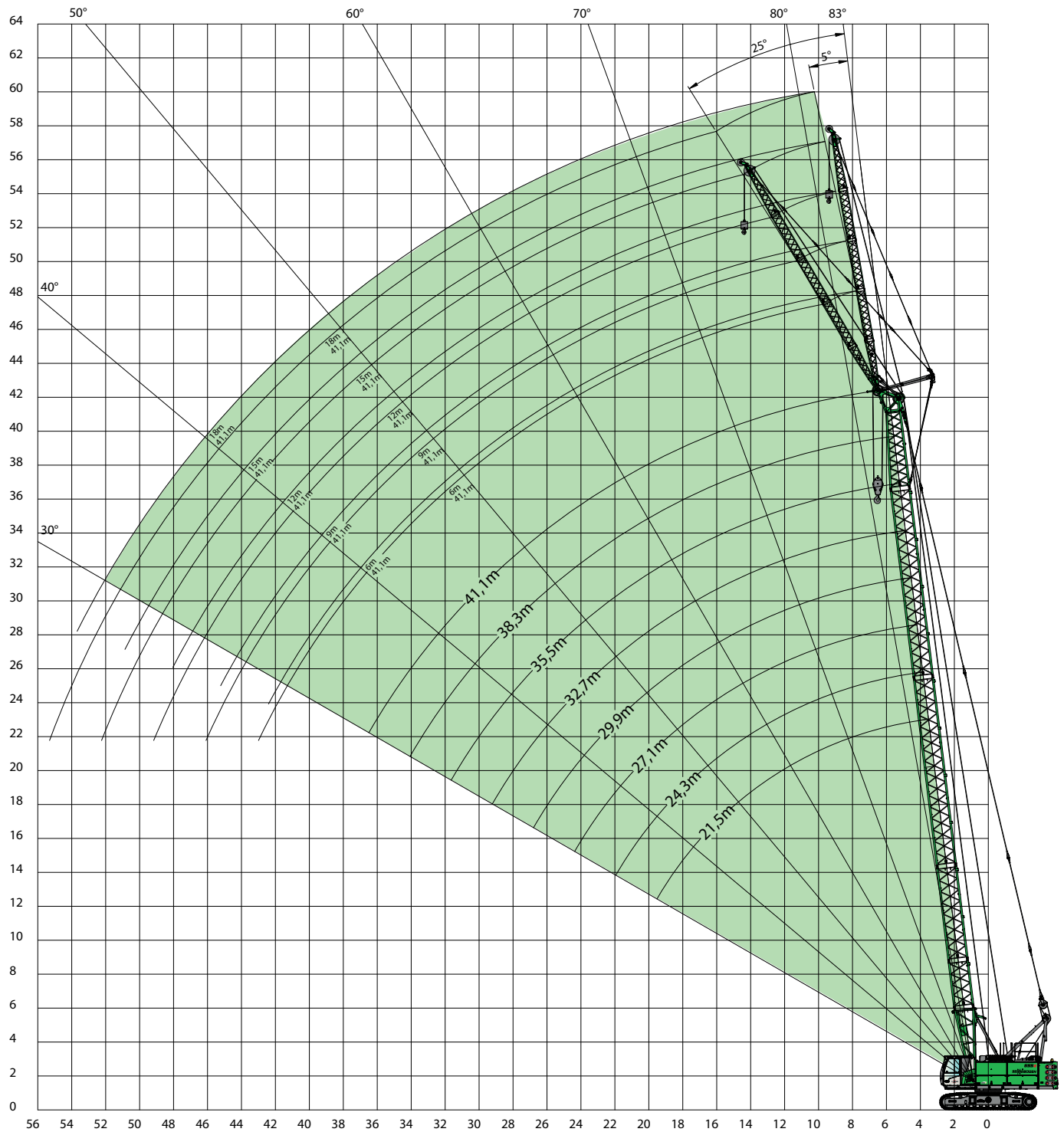
Capacity	Weight	Cable strands and max. load capacity [kg]				
		5	4	3	2	1
15 t	300 kg					12,000
40 t 1-roll	500 kg			36,000	24,000	12,000
60 t 2-roll	600 kg	55,000	48,000	36,000	24,000	12,000



# 655E Load capacities fixed fly jib



with telescoping undercarriage T47/37

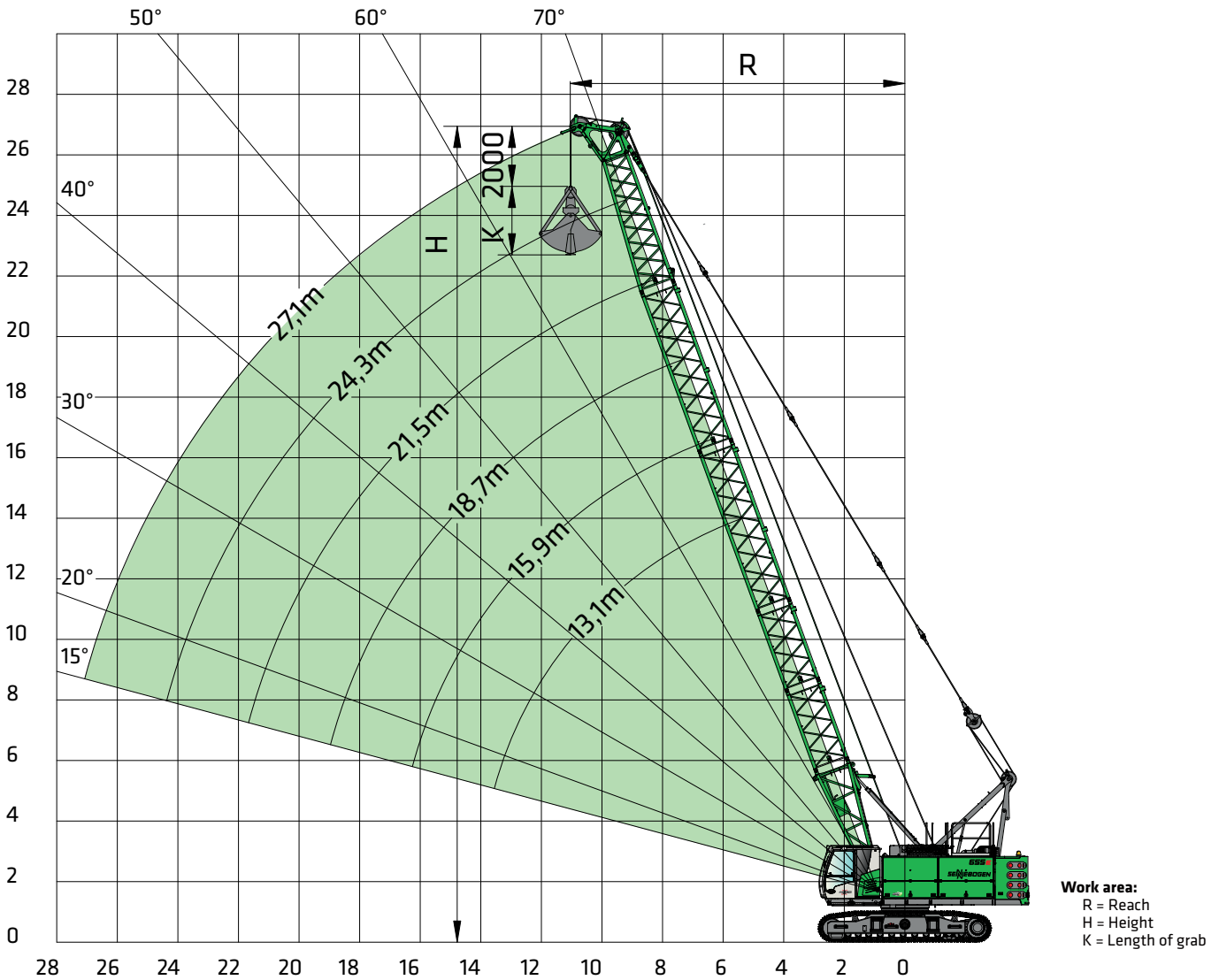


# 655E Load capacities fixed fly jib

18.0 t 3.7 m 5°	Main boom length [m]																																								
	21.5					24.3					27.1					29.9					32.7					35.5					38.3					41.1					
Reach [m]	Fly boom length [m]																																								
	6.0	9.0	12.0	15.0	18.0	6.0	9.0	12.0	15.0	18.0	6.0	9.0	12.0	15.0	18.0	6.0	9.0	12.0	15.0	18.0	6.0	9.0	12.0	15.0	18.0	6.0	9.0	12.0	15.0	18.0	6.0	9.0	12.0	15.0	18.0	6.0	9.0	12.0	15.0	18.0	
6.0	12.0					12.0					12.0					12.0					12.0					12.0					12.0										
7.0	12.0	11.5				12.0	11.4				12.0					12.0					12.0					12.0					12.0										
8.0	12.0	11.2	8.7	7.0		12.0	11.2	8.7			12.0	11.1	8.7			12.0	11.0				12.0	10.8				12.0					12.0										
9.0	12.0	10.9	8.5	6.9	5.4	12.0	10.9	8.5	6.9	5.4	12.0	10.9	8.5	6.8	5.4	12.0	10.8	8.5	6.8		12.0	10.7	8.4			12.0	10.6				12.0	10.4									
10.0	12.0	10.6	8.3	6.8	5.3	12.0	10.7	8.4	6.7	5.3	12.0	10.6	8.3	6.7	5.3	12.0	10.4	8.2	6.6	5.2	12.0	10.5	8.3	6.6	5.2	12.0	10.4	8.2	6.5	5.2	12.0	10.3	8.1	6.5							
11.0	12.0	10.3	8.1	6.6	5.2	12.0	10.4	8.2	6.6	5.2	12.0	10.4	8.2	6.6	5.2	12.0	10.4	8.2	6.6	5.2	12.0	10.3	8.2	6.5	5.1	12.0	10.3	8.0	6.5	5.2	11.6	10.1	8.0	6.4	5.1						
12.0	12.0	10.1	8.0	6.5	5.1	12.0	10.2	8.0	6.5	5.0	12.0	10.2	8.0	6.5	5.1	11.7	10.2	8.0	6.4	5.1	11.3	10.2	8.0	6.4	5.0	10.9	10.1	7.9	6.4	5.1	10.5	10.0	4.9	6.3	5.0	10.2	9.9	7.8	6.3	5.0	
13.0	11.1	9.8	7.8	6.3	5.0	11.0	9.9	7.9	6.3	4.9	10.9	10.0	7.9	6.4	5.0	10.6	10.0	7.9	6.3	5.0	10.3	10.0	7.9	6.3	5.0	9.9	9.9	7.8	6.3	5.0	9.6	9.6	7.8	6.2	4.9	9.3	9.3	7.7	6.2	4.9	
14.0	10.0	9.5	7.6	6.2	4.8	9.9	9.7	7.7	6.2	4.8	9.8	9.8	7.7	6.3	4.9	9.7	9.7	7.8	6.2	4.9	9.4	9.4	7.7	6.2	4.9	9.1	9.1	7.7	6.2	4.9	8.8	8.8	7.7	6.2	4.9	8.5	8.5	7.6	6.1	4.8	
15.0	9.1	9.2	7.5	6.1	4.7	9.0	9.2	7.5	6.1	4.7	8.9	9.0	7.6	6.2	4.8	8.8	9.0	7.6	6.1	4.8	8.7	8.7	7.6	6.2	4.8	8.4	8.4	7.6	6.1	4.8	8.1	8.1	7.6	6.1	4.8	7.8	7.8	7.5	6.0	4.7	
16.0	8.3	8.5	7.3	5.9	4.6	8.2	8.4	7.4	6.0	4.6	8.1	8.2	7.4	6.1	4.7	8.0	8.2	7.5	6.0	4.7	7.9	8.0	7.5	6.1	4.7	7.7	7.8	7.5	6.1	4.7	7.4	7.5	7.4	6.0	4.7	7.2	7.2	7.2	6.0	4.7	
17.0	7.6	7.8	7.2	5.8	4.5	7.5	7.7	7.2	5.8	4.5	7.4	7.5	7.3	5.9	4.6	7.3	7.5	7.3	5.9	4.6	7.2	7.3	7.3	6.0	4.6	7.1	7.2	7.2	6.0	4.6	6.9	6.9	6.9	5.9	4.6	6.7	6.7	6.7	5.9	4.6	
18.0	7.0	7.2	7.1	5.6	4.4	6.9	7.1	7.1	5.7	4.4	6.8	6.9	7.0	5.8	4.5	6.7	6.9	6.9	5.8	4.5	6.6	6.7	6.8	5.9	4.9	6.4	6.6	6.7	5.9	4.5	6.3	6.4	6.4	5.8	4.6	6.2	6.2	6.2	5.8	4.5	
19.0	6.5	6.6	6.7	5.5	4.3	6.4	6.5	6.6	5.6	4.3	6.2	6.4	6.5	5.7	4.4	6.2	6.3	6.4	5.7	4.4	6.0	6.2	6.3	5.8	4.5	5.9	6.1	6.2	5.8	4.5	5.8	5.9	6.0	5.8	4.5	5.7	5.8	5.8	5.7	4.5	
20.0	6.0	6.2	6.2	5.4	4.3	5.9	6.0	6.1	5.4	4.2	5.8	5.9	6.0	5.6	4.4	5.7	5.8	5.9	5.6	4.3	5.6	5.7	5.8	5.7	4.4	5.4	5.6	5.7	5.7	4.4	5.3	5.4	5.5	5.5	4.4	5.2	5.4	5.4	5.3	4.4	
22.0	5.2	5.4	5.4	5.1	4.1	5.1	5.2	5.3	5.2	4.1	5.0	5.1	5.2	5.2	5.2	4.9	5.0	5.1	5.1	4.2	4.8	4.9	5.0	5.0	4.3	4.6	4.8	4.8	4.9	4.2	4.5	4.6	4.7	4.8	4.3	4.4	4.5	4.6	4.7	4.3	
24.0	4.6	4.7	4.8	4.8	3.9	4.4	4.6	4.6	4.7	3.9	4.3	4.4	4.5	4.5	4.0	4.2	4.3	4.4	4.5	4.0	4.1	4.2	4.3	4.3	4.1	4.0	4.1	4.2	4.2	4.1	3.8	3.9	4.0	4.1	4.1	3.7	3.9	3.9	4.0	4.0	
26.0		4.1	4.2	4.3	3.8	3.9	4.0	4.1	4.1	3.8	3.7	3.9	3.9	4.0	3.9	3.7	3.8	3.9	3.9	3.9	3.5	3.7	3.7	3.8	3.8	3.4	3.5	3.6	3.7	3.7	3.3	3.4	3.5	3.5	3.5	3.2	3.3	3.4	3.4	3.4	
28.0		3.7	3.7	3.8	3.6	3.4	3.5	3.6	3.7	3.6	3.3	3.4	3.5	3.5	3.5	3.2	3.3	3.4	3.4	3.4	3.1	3.2	3.3	3.3	3.3	2.9	3.1	3.1	3.2	3.2	2.8	2.9	3.0	3.0	3.0	2.7	2.8	2.9	2.9	3.0	
30.0			3.3	3.4	3.3	3.1	3.2	3.3	3.3	2.9	3.0	3.1	3.1	3.1	3.1	2.8	2.9	3.0	3.0	3.0	2.7	2.8	2.8	2.9	2.9	2.5	2.6	2.7	2.8	2.8	2.4	2.5	2.6	2.6	2.6	2.3	2.4	2.5	2.5	2.5	
32.0				3.0	3.1			2.9	2.9	2.9		2.6	2.7	2.8	2.8	2.5	2.6	2.6	2.7	2.7	2.3	2.4	2.5	2.5	2.5	2.2	2.3	2.4	2.4	2.4	2.0	2.2	2.2	2.3	2.3	2.0	2.1	2.1	2.2	2.2	
34.0					2.7				2.6	2.6		2.4	2.5	2.5		2.3	2.3	2.4	2.4	2.0	2.1	2.2	2.2	2.2	1.9	2.0	2.1	2.1	2.1	1.7	1.8	1.9	2.0	2.0	1.7	1.8	1.8	1.9	1.9		
36.0					2.5				2.3	2.4		2.1	2.2	2.2		2.1	2.1	2.1	2.1	1.9	1.9	2.0	2.0	1.6	1.7	1.8	1.8	1.8	1.5	1.6	1.6	1.7	1.7	1.4	1.5	1.6	1.6	1.6			
38.0									2.1				1.9	2.0			1.8	1.9	1.9		1.6	1.7	1.7	1.7	1.5	1.5	1.6	1.6	1.2	1.3	1.4	1.4	1.5	1.2	1.2	1.3	1.4	1.4			
40.0													1.7					1.6	1.7			1.5	1.5	1.5	1.3	1.3	1.4	1.4	1.0	1.1	1.2	1.2	1.2	1.0	1.0	1.1	1.1	1.1			
42.0																		1.5					1.3	1.3			1.1	1.2	1.2		0.9	1.0	1.0	1.0	0.8	0.8	0.9	0.9	1.0		
44.0																																	0.8	0.9	0.9		0.7	0.7	0.8	0.8	
46.0																																				0.7	0.7		0.6	0.6	0.6
48.0																																				0.5	0.6		0.4	0.5	0.5
50.0																																				0.4			0.3	0.3	0.3

Table no. 655R-80/1927/18.0/11.12 SHF55-HD

18.0 t 3.7 m 25°	Main boom length [m]																																							
	21.5					24.3					27.1					29.9					32.7					35.5					38.3					41.1				
Reach [m]	Fly boom length [m]																																							
	6.0	9.0	12.0	15.0	18.0	6.0	9.0	12.0	15.0	18.0	6.0	9.0	12.0	15.0	18.0	6.0	9.0	12.0	15.0	18.0	6.0	9.0	12.0	15.0	18.0	6.0	9.0	12.0	15.0	18.0	6.0	9.0	12.0	15.0	18.0	6.0	9.0	12.0	15.0	18.0
6.0																																								
7.0																																								
8.0	11.6					11.5																																		
9.0	11.4					11.4					11.4					11.3																								
10.0	11.3	8.3				11.3	8.3				11.2	8.2				11.2																								
11.0	11.1	8.2	6.5			11.1	8.2				11.1	8.1				11.1	8.1																							
12.0	11.0	8.1	6.4			11.0	8.1	6.4			11.0	8.0	6.3			11.0	8.1	6.4																						
13.0	10.8	8.0	6.3	4.9		10.8	8.0	6.3	4.9		10.8	8.0	6.3	4.9		10.8	8.0	6.3																						
14.0	10.3	7.9	6.2	4.8	3.9	10.3	8.0	6.2	4.9	3.9	10.1	7.9	6.2	4.8	3.9	10.1	7.9	6.2	4.8																					
15.0	9.4	7.5	6.1	4.7	3.8	9.3	7.8	6.1	4.8	3.9	9.2	7.8	6.1	4.8	3.8	9.1	7.8	6.2	4.8	3.8	9.0	7.9	6.2	4.8	3.9	8.7	7.8	6.3	4.7	3.8	8.4	7.9	6.1	4.8						
16.0	8.6	7.2	6.0	4.7	3.8	8.5	7.5	6.0	4.7	3.8	8.4	7.8	6.0	4.7	3.7	8.3	7.8	6.1	4.7	3.8	8.2	7.8	6.1	4.8	3.8	8.0	7.8	6.1	4.7	3.7	7.8	7.8	6.1	4.7	3.8	7.5	7.7			

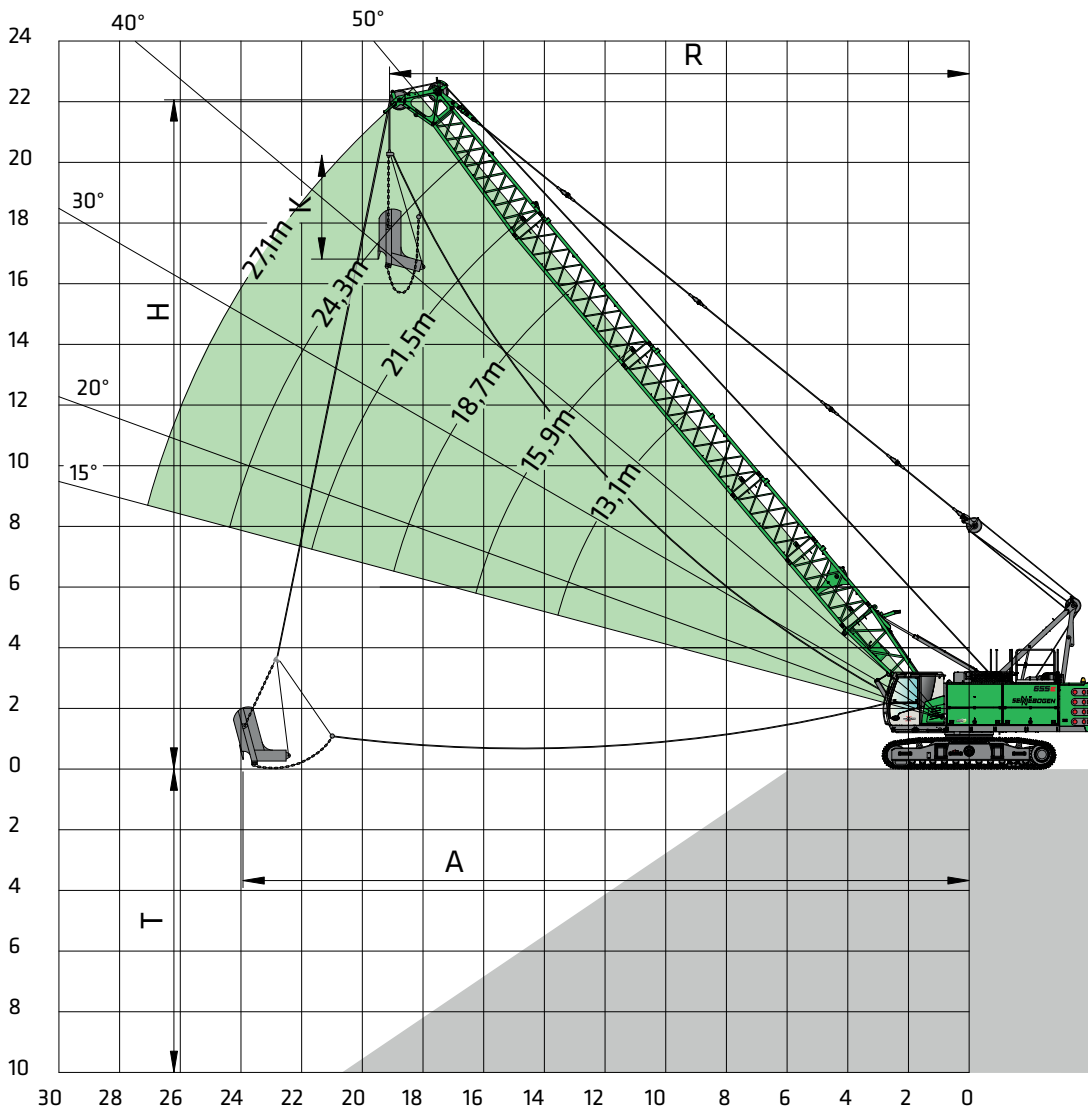


**Notes:**

- The load ratings given apply when the machine is on a firm and level surface.
- The load ratings are given in tons and apply 360 degrees.
- The load ratings apply to the maximum stabilizer/undercarriage track width of 3700 mm or 3400 mm.
- The load ratings given include the grab weight and do not exceed 66.7% of the tipping load
- For operation with a mechanical two-rope grab, the load capacity is limited by the permissible cable pull or the maximum tensile force of a winch:  
 Winch tensile force [kN] 160  
 Cable diameter [mm] 26  
 Permissible cable pull [t] 16.0

Boom angle alpha [°]	Boom length [m]																													
	13.1					15.9					18.7					21.5					24.3					27.1				
	R	H	18 t	12.5 t		R	H	18 t	12.5 t		R	H	18 t	12.5 t		R	H	18 t	12.5 t		R	H	18 t	12.5 t		R	H	18 t	12.5 t	
70	5.9	13.8	28.9	26.4	21.8	6.9	16.4	22.9	21.1	17.3	7.8	19.0	18.9	17.4	14.3	8.8	21.7	15.9	14.7	12.0	9.7	24.3	13.6	12.6	10.2	10.7	26.9	11.8	11.0	8.8
65	6.9	13.3	22.6	20.8	17.1	8.1	15.8	17.9	16.6	13.6	9.3	18.4	14.7	13.6	11.1	10.5	20.9	12.4	11.5	9.3	11.7	23.4	10.6	9.8	7.9	12.9	26.0	9.1	8.4	6.7
60	7.9	12.7	18.6	17.2	14.1	9.3	15.1	14.7	13.7	11.1	10.7	17.6	12.1	11.2	9.1	12.1	20.0	10.1	9.4	7.5	13.5	22.4	8.6	7.9	6.3	14.9	24.8	7.3	6.8	5.3
55	8.9	12.1	15.9	14.7	12.1	10.5	14.4	12.6	11.7	9.5	12.1	16.7	10.3	9.5	7.7	13.7	18.9	8.5	7.9	6.3	15.3	21.2	7.2	6.7	5.3	16.9	23.5	6.1	5.6	4.4
50	9.7	11.3	14.0	13.0	10.6	11.5	13.5	11.0	10.2	8.3	13.3	15.6	8.9	8.3	6.7	15.1	17.8	7.4	6.9	5.4	16.9	19.9	6.2	5.7	4.5	18.7	22.1	5.2	4.8	3.7
45	10.6	10.5	12.5	11.6	9.5	12.5	12.5	9.8	9.1	7.4	14.5	14.5	8.0	7.4	5.9	16.5	16.5	6.5	6.1	4.8	18.5	18.4	5.5	5.0	3.9	20.5	20.4	4.6	4.2	3.2
40	11.3	9.6	11.4	10.6	8.6	13.4	11.4	8.9	8.3	6.7	15.6	13.2	7.2	6.7	5.3	17.7	15.0	5.9	5.5	4.3	19.9	16.8	4.9	4.5	3.5	22.0	18.6	4.0	3.7	2.8
35	11.9	8.7	10.6	9.8	8.0	14.2	10.6	8.2	7.7	6.1	16.5	11.9	6.6	6.2	4.9	18.8	13.5	5.4	5.0	3.9	21.1	15.1	4.5	4.1	3.1	23.4	16.7	3.7	3.4	2.5
30	12.5	7.7	9.9	9.2	7.5	14.9	9.1	7.7	7.2	5.7	17.4	10.5	6.2	5.8	4.5	19.8	11.9	5.0	4.6	3.6	22.2	13.3	4.1	3.8	2.9	24.6	14.7	3.4	3.1	2.2
25	13.0	6.7	9.4	8.8	7.1	15.5	7.9	7.2	6.8	5.4	18.1	9.1	5.9	5.4	4.3	20.6	10.2	4.7	4.4	3.4	23.2	11.4	3.9	3.6	2.7	25.7	12.6	3.1	2.9	2.1
20	13.4	5.6	9.1	8.4	6.8	16.0	6.6	7.0	6.5	5.2	18.7	7.5	5.6	5.2	4.1	21.3	8.5	4.5	4.2	3.2	23.9	9.4	3.7	3.4	2.5	26.6	10.4	3.0	2.7	1.9
15	13.7	4.5	8.8	8.2	6.6	16.4	5.2	6.8	6.3	5.0	19.1	6.0	5.4	5.0	3.9	21.8	6.7	4.3	4.0	3.1	24.5	7.4	3.5	3.2	2.4	27.2	8.1	2.8	2.6	1.8

# 655E Dragline bucket equipment



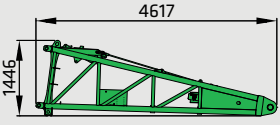
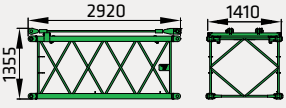
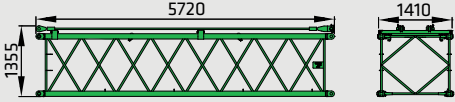
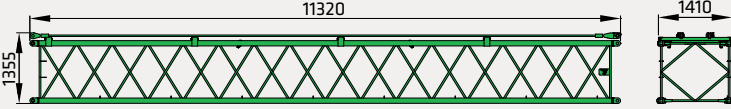
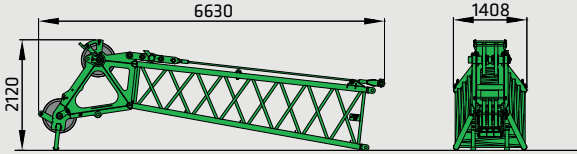
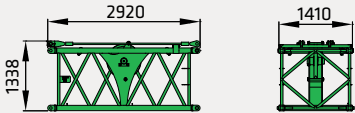
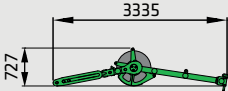
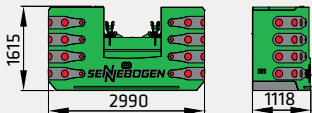
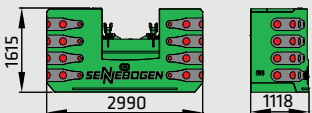
**Grab curve:**  
 R = reach  
 A = max. grab width = approx.  $R + 1/3$  to  $1/2 (H-K)$   
 T = grab depth = approx. 40-50 % of R  
 H = Height  
 K = Length of dragline bucket

**Notes:**

1. The load capacities given include the dragline bucket weight and do not exceed 75% of the tipping load.
2. The load capacities apply for the maximum undercarriage track width.
3. Engine and winch equipment as required (the values given apply for maximum equipment and average conditions).
4. The size of the dragline bucket is determined based on the conditions given.

Boom angle alpha [°]	Boom length [m]																													
	13.1					15.9					18.7					21.5					24.3					27.1				
	R	H	18 t	12.5 t		R	H	18 t	12.5 t		R	H	18 t	12.5 t		R	H	18 t	12.5 t		R	H	18 t	12.5 t		R	H	18 t	12.5 t	
50	9.7	11.3	14.7	14.6	11.9	11.5	13.5	12.4	11.5	9.3	13.3	15.6	10.1	9.3	7.5	15.1	17.8	8.3	7.7	6.1	16.9	19.9	7.0	6.5	5.0	18.7	22.1	5.9	5.4	4.1
45	10.6	10.5	14.1	13.1	10.7	12.5	12.5	11.0	10.3	8.3	14.5	14.5	9.0	8.3	6.6	16.5	16.5	7.4	6.8	5.4	18.5	18.4	6.1	5.7	4.4	20.5	20.41	5.1	4.7	3.6
40	11.3	9.6	12.9	12.0	9.7	13.4	11.4	10.0	9.3	7.5	15.6	13.2	8.1	7.5	6.0	17.7	15.0	6.6	6.1	4.8	19.9	16.8	5.5	5.1	3.9	22.0	18.6	4.6	4.2	3.1
35	11.9	8.7	11.9	11.1	9.0	14.2	10.3	9.3	8.6	6.9	16.5	11.9	7.5	6.9	5.5	18.8	13.5	6.1	5.6	4.4	21.1	15.1	5.0	4.6	3.5	23.4	16.7	4.1	3.8	2.8
30	12.5	7.7	11.2	10.4	8.4	14.9	9.1	8.7	8.1	6.4	17.4	10.5	7.0	6.5	5.1	19.8	11.9	5.6	5.2	4.0	22.2	13.3	4.6	4.3	3.2	24.6	14.7	3.8	3.5	2.5
25	13.0	6.7	10.6	9.9	8.0	15.5	7.9	8.2	7.7	6.1	18.1	9.1	6.6	6.1	4.8	20.6	10.2	5.3	4.9	3.8	23.2	11.4	4.3	4.0	3.0	25.7	12.6	3.5	3.2	2.3
20	13.4	5.6	10.2	9.5	7.7	16.0	6.6	7.9	7.3	5.8	18.7	7.5	6.3	5.8	4.6	21.3	8.5	5.1	4.7	3.6	23.9	9.4	4.1	3.8	2.8	26.6	10.4	3.3	3.0	2.2
15	13.7	4.5	9.9	9.2	7.4	16.4	5.2	7.6	7.1	5.6	19.1	6.0	6.1	5.7	4.4	21.8	6.7	4.9	4.5	3.4	24.5	7.4	4.0	3.7	2.7	27.2	8.1	3.2	2.9	2.1

# 655E Transport dimensions

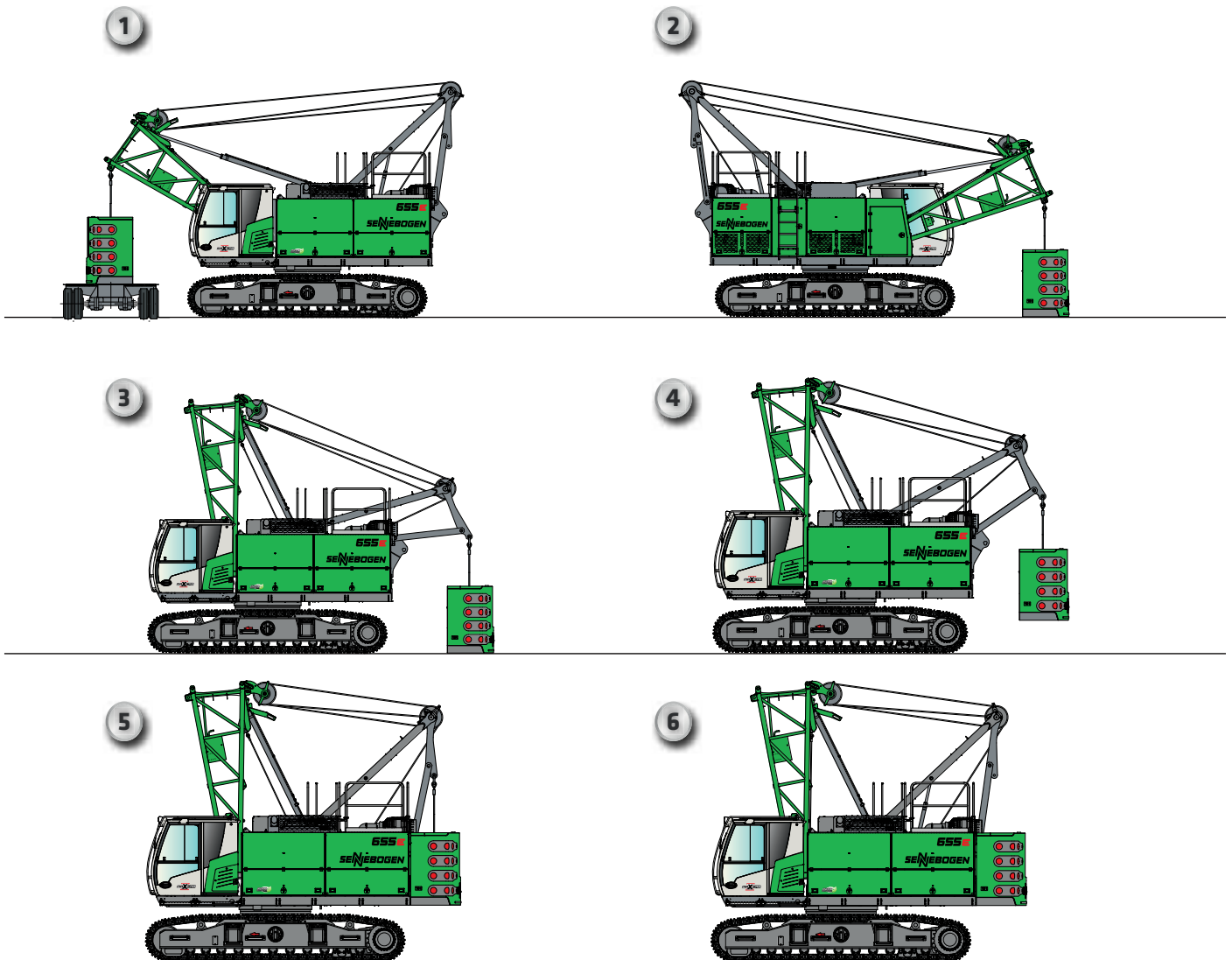
	<p><b>Boom lower section 4.4 m type 1402.52</b></p> <p><b>Weight</b> 1200 kg (max. 1660 kg)</p>
	<p><b>Boom section 2.8 m type 1402.52</b></p> <p><b>Weight</b> 400 kg (incl. holding cable)</p>
	<p><b>Boom section 5.6 m type 1402.52</b></p> <p><b>Weight</b> 660 kg (incl. holding cable)</p>
	<p><b>Boom section 11.2 m type 1402.52</b></p> <p><b>Weight</b> 1160 kg (incl. holding cable)</p>
	<p><b>Boom head piece 5.9 m type 1402.52</b></p> <p><b>Weight</b></p> <p><b>Steel rollers</b> 1560 kg (incl. holding cable)</p> <p><b>Plastic rollers</b> 1400 kg (incl. holding cable)</p>
	<p><b>Boom section 2.8 m type 1402.52 (DL) with pulley for dragline bucket operation</b></p> <p><b>Weight</b> 650 kg (incl. holding cable)</p>
	<p><b>Auxiliary boom S12.4</b></p> <p><b>Weight</b> 410 kg</p>
	<p><b>Counter weight</b></p> <p><b>Weight</b> 18000 kg</p>
	<p><b>Counter weight only an option on T47/340-230</b></p> <p><b>Weight</b> 12500 kg</p>



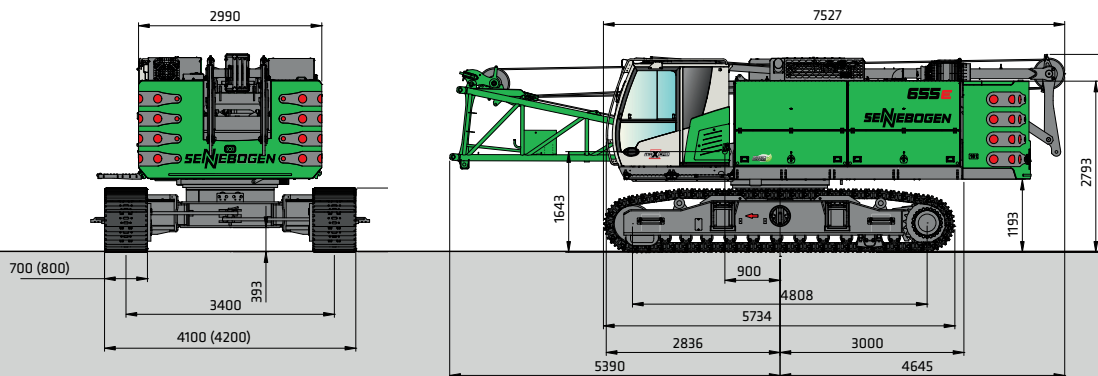
# 655E Transport dimensions

	<b>Boom lower section 3 m type 598</b>
<b>Weight</b>	<b>330 kg</b>
	<b>Boom section 3 m type 598</b>
<b>Weight</b>	<b>120 kg (incl. holding cable)</b>
	<b>Boom head piece 3 m type 598</b>
<b>Weight</b>	<b>210 kg (incl. holding cable)</b>

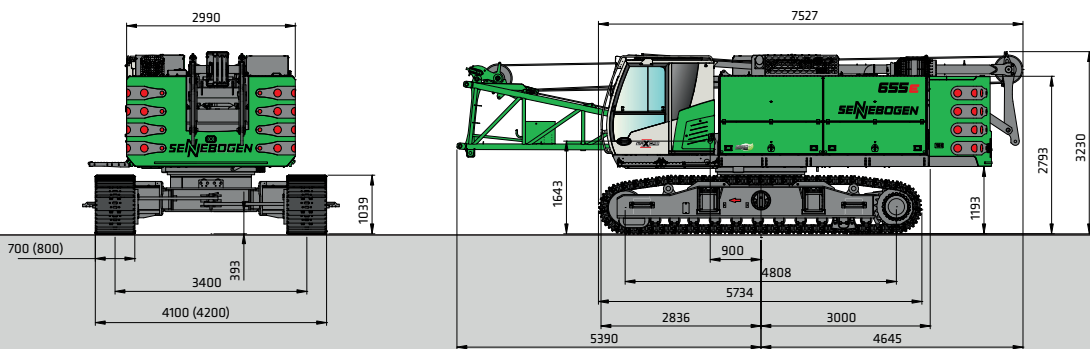
## Self-assembly system



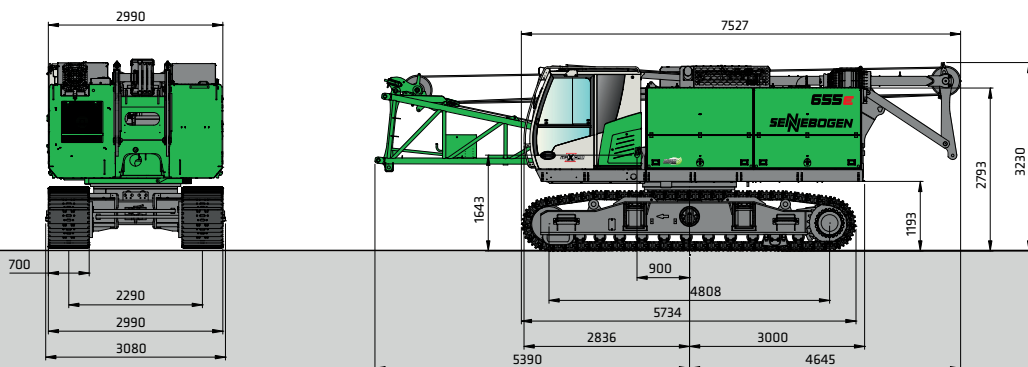
# 655E Transport dimensions



655 HD with 18 t counter weight and telescopic T47/370 undercarriage with a track width of 3400 mm approx. 57 t



655 HD with 18 t counter weight and telescopic T47/340 undercarriage with a track width of 3400 mm approx. 57 t

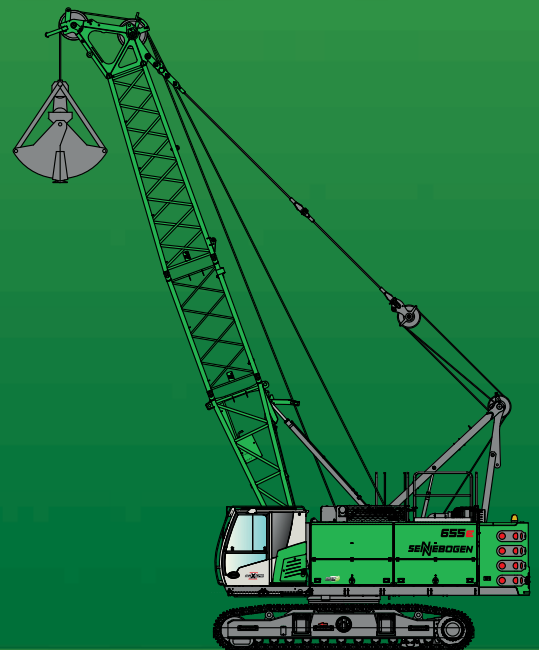


655 HD without counter weight approx. 39 t





# 655E



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

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

Please contact your local SENNEBOGEN sales partner for information concerning the equipment variants offered. Requested performance characteristics are only binding if they are expressly stipulated upon conclusion of the contract. Delivery options and technical features are subject to change. All information is supplied without liability. Equipment is subject to change, and rights of advancement are reserved.

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

## SENNEBOGEN

**SENNEBOGEN**  
**Maschinenfabrik GmbH**  
Sennebogenstraße 10  
94315 Straubing, Germany

Tel. +49 9421 540-144/146  
marketing@sennebogen.de

655HD-E-011910

GO FOR GREEN

 [www.sennebogen.com](http://www.sennebogen.com)