



AGD Equipment Limited

SALES • RENTAL • SERVICE • PARTS

MINI CRANES

CRAWLER CRANES

TELESCOPIC CRANES

**PILING RIGS
AND EQUIPMENT**

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Sennebogen 650HD Specification

www.agd-equipment.co.uk



50 t metric



210 kW

650 HD

Serie C

schwerer HD Seilbagger / Kran

HD Crawler Crane (Duty Cycle)

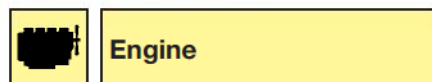


SENNBOGEN[®]

crane line

- Engine output 210 kW (286 HP)
- Very strong, state of the art hydraulic system
- Electronic speed sensing
- Additional hydraulic circuits
- Line pull 2 x 16 t
- Precise control and high line speeds
- Robust, very service-friendly design

Specifications



Engine

Caterpillar Diesellengine 3126B with direct injection, watercooled, 210 kW (286 HP) at 2100 rpm

Dry air filter with main and safety element.
Electric system 24 Volt, high efficiency cold starting batteries. Idling speed function.

Fuel tank capacity approx. 450 l



Hydraulic System

All hydraulic pumps are variable displacement piston pumps with individual regulation for each pump. The pumps are equipped with an energy-saving flow-on-demand control system and pressure cut-off for high efficiency and reduced loss of energy.

Max. flow rates:

320 l/min for travel and winch 1
320 l/min for travel and winch 2
220 l/min for swing and boom hoist
Working pressure up to 330/350 bar.
Hydraulic tank capacity approx. 650 l

Optional:

Additional hydraulic packages for external user (e.g. casing machines, vibrators, etc.)

Hydraulic oil filter with long intervals between change. Large dimensioned hydraulic cooling system. Servo-assisted joy-stick controls according to ISO-System. Central service tableau. Decomposable hydraulic oil (synthetic) can be used.

Hydro Clean hydraulic superfine filter with water absorption (optional).



Winch 1 - Winch 2

Each winch is driven independently by a directly flanged hydraulic piston motor. Hydraulic brake valves for wear resistant braking of loads. Strong low maintenance oil bath planetary gears. The clutch and brake functions are effected through large dimensioned, maintenance-free, low-wearing, oil-lubricated multiple disc brakes.

Grab closing automatics for 2 rope grab operation - dividing the load equally between both winches.
Combilink - for dragline operation, allows power load lowering for the dredging winch.

Winches	12 t	16 t
Single line pull kN 1.Layer	120	160
Rope dia. mm	22	26
Line speed m/min	70/126	60/116

Optional: Additional crane winch



Swing System

The swing function is independent operated through 1 swing drive with hydraulic piston motor and oil bath planetary gear. Spring-loaded hydraulically releasable multiple-disc brake, self-closing. Swing speed from 0 to 3.7 rpm, 0 to 1 rpm for crane operation.

Precision swing operation with preselector switch.

Large dimensioned swing bearing, external gears thus less tooth pressure and moments.



Boom Hoist Operation

Independent operation via axial piston motor, spring-loaded hydraulically releasable multiple-disc brake, planetary gear and winch drum with special scores. Max. line pull 52 kN (5.3 t). Drum pawl lock provides an integral drum lock.



Upper Structure

Torsion-free precision machined upper frame. All components are located clearly and service friendly. Engine installation very service-friendly in longitudinal direction with low noise level.

Counterweight 18 t



Undercarriage

Strong hydraulically extendable crawler undercarriage. Each track is independently driven by an axial piston motor through planetary final drive. Spring loaded hydraulically releasable multiple-disc brake.

Maintenance-free tractor type crawler with hydraulic track-tensioning device. Tractor type crawler with triple bar shoes. Excellent rough terrain travel. Travel speed with crawler B6 is 0 - 2.1 km/h.



Working Equipment

Tubular boom Type 1370, 10.3m-52.3 m, double sheave hammer head, fixed jib, auxiliary jib. Special attachment for crane/grab/dragline operation. Complete crane safety device with electronic SLI-safe load indicator.



Operator's Cab

Comfortable F 2000 operator's cab, resiliently mounted, with exceptional sound suppression, large-capacity compartment with excellent allround visibility, all-weather design with tinted safety glass, front wind-screen with ventilation position stows under the roof, large-size skylight, window wiper/ washer system for front windscreen and skylight, front guard panel, large-capacity stowage rack, ergonomically designed comfortable seat, resiliently mounted, adjustable in suspension and height, seat cushion adjustable in depth and angle, adjustable lumbar support, wide adjustable armrests, clearly laid out instrument panel with ergonomically shaped control levers, adjustable steering column (mobile machines only), infinitely variable cab heating system, outside air and circulating air stages, with particle filter. Five adjustable air vents for optimum work environment, new SDS diagnostic system for monitoring of all essential machine and engine functions, includes visual and audible warning of any malfunctions. Wide range of additional features and equipment.



Service Weight

Base machine 650 HD, 2 x 16 t free fall winches, 210 kW diesel engine, 10.3 m basic boom, counterweight 18 t. 40 t hook,

crawler B6, 800 mm triple bar shoes:

approx. 54 t

Note:

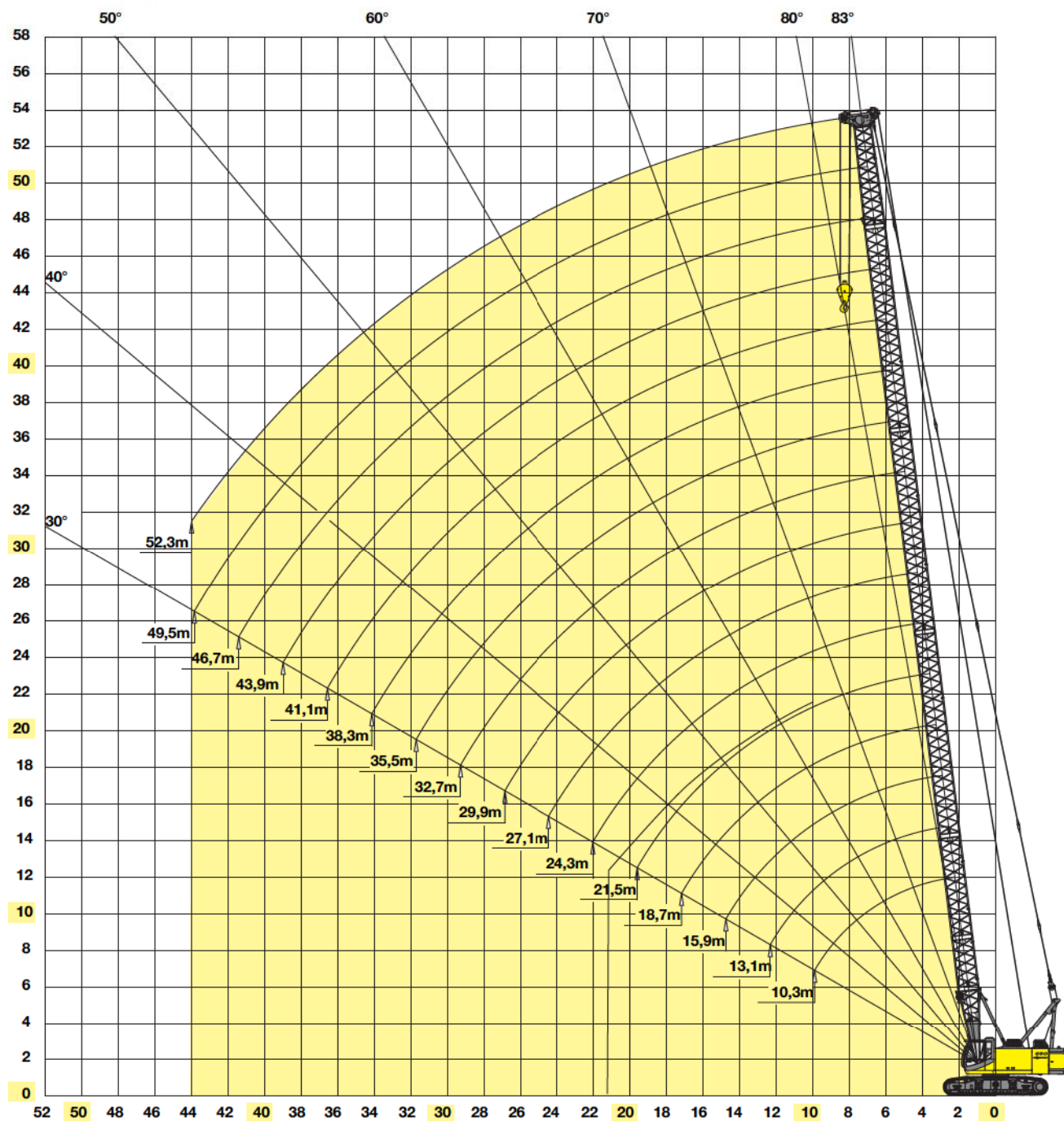
The shown weights may vary with different equipment!

Leading through Innovation

Subject to technical modification!

Kranausrüstung - Hauptausleger

Crane Equipment - Main Boom



Auslegerkonfiguration - Hauptausleger																	
boom configuration - main boom																	
Auslegerlänge [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	52,3
boom length [m]																	
Fußstück Typ 1370	4,2m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
lower boom type 1370																	
Zwischenstück Typ 1370	2,8m	0	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1
boom insert type 1370																	
Zwischenstück Typ 1370	5,6m	0	0	0	1	1	2	2	1	1	2	2	1	1	2	2	1
boom insert type 1370																	
Zwischenstück Typ 1370	11,2m	0	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3
boom insert type 1370																	
Zwischenstück konisch Typ 1370/610	5,6m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
tapered boom insert type 1370/610																	
Rollenkopf T50	0,5m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
boom head T50																	
Schnabelausleger S12.1 (optional)	12,0t	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
auxiliary jib S12.1 (option)																	

**Main boom SH,
Counterweight 18.0 t,**

Kran-Traglasten

Crane Load Chart

650 HD

Hauptausleger SH

main boom SH

Gegengewicht	18,0 t
Unterwagenballast	0,0 t

counterweight	18,0 t
carbody counterweight	0,0 t

Ausladung	Auslegerlänge / boom length [m]															
Radius[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	52,3
3,0	50/3,1	46/3,4	43,0/3,8													
4,0	44,1	42,5	41,6	38,5/4,1	34,0/4,5	30,4/4,8										
5,0	37,6	36,6	36,0	34,2	31,8	29,7	26,8/5,1	23,8/5,5	20,8/5,8							
6,0	31,1	30,6	30,3	29,4	27,9	26,5	24,6	22,7	20,5	18,5/6,2	16,3/6,5	14,2/6,8				
7,0	24,8	24,7	24,6	24,5	24,0	23,3	22,0	20,7	18,9	17,4	15,8	14,1	12,1/7,2	10,6/7,5	9,1/7,9	
8,0	20,5	20,4	20,3	20,2	20,1	20,1	19,4	18,7	17,4	16,2	14,8	13,3	11,6	10,4	9,1	7,8/8,2
9,0	17,5	17,3	17,2	17,1	17,0	17,0	16,9	16,6	15,8	14,9	13,8	12,6	11,1	9,9	8,7	7,6
10,0	15,2	15,0	14,9	14,8	14,7	14,7	14,6	14,6	14,2	13,6	12,8	11,8	10,5	9,5	8,4	7,3
11,0	14,5/10,3	13,2	13,1	13,0	12,9	12,9	12,8	12,8	12,7	12,4	11,8	11,0	9,9	9,0	8,0	7,0
12,0		11,8	11,7	11,6	11,5	11,4	11,3	11,3	11,2	11,1	10,8	10,3	9,4	8,6	7,6	6,8
13,0		10,9/12,7	10,5	10,4	10,3	10,3	10,1	10,1	10,0	9,9	9,8	9,5	8,8	8,1	7,3	6,5
14,0			9,5	9,4	9,3	9,3	9,1	9,1	9,0	8,9	8,8	8,8	8,3	7,7	6,9	6,2
15,0			8,7	8,6	8,5	8,4	8,3	8,3	8,2	8,1	8,0	8,0	7,7	7,2	6,6	5,9
16,0			8,6/15,2	7,9	7,8	7,7	7,6	7,6	7,5	7,4	7,3	7,3	7,1	6,8	6,2	5,7
17,0				7,3	7,2	7,1	7,0	7,0	6,9	6,8	6,6	6,6	6,5	6,3	5,9	5,4
18,0				7,0/17,6	6,6	6,6	6,4	6,4	6,3	6,2	6,1	6,1	6,0	5,9	5,5	5,1
19,0					6,2	6,1	5,9	5,9	5,8	5,7	5,6	5,6	5,5	5,4	5,2	4,8
20,0					5,7	5,7	5,5	5,5	5,4	5,3	5,2	5,2	5,1	5,0	4,8	4,6
22,0						5,0	4,8	4,8	4,7	4,6	4,4	4,4	4,3	4,3	4,1	4,0
24,0						4,8/22,4	4,2	4,2	4,1	4,0	3,8	3,8	3,7	3,7	3,5	3,5
26,0							4,0/24,9	3,7	3,6	3,5	3,4	3,4	3,3	3,2	3,0	3,0
28,0								3,5/27,3	3,2	3,1	2,9	2,9	2,8	2,7	2,6	2,5
30,0									2,9/29,7	2,7	2,6	2,6	2,5	2,4	2,3	2,2
32,0										2,4	2,3	2,3	2,2	2,1	1,9	1,9
34,0										2,4/32,1	2,0	2,0	1,9	1,8	1,7	1,6
36,0											2,0/34,6	1,8	1,7	1,6	1,4	1,4
38,0												1,7/37,0	1,5	1,4	1,2	1,1
40,0													1,3/39,4	1,2	1,0	1,0
42,0														1,0/41,8	0,9	0,8
44,0															0,7	0,7
46,0															0,7/44,3	
48,0		TAB.-Nr. 650R-75/1927/18,0/10.04														
50,0																
Strangzahl / parts reeving	5	4	4	4	3	3	3	2	2	2	2	2	2	2	2	26 mm
Strangzahl / parts reeving	6	6	6	5	4	4	4	3	3	3	2	2	2	2	2	22 mm
zul. Wind [m/s] allow.wind [m/s]	16,7	16,4	16,1	15,7	15,4	15,1	14,8	14,4	14,1	13,8	13,4	13,1	12,8	12,5	12,1	Seildurchmesser rope diameter

Main boom SH with spout extension, coun- ter weight 18.0 t

Kran-Traglasten

Crane Load Chart

650 HD

Schnabelausleger SHS12

auxiliary jib SHS12

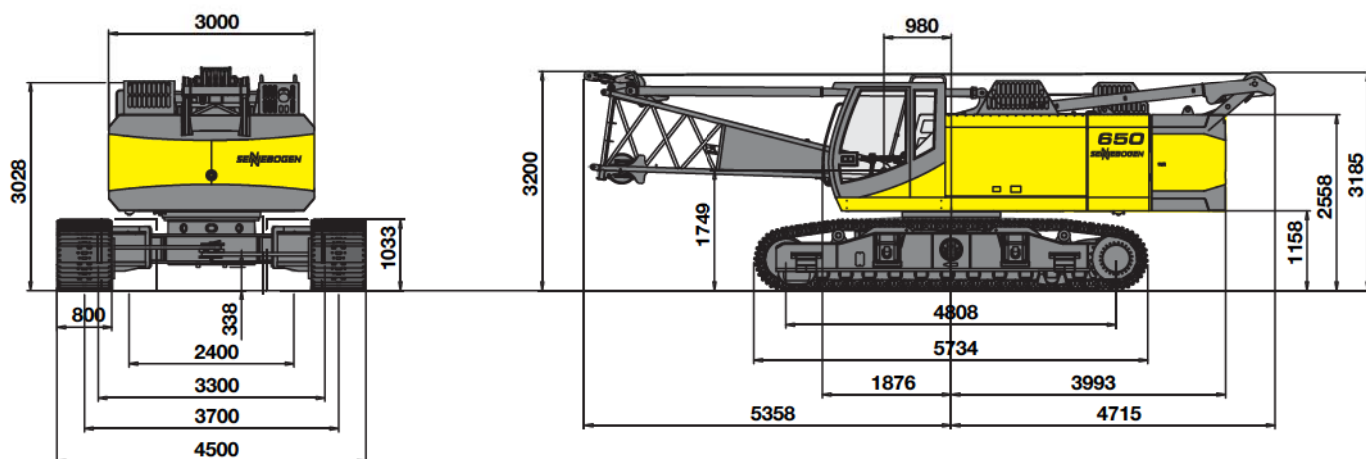
Gegengewicht	18,0 t
Untervagenballast	0,0 t

counterweight	18,0 t
carbody counterweight	0,0 t

Ausladung	Auslegerlänge / boom length [m]																
Radius[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	52,3	
3,0																	
4,0	12,0/4,1	12,0/4,5	12,0/4,8														
5,0	12,0	12,0	12,0	12,0/5,2	12,0/5,5	12,0/5,8											
6,0	12,0	12,0	12,0	12,0	12,0	12,0	12,0/6,2	12,0/6,5	12,0/6,9								
7,0	12,0	12,0	12,0	12,0	12,0	12,0	12,0	12,0	12,0	12,0/7,2	12,0/7,5	12,0/7,9					
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12,0	12,0/11,7	11,8	11,7	11,6	11,5	11,4	11,3	11,3	11,2	11,1	10,8	10,3	9,4	8,6	7,6	6,8	
13,0		10,6	10,5	10,4	10,3	10,3	10,1	10,1	10,0	9,9	9,8	9,5	8,8	8,1	7,3	6,5	
14,0		9,6	9,5	9,4	9,3	9,3	9,1	9,1	9,0	8,9	8,8	8,8	8,3	7,7	6,9	6,2	
15,0		9,5/14,1	8,7	8,6	8,5	8,4	8,3	8,3	8,2	8,1	8,0	8,0	7,7	7,2	6,6	5,9	
16,0			7,9	7,9	7,8	7,7	7,6	7,6	7,5	7,4	7,3	7,3	7,1	6,8	6,2	5,7	
17,0			7,6/16,5	7,3	7,2	7,1	7,0	7,0	6,9	6,8	6,6	6,6	6,5	6,3	5,9	5,4	
18,0				6,7	6,6	6,5	6,4	6,4	6,3	6,2	6,1	6,1	6,0	5,9	5,5	5,1	
19,0				6,2	6,1	6,0	5,9	5,9	5,8	5,7	5,6	5,6	5,5	5,4	5,2	4,8	
20,0					5,7	5,6	5,5	5,5	5,4	5,3	5,2	5,2	5,0	5,0	4,8	4,6	
22,0					5,1/21,4	4,9	4,8	4,7	4,6	4,5	4,4	4,4	4,3	4,2	4,1	4,0	
24,0						4,3/23,8	4,2	4,1	4,0	3,9	3,8	3,8	3,7	3,6	3,5	3,4	
26,0							3,6	3,6	3,5	3,4	3,3	3,3	3,2	3,1	3,0	2,9	
28,0							3,6/26,2	3,2	3,1	3,0	2,9	2,9	2,7	2,7	2,5	2,5	
30,0								3,1/28,7	2,7	2,6	2,5	2,5	2,4	2,3	2,2	2,1	
32,0									2,5/31,1	2,3	2,2	2,2	2,1	2,0	1,9	1,8	
34,0										2,1/33,5	1,9	1,9	1,8	1,7	1,6	1,5	
36,0											1,7/35,9	1,6	1,5	1,4	1,3	1,3	
38,0												1,4	1,3	1,2	1,1	1,0	
40,0												1,4/38,4	1,1	1,0	0,9	0,8	
42,0													1,0/40,8	0,8	0,7	0,7	
44,0														0,7/43,2			
46,0																	
48,0	TAB.-Nr. 650R-75/1927/18.0/10.04 S12.1																
50,0																	
Strangzahl / parts reeving	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	26 mm	
Strangzahl / parts reeving	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22 mm	
zul. Wind [m/s] allow.wind [m/s]	16,7	16,4	16,1	15,7	15,4	15,1	14,8	14,4	14,1	13,8	13,4	13,1	12,8	12,5	12,1	11,8	Seildurchmesser rope diameter

Maße

Dimensions

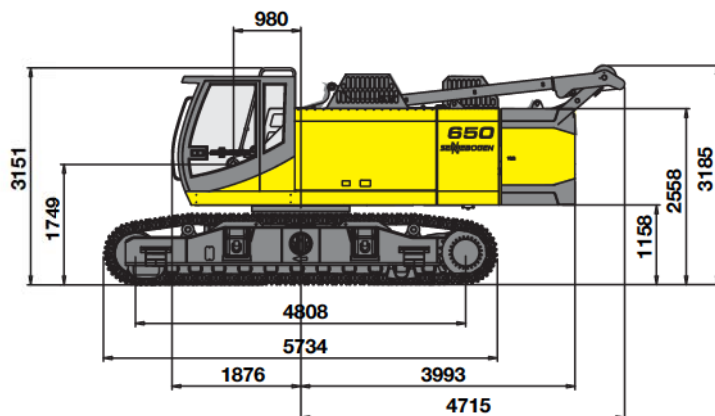


Transportmaße

Transport Dimensions

Grundmaschine - Basemachine

Bodenplatten shoe width	Min.Transportbreite Min. Transport width
800 mm	3300 mm
900 mm	3300 mm



Haken

Hooks

Für 120 KN Winde mit 22 mm Seildurchmesser - For 120 KN Winch with 22 mm rope diameter

Kapazität Capacity	Gewicht Weight	Seilstränge und max. Traglast - Nr. of ropes and max. rated Load													
		14	13	12	11	10	9	8	7	6	5	4	3	2	1
10 t	200 kg														8.500
25 t - 1 Rolle	400 kg												25.500	17.000	8.500
40 t - 2 Rollen	500 kg										40.000	34.000	25.500	17.000	8.500
60 t - 3 Rollen	600 kg									50.000	42.500	34.000	25.500	17.000	8.500

Für 160 KN Winde mit 26 mm Seildurchmesser - For 160 KN Winch with 26mm rope diameter

Kapazität Capacity	Gewicht Weight	Seilstränge und max. Traglast - Nr. of ropes and max. rated Load													
		14	13	12	11	10	9	8	7	6	5	4	3	2	1
15 t	300 kg														12.000
40 t - 1 Rolle	500 kg											40.000	36.000	24.000	12.000
60 t - 2 Rollen	600 kg										50.000	48.000	36.000	24.000	12.000

Transportmaße

Transport Dimensions



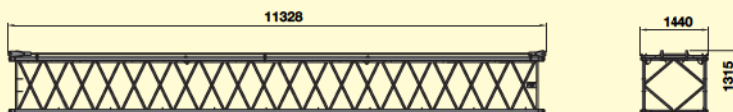
Auslegerzwischenstück 2,8m Typ 1370 (mit Abspannung)
boom insert 2,8m type 1370 (with pendants)

Gewicht / weight: 310 kg



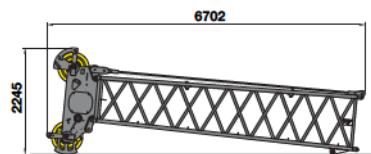
Auslegerzwischenstück 5,6m Typ 1370 (mit Abspannung)
boom insert 5,6m type 1370 (with pendants)

Gewicht / weight: 490 kg



Auslegerzwischenstück 11,2m Typ 1370 (mit Abspannung)
boom insert 11,2m type 1370 (with pendants)

Gewicht / weight: 870 kg

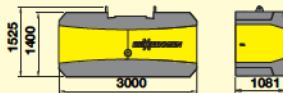


Auslegerkopfstück 5,6m Typ 1370 mit Abspannung
und Auslegerkopf T50

Upper boom 5,6m type 1370 with pendants
and boom head T50

Breite / width: 1420mm

Gewicht / weight: 1100 kg (1250 kg mit Stahlrollen/
with steel sheaves)



Gegengewicht
Counterweight

Gewicht / weight: 18.000 kg



Vorsprung durch Innovation

Leading through Innovation

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E-mail: marketing@sennebogen.de

Technische Änderungen ohne Vorankündigung und Verpflichtung gegenüber früher gelieferten Geräten vorbehalten! Die abgebildeten Geräte können Sonderausrüstungen beinhalten! Irrtum und Druckfehler vorbehalten.

Technical specifications are subject to change without notice and without incurring responsibility for machines previously sold! The shown machines may have special equipment! Error and misprints reserved.

“” www.sennebogen.com