

GMK4090

Preliminary Product Guide

ASME B30.5
Imperial 85%



Features

- 90 t (100 USt) capacity
- 51 m (167 ft) six-section main boom
- 8,7 m - 15 m (28.5 ft - 49.2 ft) swingaway extension
- 6 m (19.7 ft) boom extension
- Single-engine concept design
- MAXbase variable outrigger positioning

GROVE GMK4090

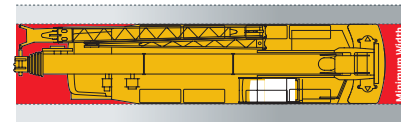
PRELIMINARY

Compact and Strong: With high capacities and industry-leading compact dimensions, the GMK4090 allows you to secure more jobs than ever before.

Features

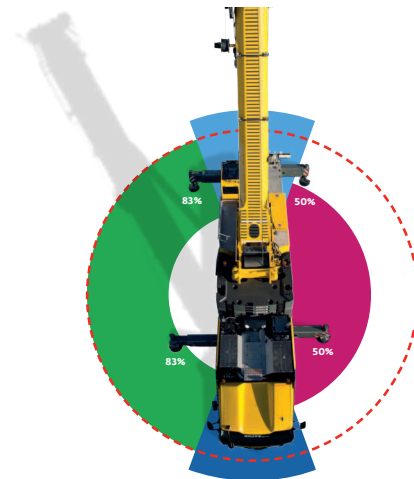
> Industry-leading compact dimensions

The minimum width of the GMK4090 is 2,55 m (8.4 ft) and the overall length is 12,68 m (41.6 ft).



> MAXbase Variable Outrigger Positioning

MAXbase variable outrigger positioning for increased capacities and flexibility at jobsites.



> Single-engine concept

The new single engine concept on the GMK4090 with the latest EUROMOT 4/Tier 4 final engine reduces fuel consumption to a minimum. Using the ECO mode, the GMK4090 is the most fuel efficient crane in its class.



> CraneSTAR is an exclusive and innovative crane asset management system

Helps improve your profitability and reduce costs by remotely monitoring critical crane data.
Visit www.cranestar.com for more information.

PRELIMINARY

Jobsite benefits

- Access narrow jobsites and utilize a more compact radius to gain a better position for lift performance. The GMK4090's compact size and MAXbase variable outrigger positioning system provides excellent job site flexibility unmatched in the market.
- Human Machine Interface (HMI) allows for control of the MEGATRAK™ suspension system from both sides of the carrier allowing for adjustment of ground clearance independent of the outriggers. The GMK4090 can also be equipped with an outrigger pad load indicator with visibility on both sides of the carrier or from the operators cab.
- MEGATRAK™ independent suspension, all-wheel steering system and steer by wire technology provides increased ground clearance, adjustable suspension and reduces tire-wear to provide maximum maneuverability in all-terrains.



Manitowoc Crane Care when you need it.

The assurance of the world's most advanced crane service and support to get you back to work fast.



Manitowoc Finance helps you get right to work generating profits for your business.

Financial tools that help you capitalize on opportunity with solutions that fit your needs.

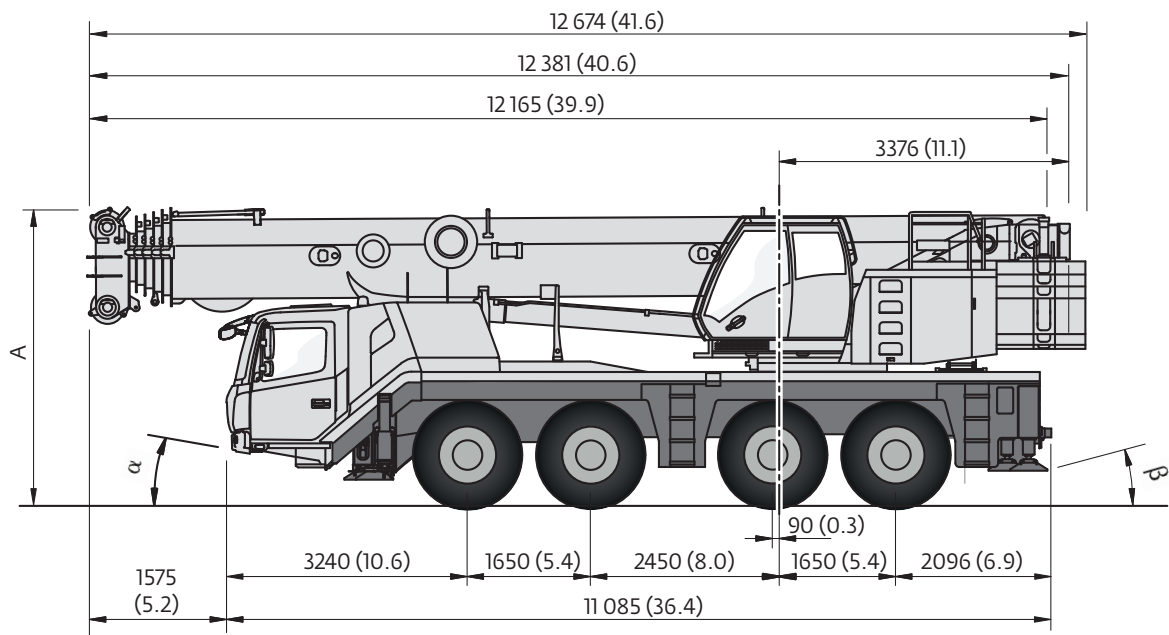
Contents

PRELIMINARY

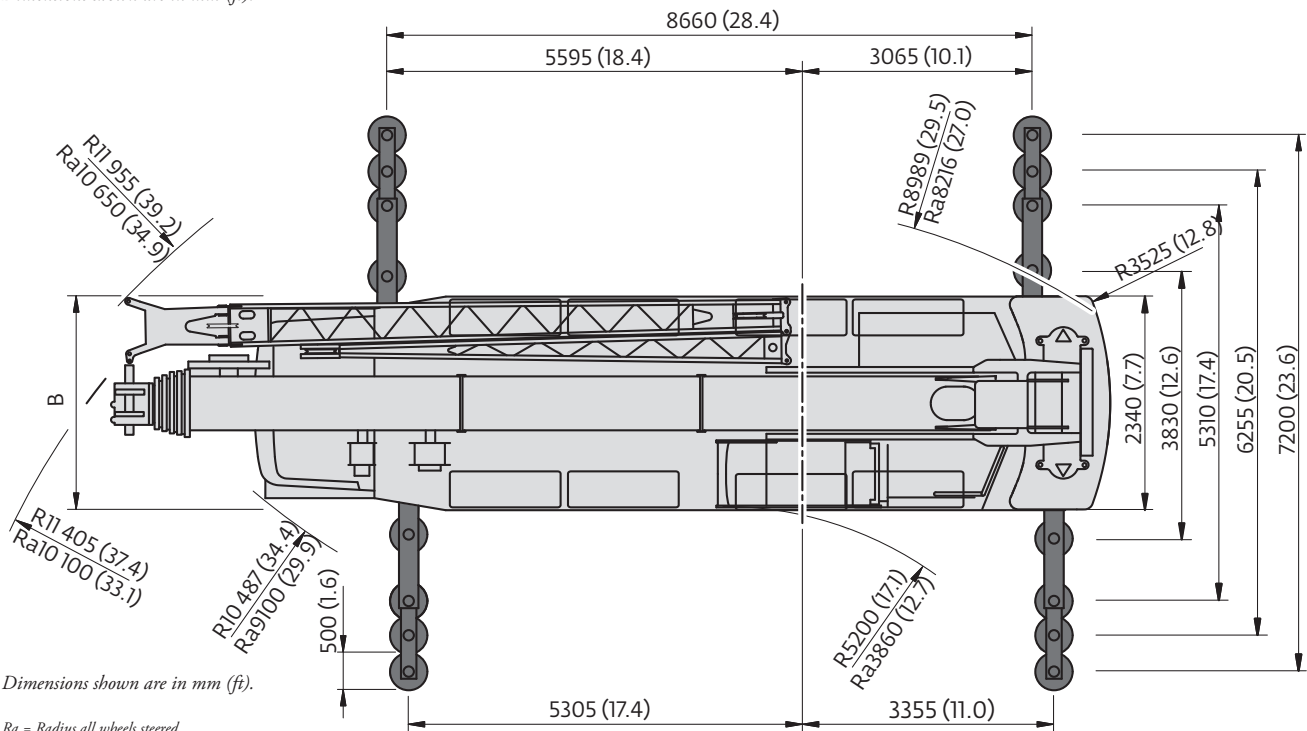
Dimensions	5
Data	8
Weights	9
Working range - Main boom	10
Load charts - Main boom	11
Specifications	15
Symbols glossary	16

PRELIMINARY

Dimensions



Dimensions shown are in mm (ft).



Dimensions shown are in mm (ft).

Ra = Radius all wheels steered

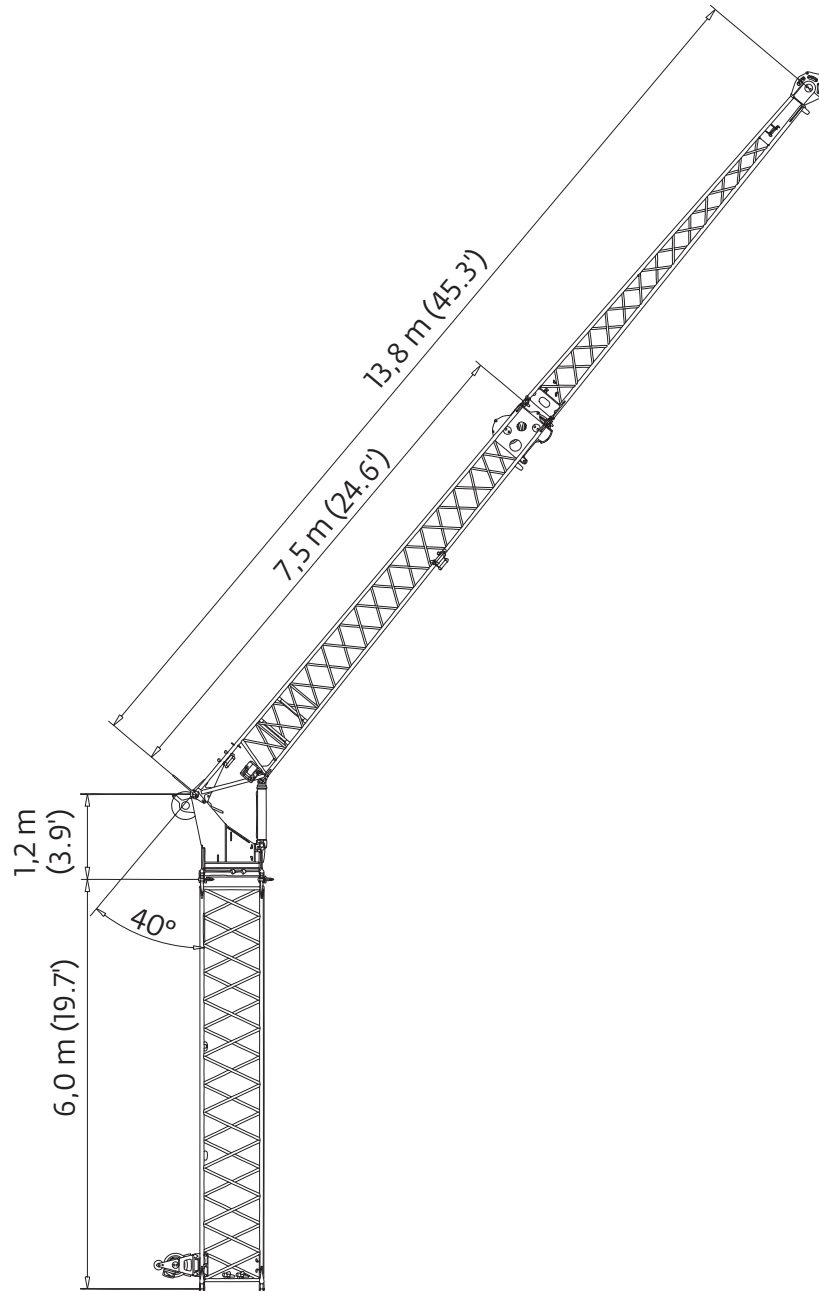
	A	A 126 mm* (0.4)	B	C	D	E	F	α	β	β l
14.00 R25	3940 (12.9)	3810 (12.5)	2550 (8.4)	2320 (7.6)	1750 (5.7)	435 (1.4)	262 (0.9)	14	21	17
16.00 R25	3990 (13.1)	3860 (12.7)	2750 (9.0)	2280 (7.5)	1863 (6.1)	485 (1.6)	292 (1.0)	16	23	19
20.5 R25	3990 (13.1)	3860 (12.7)	2880 (9.4)	2320 (7.6)	1863 (6.1)	485 (1.6)	292 (1.0)	16	23	19

* Lowered

Dimensions

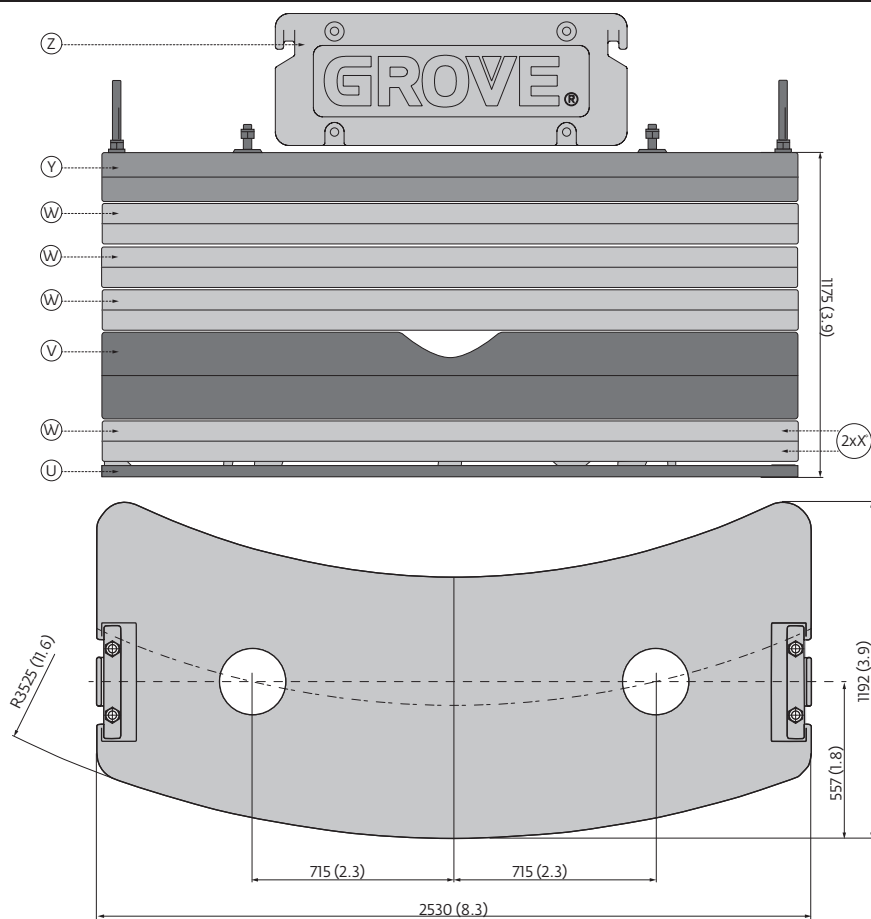
PRELIMINARY

Jib configurations



Total Length	Intermediate section boom extension make-up			
m (ft)	6,0 m (19.7 ft)	1,2 m (3.9 ft)	7,5 m (24.6 ft)	6,3 m (20.7 ft)
8,7 (28.5)	-	1x	1x	-
15,0 (49.2)	-	1x	1x	1x
21,0 (68.9)	1 x	1x	1x	1x

Counterweight



	Z 0,5 t (0.6 USt)	Y 2,9 t (3.2 USt)	*X 1,15 t (1.3 USt)	W 2,3 t (2.5 USt)	V 4,6 t (5.1 USt)	U 1,1 t (1.2 USt)
0,5 t (0.6 USt)	x					
3,5 t (3.9 USt)	x	x				
4,5 t (5.0 USt)	x	x				x
5,6 t (6.2 USt)	x	x	x			x
6,8 t (7.5 USt)	x	x		x		x
7,9 t (8.7 USt)	x	x	x	x		x
9,1 t (10.0 USt)	x	x		2x		x
10,2 t (11.2 USt)	x	x	x	2x		x
11,4 t (12.6 USt)	x	x		3x		x
12,5 t (13.8 USt)	x	x	x	3x		x
13,7 t (15.1 USt)	x	x		2x	x	x
14,8 t (16.3 USt)	x	x	x	2x	x	x
16,0 t (17.6 USt)	x	x		3x	x	x
17,1 t (18.8 USt)	x	x	x	3x	x	x
18,3 t (20.2 USt)	x	x	2x	3x	x	x
18,3 t (20.2 USt)	x	x		4 x	x	x

*Optional 2 x 1,15 t (1.3 USt) instead of 1 x 2.3 t (2.5 USt)



Lifting Capacity	Sheaves	Weight	Parts of line	Possible load with crane*
80 t (88 USt)	7	800 kg (1770 lb)	2 - 12 / **15	58 t / 74 t** (63.9/81.6 USt)
63 t (69 USt)	5	650 kg (1430 lb)	2 - 11	54 t (59.5 USt)
40 t (44 USt)	3	450 kg (1000 lb)	2 - 7	35 t (35.6 USt)
16 t (18 USt)	1	300 kg (660 lb)	1 - 3	15 t (16.5 USt)
8 t (9 USt)	H/B	200 kg (440 lb)	1	5 t (5.5 USt)

*Varies depending on national regulations

** Requires additional boom nose sheave



+



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	R1	R2	
mp/h	3.9	4.7	5.8	7.0	8.7	10.5	12.4	15.5	17.4	21.1	25.5	31.1	38.5	46.6	52.8	52.8	3.9	4.8	
mp/h	1.8	2.2	2.6	3.1	3.9	4.7	5.6	6.8	8.0	9.3	11.8	14.3	17.4	21.1	25.5	30.4	1.8	2.2	70%
	14.00 R25																		

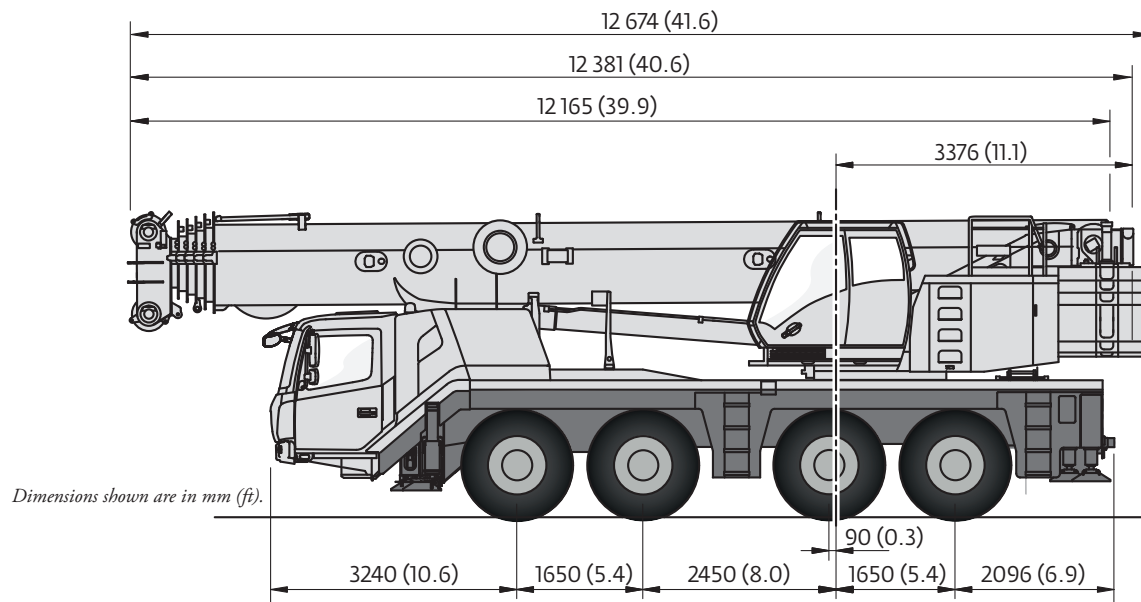


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	Infinitely variable	Rope	Max. Single line pull
	0 - 120 m/min (394 fpm) Single line	16 mm / 220 m (720 ft)	50,0 kN (11,240 lb)
	0 - 120 m/min (394 fpm) Single line	16 mm / 220 m (720 ft)	50,0 kN (11,240 lb)
	0 - 1,7 min ⁻¹		
	-3,0° to + 82° approx. < 45 s		
	11,3 m - 51,0 m (37.1 ft - 167.3 ft) approx. < 335 s		

Boom over front



Basic Weights - kg (lb)	Axles 1 and 2	Axles 1 and 2	Axles 3 and 4	Axles 3 and 4	Total	Total
Mercedes power Tier 4 Final, 16.00 R25 tires on steel wheels, 8x6x8 drive/steer, additional oil cooler, nylatron outrigger pads, trailing boom float kit, auxiliary hoist, 2,9 t (3.2 USt) counterweight attached to superstructure, and full fuel tank.	21 500 kg	47,400 lb	20 240 kg	44,640 lb	41 740 kg	92,040
Additions						
8X8X8 drive/steer	244 kg	537 lb	59 kg	129 lb	303 kg	666 lb
Spare wheel 14.00 R25 XGC steel rim with stowage	-206 kg	-455 lb	477 kg	1052 lb	271 kg	597 lb
Spare wheel 16.00 R25 XGC steel rim with stowage	-247 kg	-544 lb	571 kg	1258 lb	324 kg	714 lb
Spare wheel 20.5 R25 XGC steel rim with stowage	-295 kg	-650 lb	682 kg	1503 lb	387 kg	853 lb
Brackets for hydraulic swingaway	92 kg	203 lb	-32 kg	-70 lb	60 kg	132 lb
Hose reel for hydraulic swingaway	102 kg	225 lb	-42 kg	-93 lb	60 kg	132 lb
8,7 m - 15 m (28.5 ft - 49.2 ft) hydraulic swingaway	1211 kg	2669 lb	-326 kg	-718 lb	885 kg	1951 lb
Substitutions						
14.00R25 tires	-212 kg	-468 lb	-212 kg	-468 lb	-424 kg	-936 lb
20.5R25 tires	252 kg	555 lb	252 kg	555 lb	504 kg	1110 lb
Removals						
Auxiliary hoist	546 kg	1203 lb	-1398 kg	-3081 lb	-852 kg	-1878 lb
Front and rear nylatron outrigger floats	-59 kg	-131 lb	-72 kg	-159 lb	-131 kg	-290 lb

For additional travel configurations, please consult the factory.

Working range

Main boom

PRE



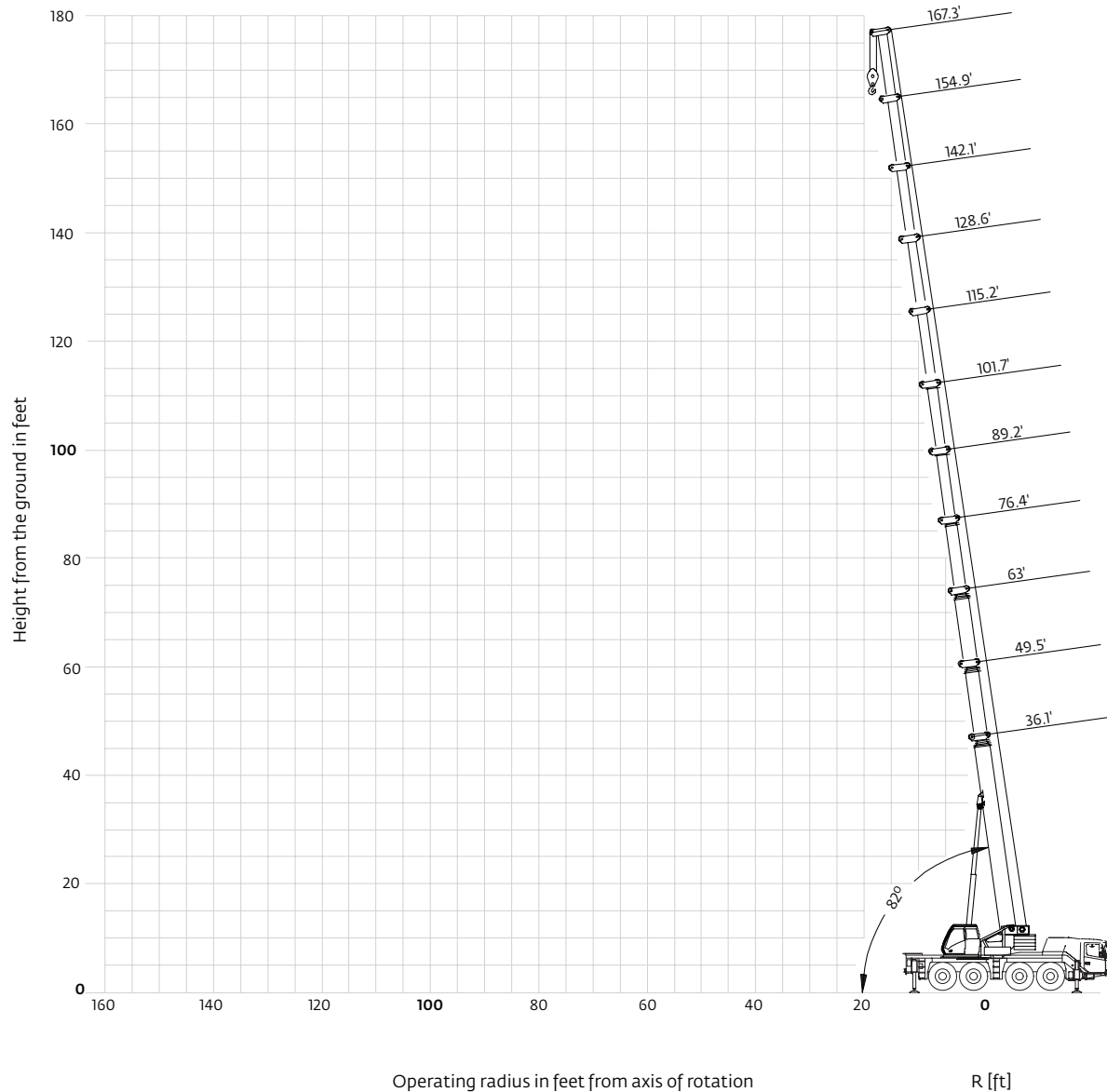
11,0 m - 51,0 m (36 ft - 167 ft)

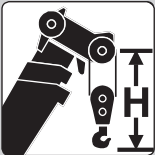


7,2 m (23.6 ft)



360°



	Hook block T (USt)	H mm (ft)
	80 D (88)	3200 (10.5)
	63 D (69)	3000 (9.8)
	40 D (44)	2900 (9.5)
	16 E (18)	2800 (9.2)
	8 H/B (9)	2350 (7.7)

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane

PRELIMINARY

Load charts

Main boom



11,0 m - 51,0 m
(36 ft - 167 ft)



7,2 m
(23.6 ft)



360°



18,3 t (20.2 USt)



Pounds x 1000

ft	36.1	49.5	63.0	76.4	89.2	101.7	115.2	128.6	142.1	154.9	167.3	ft
10.0	200.0 *											10.0
10.0	153.0	127.0	124.0	109.0								10.0
15.0	108.0	105.0	100.0	96.0	79.0							15.0
20.0	87.0	86.0	83.0	79.0	73.0	59.0	45.0					20.0
25.0	67.0	70.0	69.0	68.0	66.0	56.0	43.6	33.8				25.0
30.0		57.0	57.0	56.0	57.0	51.0	40.6	33.6	25.4	19.6		30.0
35.0		48.0	48.0	48.0	48.0	47.0	37.0	32.4	25.4	19.6	15.8	35.0
40.0		35.0	41.0	41.6	40.4	40.4	33.4	29.8	25.4	19.6	15.8	40.0
45.0			35.6	35.4	35.4	34.6	30.0	27.2	24.8	19.6	15.8	45.0
50.0			29.6	29.6	30.8	29.6	27.4	24.8	22.8	19.6	15.8	50.0
55.0				26.2	26.6	25.4	24.2	22.6	21.0	19.2	15.8	55.0
60.0				23.2	22.8	21.8	21.6	20.4	19.4	18.0	15.8	60.0
65.0				20.2	19.8	18.8	19.8	18.0	17.8	16.8	15.4	65.0
70.0					17.4	17.6	17.6	15.8	16.0	15.8	14.8	70.0
75.0					15.4	16.2	15.4	14.6	14.2	14.4	14.0	75.0
80.0						14.6	13.8	13.8	12.8	13.0	13.2	80.0
85.0						13.0	12.2	12.6	12.2	11.8	12.0	85.0
90.0						12.0	11.0	11.4	11.4	11.0	10.6	90.0
95.0							9.8	10.2	10.4	10.2	9.6	95.0
100.0							8.8	9.2	9.4	9.2	8.6	100.0
105.0								8.6	8.4	8.2	7.8	105.0
110.0								8.2	7.8	7.4	6.8	110.0
115.0								7.6	7.2	6.6	6.2	115.0
120.0									6.6	6.0	5.4	120.0
125.0									6.0	5.4	4.8	125.0
130.0									5.4	5.0	4.4	130.0
135.0										4.4	3.8	135.0
140.0										4.0	3.4	140.0
145.0											2.8	145.0
150.0											2.4	150.0
155.0											2.2	155.0

* Over rear with special equipment

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Load charts

Main boom

PRELIMINARY



11,0 m - 51,0 m
(36 ft - 167 ft)



7,2 m
(23.6 ft)



360°



14,8 t (16.3 USt)



Pounds x 1000

ft	36.1	49.5	63.0	76.4	89.2	101.7	115.2	128.6	142.1	154.9	167.3	ft
10.0	153.0	127.0	124.0	109.0								10.0
15.0	108.0	105.0	100.0	96.0	79.0							15.0
20.0	85.0	86.0	83.0	79.0	73.0	59.0	45.0					20.0
25.0	66.0	68.0	68.0	66.0	66.0	56.0	43.6	33.8				25.0
30.0		55.0	55.0	54.0	54.0	51.0	40.6	33.6	25.4	19.6		30.0
35.0		47.0	47.0	46.0	44.0	43.2	37.0	32.4	25.4	19.6	15.8	35.0
40.0		33.8	38.6	38.2	38.4	35.8	33.2	29.8	25.4	19.6	15.8	40.0
45.0			31.4	32.0	32.6	30.2	28.2	27.0	24.8	19.6	15.8	45.0
50.0			26.6	27.6	27.4	26.0	24.6	23.2	22.8	19.6	15.8	50.0
55.0				23.6	23.4	22.6	22.6	20.2	20.0	19.0	15.8	55.0
60.0				20.2	20.0	19.8	20.0	17.8	17.4	17.6	15.8	60.0
65.0				17.8	17.4	18.0	17.4	16.4	15.4	15.4	15.4	65.0
70.0					15.2	16.0	15.2	15.2	14.4	14.4	14.0	70.0
75.0					13.4	14.2	13.4	13.8	13.4	13.4	12.4	75.0
80.0						12.6	11.8	12.2	12.2	12.2	11.2	80.0
85.0						11.4	10.4	11.0	10.8	10.6	10.0	85.0
90.0						10.2	9.4	10.2	10.0	9.6	9.0	90.0
95.0							8.8	9.4	9.0	8.6	8.0	95.0
100.0							8.2	8.6	8.2	7.6	7.0	100.0
105.0								7.8	7.2	6.8	6.2	105.0
110.0								6.8	6.6	6.0	5.4	110.0
115.0								6.2	6.0	5.4	4.8	115.0
120.0									5.2	4.8	4.2	120.0
125.0									4.6	4.2	3.6	125.0
130.0									4.2	3.6	3.2	130.0
135.0										3.2	2.8	135.0
140.0										2.8	2.2	140.0



11,0 m - 51,0 m
(36 ft - 167 ft)



7,2 m
(23.6 ft)



360°



10,2 t (11.2 USt)



Pounds x 1000

ft	36.1	49.5	63.0	76.4	89.2	101.7	115.2	128.6	142.1	154.9	167.3	ft
10.0	153.0	127.0	124.0	109.0								10.0
15.0	108.0	105.0	100.0	96.0	79.0							15.0
20.0	82.0	83.0	83.0	78.0	73.0	59.0	45.0					20.0
25.0	64.0	64.0	65.0	63.0	60.0	55.0	43.6	33.8				25.0
30.0		53.0	52.0	50.0	49.0	45.0	40.4	33.6	25.4	19.6		30.0
35.0		40.4	41.6	39.8	39.4	36.2	33.8	31.8	25.4	19.6	15.8	35.0
40.0		28.8	32.8	34.2	32.4	30.0	28.2	26.8	25.0	19.6	15.8	40.0
45.0			27.6	27.8	27.4	25.0	25.4	22.4	22.0	19.6	15.8	45.0
50.0			22.8	23.2	22.8	22.6	22.0	19.8	19.0	19.0	15.8	50.0
55.0				19.6	19.2	20.4	19.0	18.4	17.4	17.2	15.4	55.0
60.0				16.8	16.4	17.4	16.6	16.6	16.2	15.6	14.4	60.0
65.0				14.6	14.0	15.0	14.2	14.6	14.6	13.6	12.6	65.0
70.0					12.2	13.2	12.4	13.2	13.0	12.2	11.0	70.0
75.0					10.6	11.4	11.2	12.0	11.4	10.8	9.6	75.0
80.0						10.2	10.4	10.6	10.0	9.6	8.6	80.0
85.0						9.6	9.6	9.4	8.8	8.4	7.6	85.0
90.0						8.6	8.6	8.4	7.8	7.4	6.6	90.0
95.0							7.6	7.4	7.0	6.6	5.8	95.0
100.0							6.8	6.6	6.2	5.6	5.0	100.0
105.0								5.8	5.2	4.8	4.4	105.0
110.0								5.2	4.8	4.4	3.8	110.0
115.0								4.6	4.2	3.8	3.0	115.0
120.0									3.6	3.2	2.6	120.0
125.0									3.2	2.6		125.0
130.0									2.8	2.2		130.0

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PRELIMINARY

Load charts

Main boom



11,0 m - 51,0 m
(36 ft - 167 ft)



7,2 m
(23.6 ft)



360°



9,1 t (10.0 USt)



Pounds x 1000

ft	36.1	49.5	63.0	76.4	89.2	101.7	115.2	128.6	142.1	154.9	167.3	ft
10.0	153.0	127.0	124.0	109.0								10.0
15.0	107.0	105.0	100.0	96.0	79.0							15.0
20.0	80.0	82.0	82.0	78.0	73.0	59.0	45.0					20.0
25.0	63.0	64.0	63.0	61.0	57.0	54.0	43.6	33.8				25.0
30.0		51.0	51.0	47.0	46.0	43.0	40.0	33.6	25.4	19.6		30.0
35.0		38.6	39.4	39.0	37.4	34.6	32.2	30.8	25.4	19.6	15.8	35.0
40.0		27.6	31.6	32.6	30.8	28.4	28.0	25.2	24.8	19.6	15.8	40.0
45.0			26.2	26.6	26.0	24.6	24.4	21.6	20.8	19.6	15.8	45.0
50.0			21.6	22.0	21.6	22.4	20.6	19.8	18.8	18.0	15.8	50.0
55.0				18.6	18.4	19.2	18.0	18.0	17.2	16.8	15.2	55.0
60.0				16.0	15.4	16.6	15.4	15.8	15.6	14.6	13.6	60.0
65.0				14.6	13.2	14.2	13.2	14.2	13.8	12.8	11.6	65.0
70.0					11.4	12.4	12.2	12.6	12.4	11.4	10.2	70.0
75.0					9.8	11.0	11.2	11.2	10.8	10.0	9.0	75.0
80.0						9.8	10.0	9.8	9.4	8.8	8.0	80.0
85.0						9.0	8.8	8.6	8.2	7.8	6.8	85.0
90.0						8.0	7.8	7.6	7.2	6.8	6.0	90.0
95.0							7.0	6.8	6.4	5.8	5.2	95.0
100.0							6.2	6.0	5.6	5.0	4.4	100.0
105.0								5.2	4.8	4.4	3.8	105.0
110.0								4.8	4.4	4.0	3.2	110.0
115.0								4.2	3.8	3.2	2.8	115.0
120.0									3.4	2.8		120.0
125.0									2.8	2.4		125.0
130.0									2.4	1.8		130.0



11,0 m - 51,0 m
(36 ft - 167 ft)



7,2 m
(23.6 ft)



360°



7,9 t (8.7 USt)



Pounds x 1000

ft	36.1	49.5	63.0	76.4	89.2	101.7	115.2	128.6	142.1	154.9	167.3	ft
10.0	153.0	127.0	124.0	109.0								10.0
15.0	107.0	105.0	100.0	96.0	79.0							15.0
20.0	80.0	80.0	80.0	78.0	73.0	59.0	45.0					20.0
25.0	62.0	63.0	61.0	58.0	56.0	53.0	43.6	33.8				25.0
30.0		48.0	48.0	46.0	44.0	41.0	38.0	33.4	25.4	19.6		30.0
35.0		36.8	37.6	37.8	35.6	32.8	31.2	29.0	25.4	19.6	15.8	35.0
40.0		26.4	30.8	31.2	29.4	27.2	27.2	24.0	23.4	19.6	15.8	40.0
45.0			25.0	25.2	24.6	24.4	23.0	21.4	20.2	19.2	15.8	45.0
50.0			20.6	20.8	20.4	21.4	19.6	19.6	18.6	17.8	15.8	50.0
55.0				17.8	17.4	18.4	16.8	17.0	16.8	15.8	14.6	55.0
60.0				15.4	14.6	15.4	14.8	15.2	14.8	13.8	12.6	60.0
65.0				13.6	12.4	13.2	13.2	13.6	13.0	12.2	11.0	65.0
70.0					10.6	11.6	12.0	12.0	11.4	10.6	9.6	70.0
75.0					9.4	10.6	10.8	10.4	10.0	9.2	8.4	75.0
80.0						9.6	9.4	9.2	8.8	8.2	7.2	80.0
85.0						8.4	8.2	8.0	7.8	7.2	6.2	85.0
90.0						7.6	7.4	7.2	6.8	6.2	5.4	90.0
95.0							6.6	6.4	5.8	5.4	4.6	95.0
100.0							5.8	5.6	5.0	4.6	4.0	100.0
105.0								4.8	4.4	4.0	3.4	105.0
110.0								4.4	4.0	3.4	2.8	110.0
115.0								3.8	3.4	3.0	2.2	115.0
120.0									2.8	2.4		120.0
125.0									2.4			125.0
130.0									2.0			130.0

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane

Load charts

Main boom

PRELIMINARY



11,0 m - 51,0 m
(36 ft - 167 ft)



7,2 m
(23.6 ft)



360°



6,8 t (7.5 USt)



Pounds x 1000

ft	36.1	49.5	63.0	76.4	89.2	101.7	115.2	128.6	142.1	154.9	167.3	ft
10.0	153.0	127.0	124.0	109.0								10.0
15.0	106.0	104.0	100.0	96.0	79.0							15.0
20.0	79.0	80.0	80.0	76.0	71.0	59.0	45.0					20.0
25.0	60.0	61.0	59.0	56.0	54.0	50.0	43.6	33.8				25.0
30.0		44.0	45.0	44.0	42.2	38.6	35.8	33.2	25.4	19.6		30.0
35.0		33.4	35.4	36.0	33.8	31.0	30.2	27.4	25.4	19.6	15.8	35.0
40.0		24.0	27.6	29.2	27.6	26.4	25.6	23.4	22.2	19.6	15.8	40.0
45.0			22.2	23.8	23.0	23.4	21.6	21.2	20.0	18.6	15.8	45.0
50.0			18.2	19.6	19.2	20.0	18.4	18.4	18.2	17.0	15.6	50.0
55.0				16.6	16.0	17.2	16.0	16.4	15.8	14.8	13.6	55.0
60.0				14.0	13.6	14.6	14.2	14.6	13.8	12.8	11.6	60.0
65.0				12.0	11.4	12.4	13.0	12.8	12.2	11.2	10.2	65.0
70.0					10.0	11.4	11.4	11.2	10.6	9.8	8.8	70.0
75.0					9.2	10.2	10.0	9.8	9.2	8.6	7.4	75.0
80.0						9.0	8.8	8.6	8.2	7.4	6.4	80.0
85.0						7.8	7.6	7.4	7.2	6.4	5.6	85.0
90.0						7.0	6.8	6.4	6.2	5.6	4.8	90.0
95.0							6.0	5.8	5.4	4.8	4.0	95.0
100.0							5.2	5.0	4.6	4.2	3.4	100.0
105.0								4.4	4.0	3.6	2.8	105.0
110.0								3.8	3.4	2.8	2.4	110.0
115.0								3.2	3.0	2.4		115.0
120.0									2.4			120.0

The lifting capacities correspond to ASME B30.5

The lifting capacities likewise fulfill the requirements of ISO 4305 with regard to stability.

The lifting capacities are given in pounds x 1000.

Lifting capacity = Payload + weight of hook block and suspending device.

The lifting capacities for the main boom only apply with the jib dismantled.

Lifting capacities greater than 130,000 lb require additional equipment.

Lifting capacities greater than 165,000 lb require special equipment.

The right is reserved to modify the load-carrying capacities.

Note: The details in this brochure serve only as general information. The determinant values for the operation of the crane are the lifting capacity tables belonging to it and the operating instructions.

Lifting capacities are indicated by boom length for different levels of extension. The actual boom length will be in accordance with the selected configuration for boom extension.

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Superstructure



Boom

11,0 m to 51,0 m (36 ft - 167 ft) six section TWIN-LOCK™ boom. Maximum tip height 54,0 m (177 ft).



Boom elevation

One cylinder with safety valve, boom angle from -3,0° to +82°.



Load moment and independent anti-two block system

Load moment and independent anti-two block system with audio visual warning and control lever lock-out. These systems provide graphic display of boom angle, length, radius, tip height, relative load moment, maximum permissible load, load indication and warning of impending two-block condition with lock-out hoist function.



Cab

Aluminium, full vision, tilting (approx. 20°), safety glass, adjustable operator's seat with suspension (optional), engine-independent heater. Armrest integrated crane controls. Ergonomically arranged instrumentation and crane operating controls.



Slewing

Two slewing gears with axial piston motors, planetary gears, automatic break.



Counterweight

18,3 t (20.2 USt), consisting of various sections (18,3 t [20.2 USt] within 2,55 m [8.4 ft] vehicle width). Hydraulic removal system.



Hydraulic system

Two separate circuits, 1 axial piston variable displacement pump with electronic power limiting control and 1 axial piston variable displacement pump for slewing.

Thermostatically controlled oil cooler. Tank capacity: 450 l (119 gallon).



Control system

Full electronic control of all crane movements using electrical control levers with automatic reset to zero. Integrated with the RCL and engine management system by CAN-BUS. Crane Control System (CCS) with system with graphic display.



Hoist

Axial piston motor with planetary gear and brake. Drum rotation indicator. IR - Hoist camera with light.

* Optional equipment

- Bi-fold swingaway, 8,7 m (28.5 ft)/15 m (49 ft) with hydraulic offset and luffing under load (0°-40°), controlled from the crane cab.
- Bi-fold swingaway, 8,7 m (28.5 ft)/15 m (49 ft) (manual offset 0°, 20°, 40°).
- Lattice extension, 21 m (69 ft)- includes 6 m (19.7 ft) fixed non-offsettable section plus 8,7 m (28.5 ft)/15 m (49 ft) swingaway (see above).
- Auxiliary hoist

Carrier



Chassis

Special 4-axle chassis, all-welded torsion-resistant box type construction in high strength steel.



Outriggers

4 double hydraulically telescoping beams with vertical cylinders and outrigger pads. Independent horizontal and vertical movement control on each side of the carrier and from the operators cab. Electronic level indicator with automatic levelling system.



Engine

Mercedes Benz OM470LA, diesel, 6 cylinders, water cooled, turbocharged, 320 kW (430 hp) at 1700 rpm (80/1269 EWG fan loose). Max. torque: 2100 Nm at 1300 rpm. Fuel tank: 200 l + 200 l (52.8 gal + 52.8 gal)

Engine emission: Euromot 4 / EPA / CARB Tier 4 final (non road) - optional Euromot 3a / EPA / CARB Tier 3 (non road).



Transmission

Mercedes G 280-16 gears forward and 2 reverse. 2-stage transfer case with longitudinal differential lock.



Drive/Steer

8 x 6 x 8.



Axle lines

4 axle lines, axle lines 1, 2, 3 and 4 steered, axle line 1, 3 and 4 driven.



Suspension

MEGATRAK®. All wheels with independent hydropneumatic suspension and hydraulic lockout. Longitudinal and transverse level control with automatic on highway levelling system. Range +170 mm/-126 mm (+6.7 in / -5.1 in). Active suspension control on outrigger control units.



Tires

Eight tires, 385/95 R25 (14.00 R25).



Steering

Dual circuit, hydraulic power assisted steering with emergency steering pump. Axle lines 1, 2 and 4 steer on highway. Separate electronic hydraulic (steer by wire) steering of the 3rd, and 4th axle line for all wheel steering and crabbing.



Brakes

Service brake: pneumatic dual circuit drum brakes acting on all wheels, air dryer. Permanent brake: exhaust brake and constant throttle brake.

Parking brake: pneumatically operated spring-loaded brake acting on axle lines 2, 3 and 4.



Driver's Cab

2-mandesign, safety glass, driver seat with pneumatic suspension, engine-independent diesel air heater incl. 24 h timer. Complete instrumentation and driving controls. Air condition. 12 V plug. Two rotating beacons. Fire extinguisher.



Electrical system











Three-phase alternator 28 V/150A, 2 batteries 12 V/180 Ah. Lighting system and signals 24 V.

* Optional equipment

- 8 x 8 x 8
- Eight tires, size 445/95 R25 (16.00 R25) - Vehicle width 2,75 m (9.02 ft).
- Eight tires, size 525/80 R25 (20.5 R25) - Vehicle width 2,88 m (9.5 ft).
- Folding bunk bed in carrier cab.
- Secondary water retarder.
- Reverse camera system.

*Further optional equipment on request.

Symbols glossary

 Axles	 Counterweight	 Main hoist	 Outriggers
 Axle load	 Crane functions	 Auxiliary hoist	 Radius
 Boom	 Crane travel	 Hookblock / Capacity	 Slewing/ Working range
 Boom elevation	 Drive/Steer	 Hydraulic system	 Speed
 Boom telescoping	 Electrical system	 Lattice extension	 Suspension
 Brakes	 Engine	 Lattice extension (luffing)	 Transmission / Gear
 Cab	 Free on wheels	 Luffing Jib	 mp/h Travel speed
 Carrier frame	 Gradeability	 Low range	 Tyres
 Hose reel	 Swing-Away	 Dolly	 Storage box + rigging gear
 Weight per axle in kg	 Driveline	 Brackets	

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