

GMK5120L

Product Guide

ASME B30.5
Imperial 85%



Features

- > 120 t (130 USt) capacity
- > 66 m (217 ft) six-section boom
- > 9,7 m (32 ft) /16 m (52 ft) swingaway
- > 8m (26 ft) boom extension for a maximum total length of 24 m (78.7 ft)
- > Single engine concept

GROVE GMK5120L

The 'must-have' addition to every fleet. With a 66 m (217 ft) main boom, the GMK5120L perfectly fills the gap between 100 t and 150 t (115 USt - 175 USt) all-terrain cranes. Superior taxi charts and class-leading amount of counterweight results in greater flexibility and lower transportation costs.

Features

> Superior strength and reach

Get impressive strength and reach including 120 t (130 USt) lifting capacity with 66 m (217 ft) boom. The boom can be further extended with an 9,7 m (32 ft) /16 m (52 ft) swingaway and one 8 m (26 ft) boom extension and / or one 8 m (26 ft) jib insert to a maximum length of 24 m (78.7 ft) with up to 50° offset.

> New cab design

The latest generation of Grove carrier cabs offer a sleek new body style, increased driver ergonomics and comfort, and increased storage space.

> Convenient transportation logistics

Counterweight configurations enable setup from 0,8 t (0.9 USt) counterweight to taxi configurations of 12 t (13 USt) to 16,5 t (18 USt) per axle. This results in greater roadability and transport savings.

> Innovative single-engine concept

The single engine concept on the GMK5120L with the latest EUROMOT 5/Tier 4 final engine reduces fuel consumption to a minimum. Using the ECO mode, the GMK5120L is the most fuel efficient crane in its class. Approved for HVO – up to 90 % CO₂ reduction.



Customer Support

Feel confident in your investment — rest easy with the assurance of the world's most advanced crane service and support network.



Service

Our customer service extends beyond any borders. Our locations span the globe, with representation on five continents. Wherever you are, we are there to help.

Parts

However remote the job site, locating the correct part quickly is vital to managing your operations. With Manitowoc Customer Support, the parts you need are just a phone call or click away.

Training

Manitowoc Training Centers offer courses for operators and technicians across the globe to provide in-depth instruction on crane operation, maintenance and troubleshooting procedures.

EnCORE

Manitowoc's EnCORE program maximizes your investment by rebuilding or repairing your crane to extend its life significantly. EnCORE also includes remanufactured parts.

Finance

Manitowoc Finance gives you access to flexible, affordable financing allowing you to get right to work with the right equipment.

Grove Connect

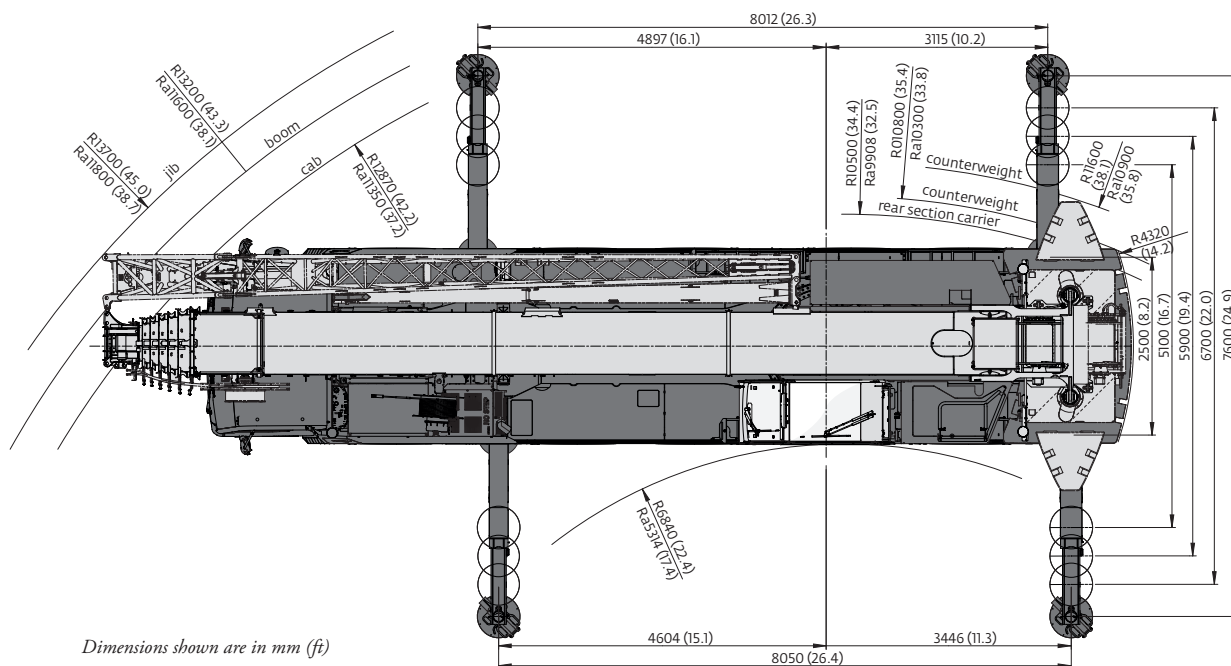
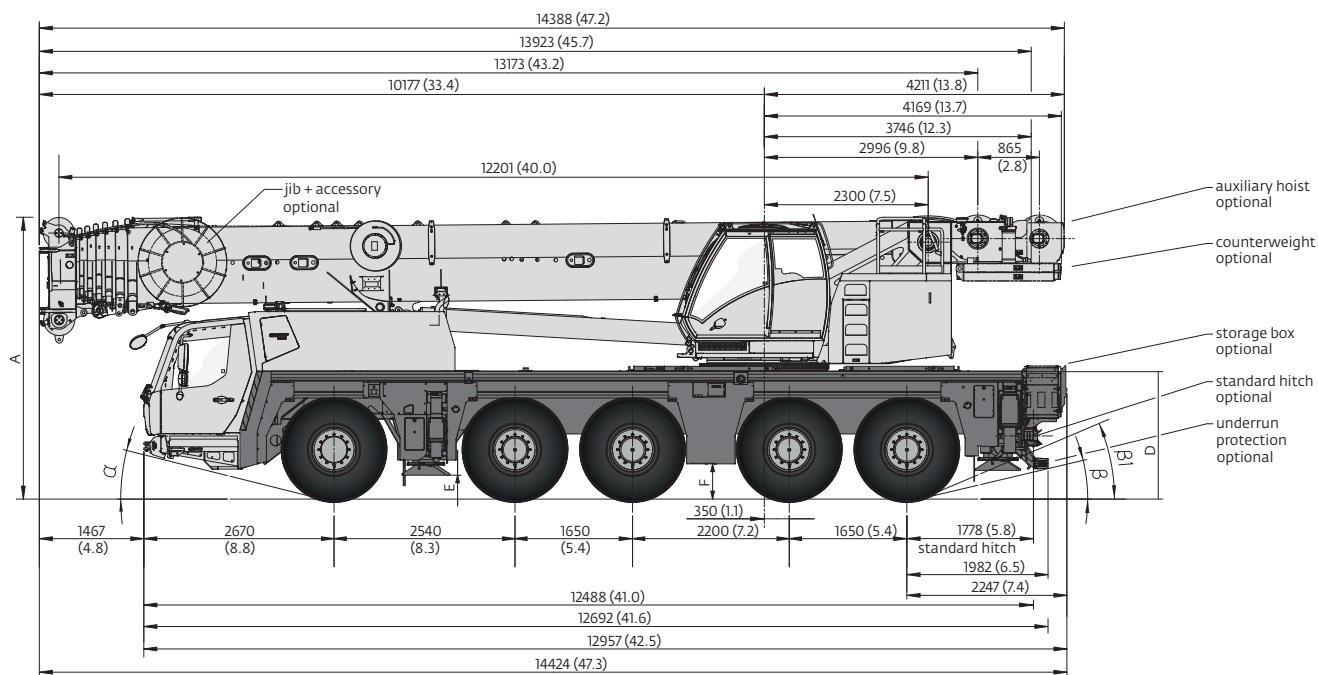
Real-time access to user manuals, parts ordering, and fleet management are just the start. Keep your site running and minimize downtime with remote trouble shooting capabilities and simplified maintenance.



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Dimensions



Dimensions shown are in mm (ft)

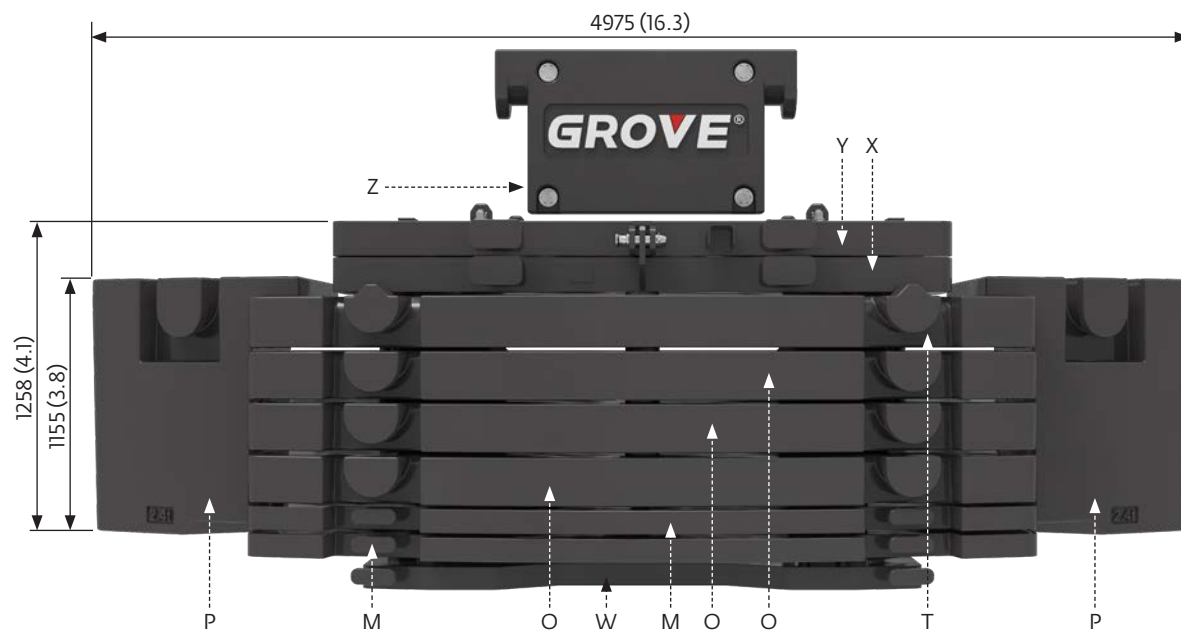
Ra = Radius all wheels steered.

	A	A 101 mm** (0.33)	B	C	D	E	F	α	β	β_1
R14,00/R25	3948 (12.9)	3847 (12.6)	2750 (9.0)	2332 (7.6)	1745 (5.7)	285 (0.9)	444 (1.5)	12°	11.5°	20.5°
R16,00/R25	3998 (13.1)	3897 (12.8)	2750 (9.0)	2293 (7.5)	1795 (5.9)	335 (1.09)	494 (1.6)	14°	13.3°	23°
R20,50/R25	3998 (13.1)	3897 (12.8)	2900 (9.5)	2289 (7.5)	1795 (5.9)	335 (1.09)	494 (1.6)	14°	13.3°	23°

** Lowered

Dimensions

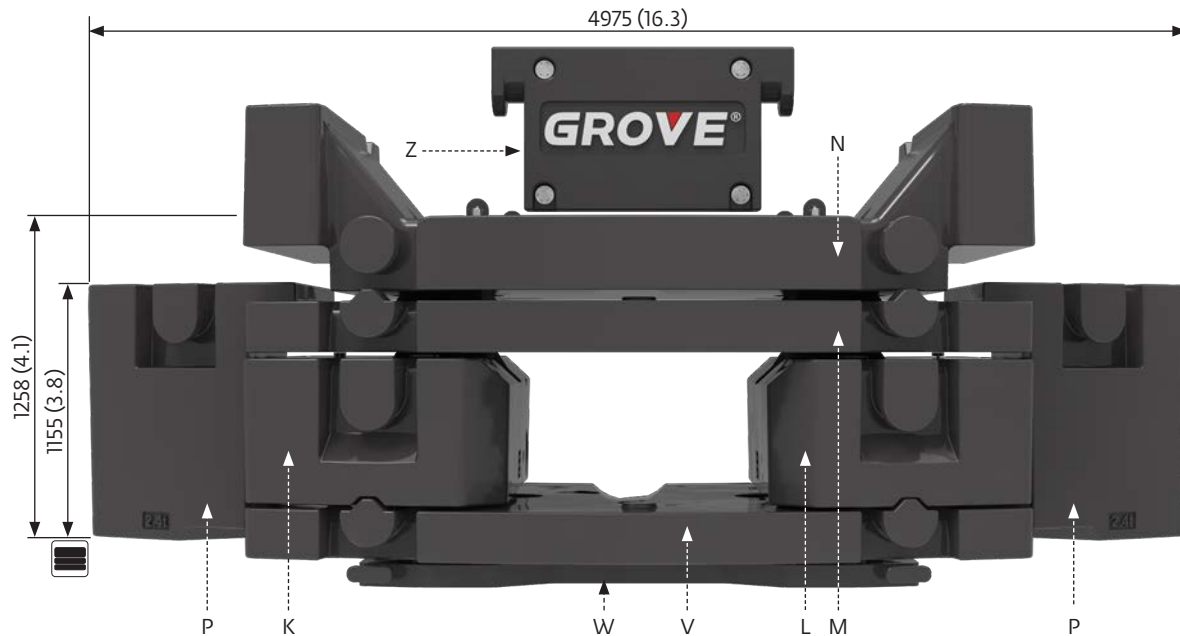
Standard Counterweight



	Z 0,8 t (1,800 lb)	Y 2,3 t (5,100 lb)	X 2,3 t (5,100 lb)	W 2,3 t (5,100 lb)	M 2,3 t (5,100 lb)	T 4,6 t (10,141 lb)	O 4,6 t (10,141 lb)	P 2,4 t (5,300 lb)
0,8 t (1,800 lb)	x							
3,1 t (6,800 lb)	x	x						
3,1 t (6,800 lb)	x			x				
5,4 t (12,000 lb)	x	x	x					
5,4 t (12,000 lb)	x			x	x			
7,7 t (17,000 lb)	x	x	x	x				
7,7 t (17,000 lb)	x			x	2x			
10,0 t (22,100 lb)	x	x	x	x	x			
10,0 t (22,100 lb)	x			x	x		x	
12,3 t (27,000 lb)	x	x	x	x	2x			
12,3 t (27,000 lb)	x			x	2x		x	
14,6 t (32,000 lb)	x	x	x	x	x		x	
14,6 t (32,000 lb)	x			x	x		2x	
16,9 t (37,000 lb)	x	x	x	x			2x	
16,9 t (37,000 lb)	x			x	2x		2x	
19,2 t (42,000 lb)	x	x	x	x	x		2x	
19,2 t (42,000 lb)	x			x	x		3x	
21,5 t (47,400 lb)	x	x	x	x			3x	
21,5 t (47,400 lb)	x			x	2x		3x	
23,8 t (52,500 lb)	x	x	x	x	x		3x	
23,8 t (52,500 lb)	x			x	x	x	3x	
26,1 t (57,500 lb)	x	x	x	x	2x		3x	
26,1 t (57,500 lb)	x			x	2x	x	3x	
30,7 t (68,000 lb)	x	x	x	x	2x	x	3x	
35,5 t (78,000 lb)	x	x	x	x	2x	x	3x	2x

Dimensions

Heavy Roadable Counterweight



	Z 0,8 t (1,800 lb)	W 2,3 t (5,100 lb)	V 2,3 t (5,100 lb)	K 4,6 t (10,141 lb)	L 4,6 t (10,141 lb)	M 6,9 t (15,212 lb)	N* 9,2 t (20,283 lb)	P 2,4 t (5,300 lb)
0,8 t (1,800 lb)	x							
3,1 t (6,800 lb)	x	x						
5,4 t (12,000 lb)	x	x	x					
10,0 t (22,100 lb)	x	x				x		
10,0 t (22,100 lb)	x						x	
12,3 t (27,000 lb)	x	x	x			x		
12,3 t (27,000 lb)	x	x					x	
14,6 t (32,000 lb)	x	x	x				x	
19,2 t (42,000 lb)	x	x				x	x	
21,5 t (47,400 lb)	x	x	x			x	x	
23,8 t (52,500 lb)	x	x	x	x	x		x	
30,7 t (68,000 lb)	x	x	x	x	x	x	x	
35,5 t (78,000 lb)	x	x	x	x	x	x	x	2x

* Fixed to superstructure, removable with tools only.

Dimensions

Counterweight

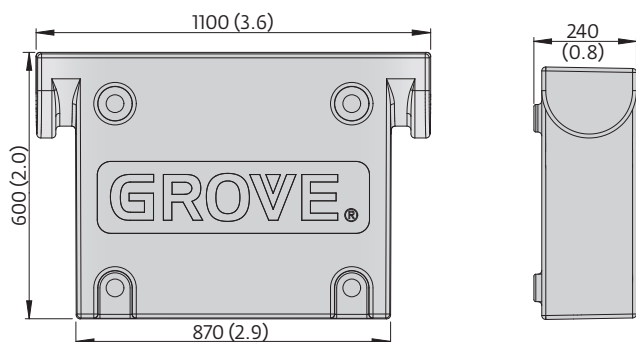


Plate	L x W x H - m (ft)	kg (lb)
Z	1,10 x 0,24 x 0,60 (2'x.8"x2')	800 (1763)

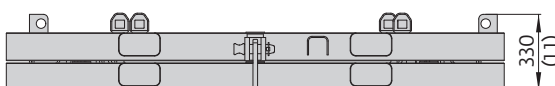
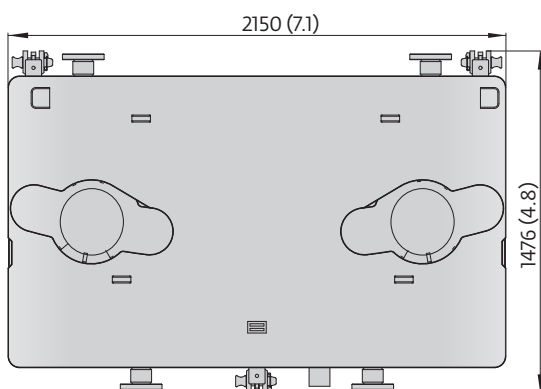


Plate	L x W x H (m)	kg (lb)
Y & X	2,15 x 1,48 x 0,33 (7'x4.8'x1.1')	2300 (5071)

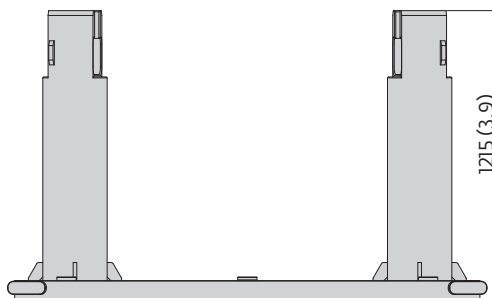
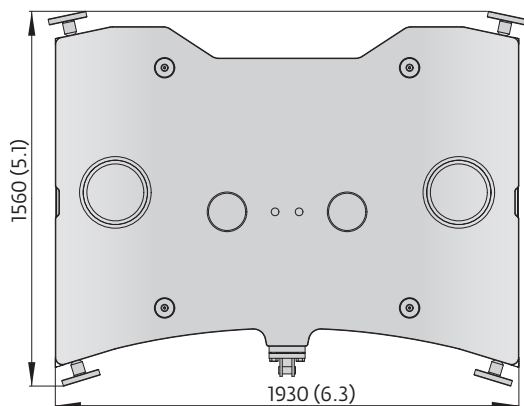


Plate	L x W x H - m (ft)	kg (lb)
W	1,93 x 1,56 x 1,20 (6.3'x5.1'x3.9')	2300 (5071)

Dimensions

Counterweight

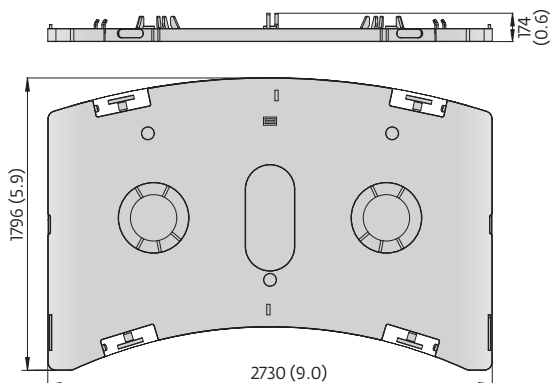


Plate	L x W x H - m (ft)	kg (lb)
V	2,73 x 1,80 x 0,17 (9'x5.9'x.6")	2300 (5071)

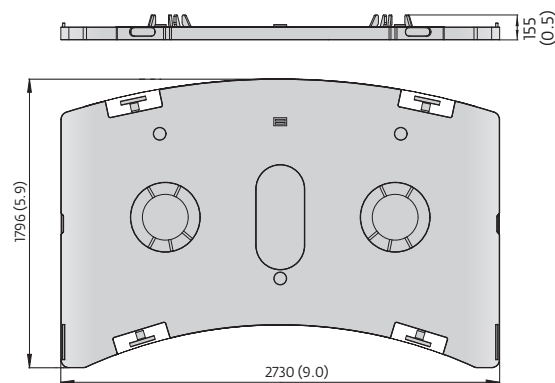


Plate	L x W x H - m (ft)	kg (lb)
U	2,73 x 1,80 x 0,16 (9'x5.9'x.5")	2300 (5071)

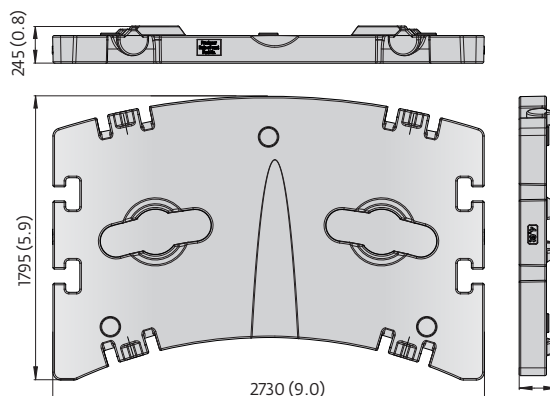


Plate	L x W x H - m (ft)	kg (lb)
T	2,73 x 1,80 x 0,25 (9'x5.9'x.8")	4600 (10141)

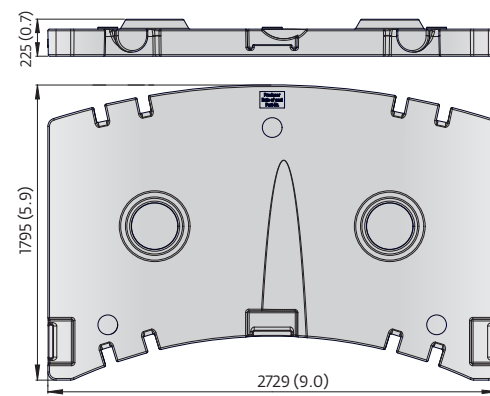


Plate	L x W x H - m (ft)	kg (lb)
O	2,73 x 1,80 x 0,23 (9'x5.9'x.7")	4600 (10141)

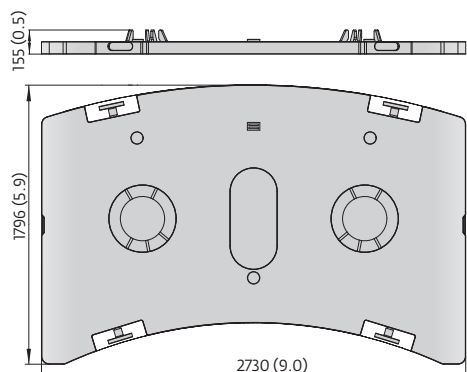


Plate	L x W x H - m (ft)	kg (lb)
M	2,73 x 1,80 x 0,16 (9'x5.9'x.5")	2300 (5071)

Dimensions

Counterweight

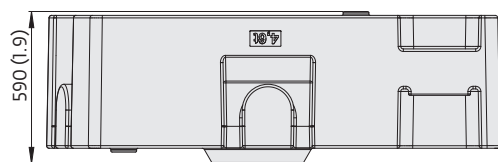
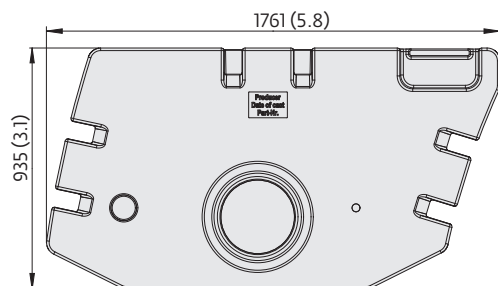


Plate	L x W x H - m (ft)	kg (lb)
S	1,76 x 0,94 x 0,59 (5.8'x3.1'x1.9')	4600 (10141)

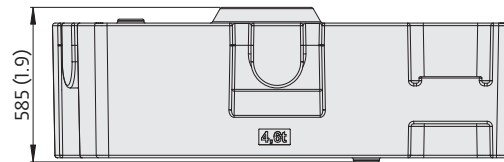
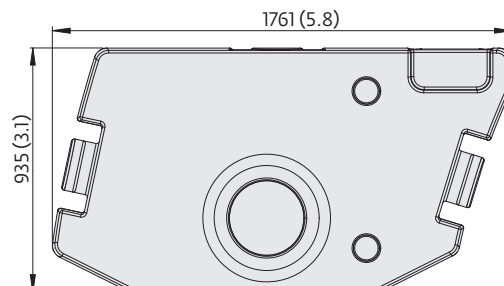


Plate	L x W x H - m (ft)	kg (lb)
R	1,76 x 0,93 x 0,59 (5.8'x3.1'x1.9')	4600 (10141)

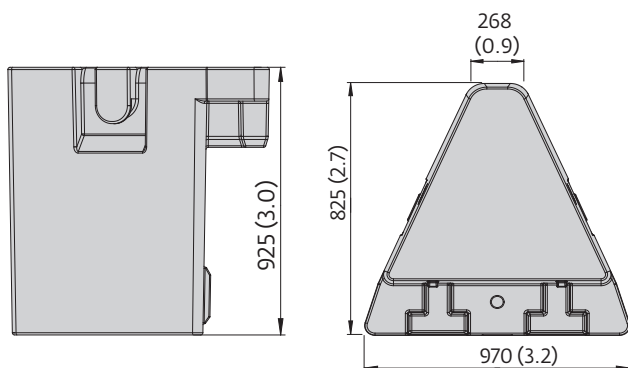
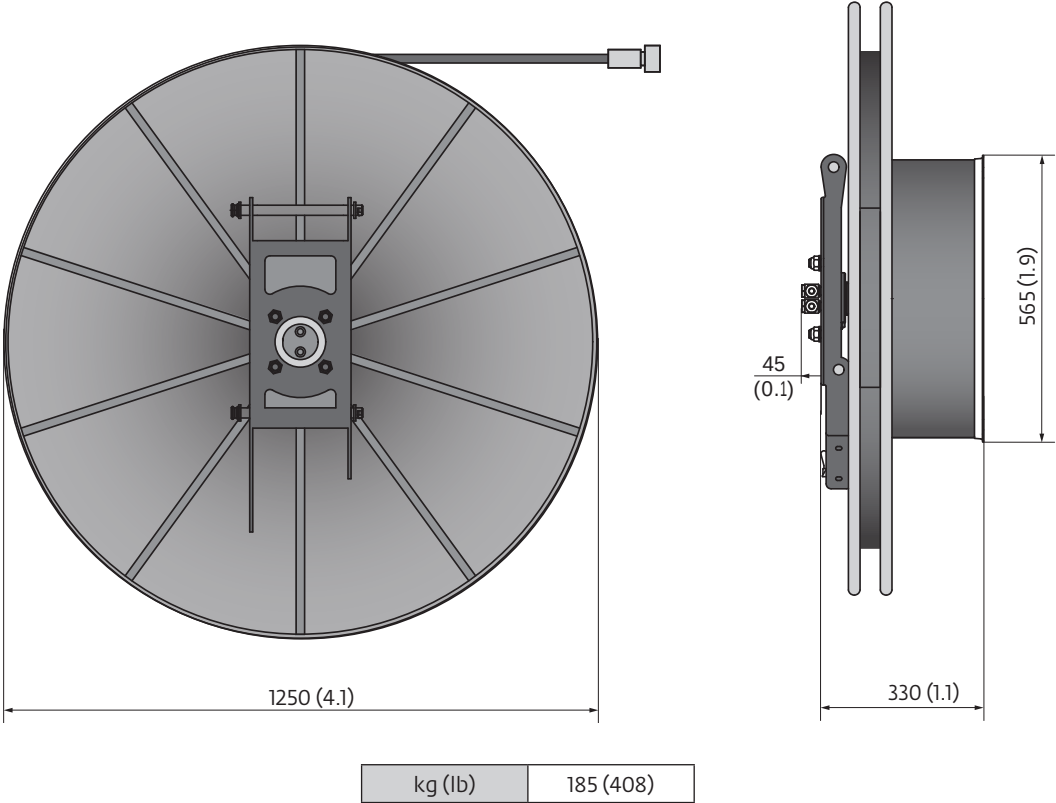


Plate	L x W x H - m (ft)	kg (lb)
P	0,97 x 0,83 x 0,93 (3.2'x2.7'x3')	2400 (5291)

Dimensions

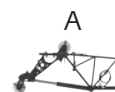
Hose reel



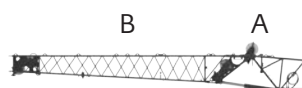
Dimensions

Jib combinations

	L x W x H - m (ft)	kg (lb)
A	3,1 x 0,8 x 1,2 (10.3' x 2.6' x 4')	729 (1607)
B	7,2 x 0,7 x 1,0 (23.6' x 2.3' x 1.0 x 3.3')	440 (970)
C	6,6 x 0,4 x 0,7 (21.7' x 1.5' x 2.3')	319 (703)
E	8,1 x 0,8 x 1,1 (26.6' x 2.6' x 3.6')	592 (1305)



3,3 m (10.8 ft)



9,4 m (30.8 ft)



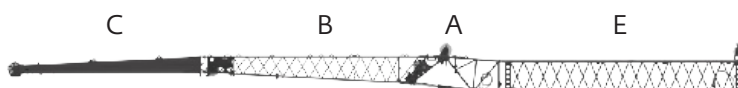
16,0 m (52.5 ft)



11,3 m (37.0 ft)



17,4 m (57.1 ft)

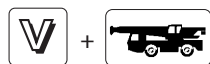


24,0 m (78.7 ft)

Data



Lifting capacity	Sheaves	Weight	Parts of line	Possible load with crane*
100 t (110 USt)	7	1350 kg (2976 lb)	2-15	90 t* (99 USt)
80 t (88 USt)	5	1200 kg (2646 lb)	2-11	77 t (85 USt)
60 t (66 USt)	3	700 kg (1543 lb)	1-7	49 t (54 USt)
50 t (55 USt)	3	900 kg (1984 lb)	1-7	49 t (54 USt)
26 t (28 USt)	1	400 kg (882 lb)	1-3	21 t (23 USt)
9 t (10 USt)	H/B	300 kg (661 lb)	1	7 t (8 USt)



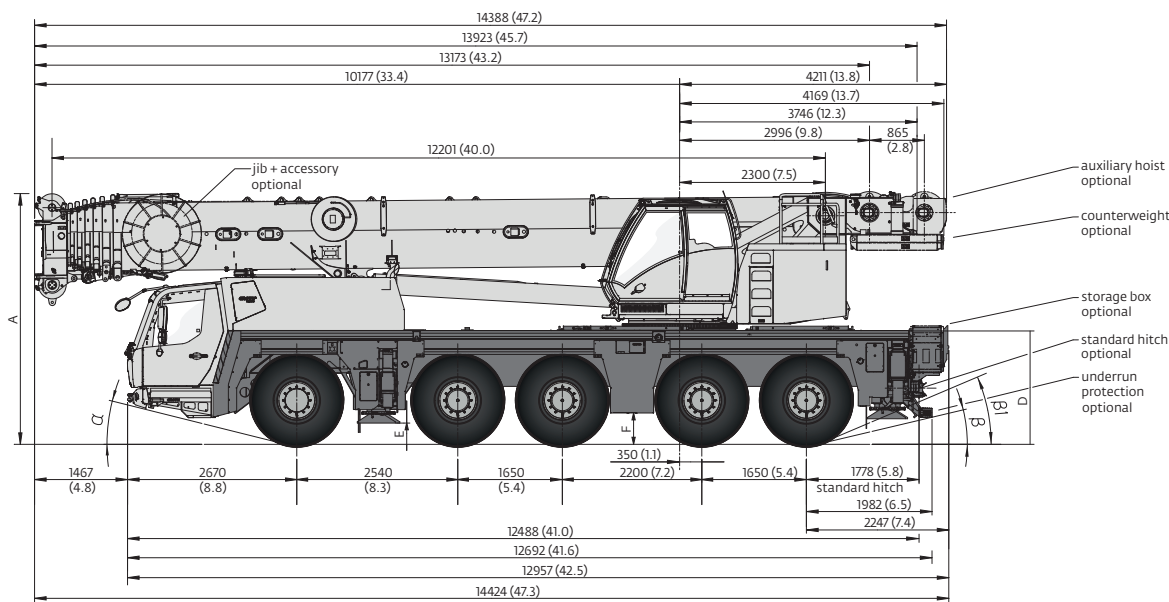
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	R1	R2	
mph	4.0	4.7	5.8	7.0	8.8	10.5	12.4	15.5	17.4	21.1	25.5	31.1	38.5	46.6	52.8	52.8	4.0	4.8	
mph	1.8	2.2	2.6	3.2	4.0	4.7	5.6	6.8	8.1	9.3	11.8	14.3	17.4	21.1	25.5	30.4	1.8	2.2	70%
	14.00 R25																		



	Infinitely variable		Rope	Max. single line pull
	0 - 120 m/min	Single line (0-394 f/min)	19 mm/255 m (19 mm / 836 ft)	70,6 kN (15,872 lb)
	0 - 120 m/min	Single line (0-394 f/min)	19 mm/255 m (19 mm / 836 ft)	70,6 kN (15,872 lb)
	0 - 1,5 min ⁻¹			
	-1,5° to + 83° approx. 50 s			
	12,2 to 66,0 m	approx. 550 s (40.0 to 216.5 ft)		

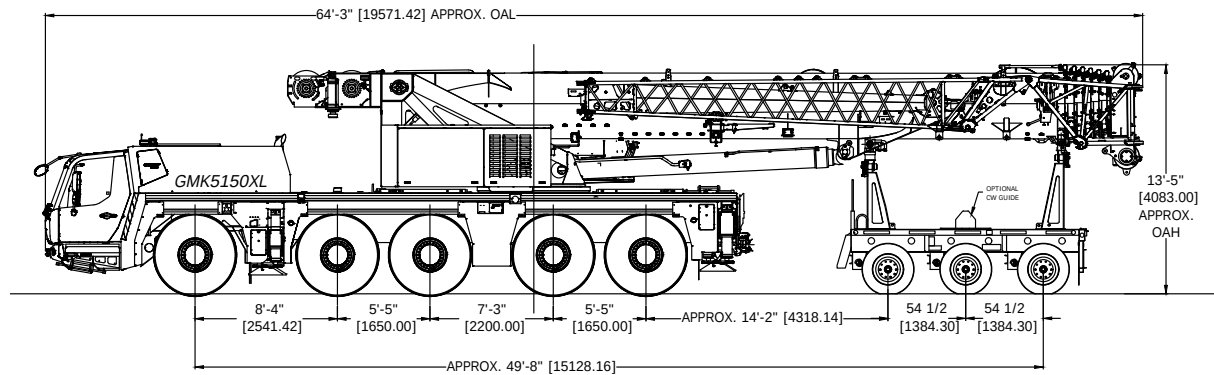
Weights

Boom over front



Basic Weights	Axles 1 and 2		Axles 3-5		Total	
GMK5120L typical configuration: 20.5" tires on steel, 10x6x10 drive/steer, hydraulic luffing jib, 2nd oil cooler, outrigger pads, auxiliary hoist, driver and tanks filled, single sheave hook block on bumper, 10,100 lb (4,6 t) cwt installed on turntable, 10,100 lb (4,6t) cwt installed on carrier deck	23 740 kg	52,340 lb	34 500 kg	76,050 lb	58 230 kg	128,380 lb

Trailing Boom



Basic Weights	Axles 1 and 2		Axles 3-5		3 Dolly Axles		Total	
GMK5120L typical configuration: 20.5" tires on steel, 10x6x10 drive/steer, hydraulic luffing swingaway, 2nd oil cooler, outrigger pads, auxiliary hoist, driver and tanks filled, 3 axle boom dolly (4300 kg [9300 lb]), Boom telescoped out 1 m (3.3 ft)	17 800 kg	39,200 lb	20 900 kg	46,100 lb	15 000 kg	33,000 lb	53 680 kg	118,350 lb

Working range

Main boom

Working range



12,2 - 66,0 m
(40.0 - 216.5 ft)



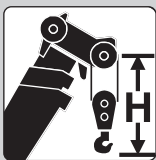
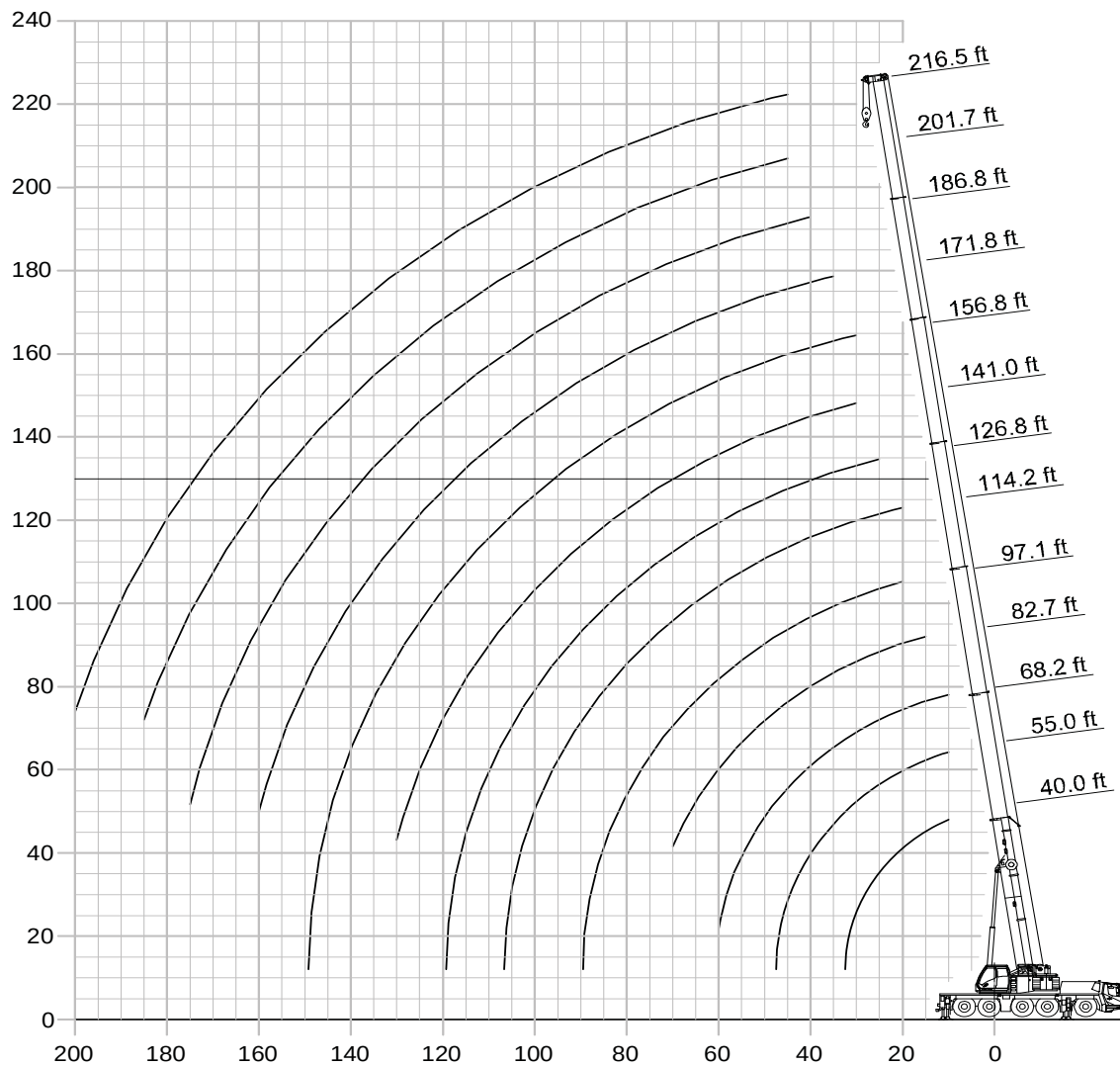
7,6 m (24.9 ft)



360°



35,5 t (78,260 lb)



Hook block
t (USt)

H
mm (ft)

140 D (154)

3160 (10.4)

95 D (105)

3070 (10.1)

60 E/D (66)

3000 (9.8)

26 E (29)

2770 (9.1)

9 H/B (10)

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

Load chart

Main boom

Telescopic boom



12,2 - 66,0 m
(40.0 - 216.5 ft)



7,6 m (24.9 ft)



360 °



35,5 t (78,260 lb)



Feet	40.0	55.0	69.9	84.9	99.7	114.2	128.3	141.0	153.8	165.9	179.3	191.6	203.7	210.0	216.5
10	188.0	170.0	164.0												
15	157.0	142.0	134.0	128.0											
20	123.0	121.0	113.0	106.0	95.0	76.0									
25	96.0	97.0	97.0	92.0	89.0	74.0	59.0								
30	78.0	79.0	79.0	78.0	78.0	69.0	58.0	46.0	38.0						
35		67.0	66.0	65.0	66.0	63.0	54.0	45.0	38.0	32.0	25.0				
40		57.0	56.0	57.0	57.0	57.0	50.0	41.6	37.2	32.0	25.0	21.0			
45		50.0	50.0	50.0	49.0	50.0	47.0	38.0	34.8	31.4	25.0	21.0	17.8	15.2	14.0
50			44.0	43.6	43.2	44.0	43.4	34.8	32.2	29.8	25.0	21.0	17.8	15.2	14.0
55			39.0	38.6	39.6	39.0	40.2	31.8	29.6	28.2	24.4	21.0	17.8	15.2	14.0
60			34.8	34.4	35.6	34.8	36.0	29.0	27.2	26.4	23.0	21.0	17.8	15.0	13.8
65				31.2	32.0	31.6	32.4	26.6	25.2	24.6	21.8	20.0	17.8	15.0	13.6
70				28.8	28.8	29.4	29.2	24.6	23.2	23.0	20.6	19.0	17.6	14.8	13.6
75				26.0	26.2	27.2	26.4	22.6	21.6	21.4	19.4	18.2	17.0	14.6	13.4
80					23.8	25.0	24.0	21.0	20.0	20.0	18.2	17.2	16.2	14.4	13.0
85					21.8	22.8	22.0	19.4	18.6	18.6	17.2	16.2	15.0	14.2	12.8
90					16.6	21.0	20.2	18.0	17.0	17.4	16.0	15.0	14.4	13.6	12.2
95						19.4	18.4	16.8	15.8	16.2	14.8	14.2	13.6	13.0	11.4
100						18.0	17.0	15.6	14.4	15.0	13.8	13.4	13.0	12.6	10.8
105						13.4	15.4	14.4	13.6	13.8	13.0	12.6	12.2	12.0	10.0
110							14.0	13.0	12.6	12.8	12.0	12.0	11.6	11.4	9.6
115							12.8	11.8	11.4	12.0	11.4	11.4	11.0	10.8	9.0
120							4.6	10.6	10.4	11.2	10.6	10.6	10.6	10.2	8.4
125								9.6	9.2	10.6	9.8	10.0	10.0	9.8	7.8
130								8.6	8.4	10.2	9.0	9.4	9.6	9.4	7.4
135									7.4	9.8	8.0	8.6	9.0	8.8	6.8
140									6.6	9.4	7.2	8.0	8.4	8.4	6.4
145										8.8	6.8	7.6	7.6	7.8	6.0
150										8.2	6.4	7.2	6.8	7.0	5.6
155										5.4	6.0	6.8	6.2	6.4	5.2
160											5.8	6.4	5.6	5.8	4.8
165											5.4	5.8	5.0	5.2	4.6
170											2.4	5.2	4.4	4.6	4.2
175													4.0	4.2	4.0
180													3.4	3.6	3.6
185													3.0	3.2	3.2
190													2.6	2.8	2.8
195														2.4	2.4
200															2.0

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

Load chart

Main boom

Telescopic boom



12,2 - 66,0 m
(40.0 - 216.5 ft)



7,6 m (24.9 ft)



360 °



30,7 t (67,700 lb)



Feet	40.0	55.0	69.9	84.9	99.7	114.2	128.3	141.0	153.8	165.9	179.3	191.6	203.7	210.0	216.5
10	188.0	172.0	164.0												
15	157.0	142.0	134.0	128.0											
20	119.0	119.0	113.0	106.0	95.0	76.0									
25	93.0	94.0	94.0	92.0	89.0	74.0	59.0								
30	75.0	77.0	76.0	75.0	76.0	69.0	58.0	46.0	38.0						
35		65.0	64.0	65.0	64.0	63.0	54.0	45.0	38.0	32.0	25.0				
40		55.0	56.0	55.0	54.0	56.0	50.0	41.6	37.2	32.0	25.0	21.0			
45		48.0	48.0	48.0	47.0	48.0	47.0	38.0	34.8	31.4	25.0	21.0	17.8	15.2	14.0
50			42.2	41.8	43.2	42.4	43.4	34.8	32.2	29.8	25.0	21.0	17.8	15.2	14.0
55			37.2	36.8	38.0	37.2	38.4	31.8	29.6	28.2	24.4	21.0	17.8	15.2	14.0
60			33.0	33.6	33.8	34.2	34.2	29.0	27.2	26.4	23.0	21.0	17.8	15.0	13.8
65				30.8	30.4	31.4	30.6	26.6	25.2	24.6	21.8	20.0	17.8	15.0	13.6
70				27.8	27.2	28.4	27.6	24.6	23.2	23.0	20.6	19.0	17.6	14.8	13.6
75				25.2	24.8	25.8	25.0	22.6	21.6	21.4	19.4	18.2	17.0	14.6	13.4
80					22.2	23.6	22.6	21.0	20.0	20.0	18.2	17.2	16.2	14.4	13.0
85					19.8	21.4	20.2	19.2	18.6	18.6	17.2	16.2	15.0	14.2	12.8
90					15.0	19.2	18.0	17.2	16.8	17.4	16.0	15.0	14.4	13.6	12.2
95						17.4	16.2	15.2	15.0	16.0	14.8	14.2	13.6	13.0	11.4
100						15.8	14.6	13.6	13.4	14.2	13.8	13.4	13.0	12.6	10.8
105						13.4	13.2	12.2	12.0	12.8	12.6	12.6	12.2	12.0	10.0
110							11.8	10.8	10.6	12.0	11.4	11.8	11.6	11.4	9.6
115							10.6	9.6	9.4	11.6	10.0	10.6	11.0	10.8	9.0
120							4.6	8.6	8.4	11.0	9.0	10.0	10.2	10.2	8.4
125								7.6	7.4	10.4	8.6	9.4	9.2	9.4	7.8
130								6.8	6.4	9.6	8.0	9.0	8.2	8.6	7.4
135									5.6	8.8	7.6	8.2	7.4	7.6	6.8
140									5.0	8.0	7.2	7.4	6.6	6.8	6.4
145										7.2	6.8	6.8	6.0	6.2	6.0
150										6.6	6.4	6.0	5.8	5.6	5.6
155											6.0	5.4	5.4	4.8	4.8
160											5.6	4.8	5.0	4.4	4.4
165											5.0	4.4	4.4	3.8	3.8
170												3.8	4.0	3.2	3.2
175												2.0	3.4	2.8	2.8
180													3.0	2.4	2.4
185													2.6	2.0	1.8
190														1.6	1.4

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Load chart

Main boom

Telescopic boom



12,2 - 66,0 m
(40.0 - 216.5 ft)



7,6 m (24.9 ft)



360 °



26,1 t (57,500 lb)



Feet	40.0	55.0	69.9	84.9	99.7	114.2	128.3	141.0	153.8	165.9	179.3	191.6	203.7	210.0	216.5
10	188.0	172.0	164.0												
15	157.0	142.0	134.0	128.0											
20	115.0	115.0	113.0	106.0	95.0	76.0									
25	90.0	90.0	90.0	90.0	89.0	74.0	59.0								
30	73.0	74.0	73.0	74.0	74.0	69.0	58.0	46.0	38.0						
35		62.0	63.0	62.0	62.0	63.0	54.0	45.0	38.0	32.0	25.0				
40		53.0	53.0	53.0	53.0	54.0	50.0	41.6	37.2	32.0	25.0	21.0			
45		46.0	46.0	46.0	47.0	46.0	47.0	38.0	34.8	31.4	25.0	21.0	17.8	15.2	14.0
50			40.2	39.8	41.0	40.2	41.2	34.8	32.2	29.8	25.0	21.0	17.8	15.2	14.0
55			35.4	36.2	36.2	36.8	36.2	31.8	29.6	28.2	24.4	21.0	17.8	15.2	14.0
60			31.2	32.6	32.2	33.2	31.8	29.0	27.2	26.4	23.0	21.0	17.8	15.0	13.8
65				28.8	28.2	29.8	28.2	26.6	25.2	24.6	21.8	20.0	17.8	15.0	13.6
70				25.2	24.6	26.2	25.0	23.6	22.8	23.0	20.6	19.0	17.6	14.8	13.6
75				22.6	21.6	23.2	22.0	21.0	20.2	20.8	19.4	18.2	17.0	14.6	13.4
80					19.2	20.8	19.6	18.6	18.2	18.6	18.0	17.2	16.2	14.4	13.0
85					17.0	18.6	17.4	16.4	16.2	16.8	16.2	16.2	15.0	14.2	12.8
90					14.6	16.6	15.4	14.4	14.2	15.2	14.6	14.8	14.4	13.6	12.2
95					4.4	14.8	13.8	12.8	12.6	13.8	13.2	13.4	13.6	13.0	11.4
100						13.4	12.2	11.2	11.0	13.2	11.8	12.4	12.6	12.6	10.8
105						12.2	10.8	10.0	9.6	12.6	10.8	11.8	11.4	11.4	10.0
110							9.6	8.8	8.4	11.6	10.2	11.0	10.4	10.4	9.6
115							8.6	7.6	7.4	10.6	9.6	10.0	9.2	9.4	9.0
120							4.6	6.6	6.4	9.6	9.0	9.0	8.2	8.4	8.4
125								5.8	5.6	8.6	8.6	8.2	7.6	7.6	7.6
130								5.0	4.6	7.8	8.0	7.4	7.2	6.8	6.8
135									4.0	7.0	7.2	6.6	6.6	6.0	6.0
140									3.2	6.2	6.6	5.8	6.0	5.2	5.2
145										5.6	5.8	5.2	5.2	4.6	4.6
150										5.0	5.2	4.6	4.6	4.0	4.0
155										2.4	4.8	4.0	4.2	3.4	3.4
160											4.2	3.4	3.6	2.8	2.8
165											3.8	3.0	3.0	2.4	2.4
170												2.6	2.6	2.0	2.0
175													2.2	1.6	1.4
180													1.8		

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Load chart

Main boom

Telescopic boom



12,2 - 66,0 m
(40.0 - 216.5 ft)



7,6 m (24.9 ft)



360 °



10,0 t (22,000 lb)



Feet	40.0	55.0	69.9	84.9	99.7	114.2	128.3	141-148.2	153-156.8	165.9	179.3	191.6	203.7	210.0	216.5
10	188.0	170.0	164.0												
15	138.0	138.0	134.0	128.0											
20	100.0	101.0	101.0	100.0	95.0	76.0									
25	78.0	80.0	80.0	75.0	73.0	67.0	59.0								
30	58.0	61.0	61.0	60.0	56.0	55.0	51.0	46.0	38.0						
35		47.0	49.0	47.0	44.0	44.0	40.8	38.0	36.2	32.0	25.0				
40		37.6	38.8	39.2	36.0	36.4	34.0	31.2	29.8	29.8	25.0	21.0			
45		30.2	32.8	33.8	29.8	30.4	31.0	26.0	24.8	25.0	24.0	21.0	17.8	15.2	14.0
50			27.2	28.0	25.0	25.8	26.4	21.8	20.8	23.6	22.0	20.4	17.8	15.2	14.0
55			22.8	23.6	20.8	22.2	22.8	20.2	17.8	20.6	20.4	19.0	17.6	15.2	14.0
60			19.2	20.0	17.4	19.0	19.8	18.6	16.2	18.0	17.8	16.4	15.2	15.0	13.8
65				17.2	14.4	16.2	17.4	17.0	14.8	15.6	15.6	14.4	13.2	13.2	13.0
70				14.8	12.6	13.8	15.0	15.8	13.6	13.8	13.8	12.6	11.4	11.4	11.4
75				12.8	11.8	11.8	13.0	14.0	12.6	12.0	12.0	11.0	9.8	9.8	9.8
80					11.0	10.0	11.2	12.4	11.8	10.6	10.6	9.6	8.4	8.6	8.4
85					10.4	8.4	10.2	10.8	11.0	9.4	9.4	8.2	7.2	7.4	7.2
90					5.8	7.2	9.6	9.6	9.6	8.2	8.2	7.2	6.2	6.2	6.2
95						6.0	9.0	8.4	8.4	7.0	7.2	6.2	5.2	5.4	5.2
100						5.0	8.0	7.4	7.4	6.0	6.2	5.4	4.4	4.4	4.4
105						4.2	7.0	6.4	6.4	5.0	5.2	4.6	3.6	3.6	3.6
110							6.2	5.6	5.6	4.2	4.4	3.6	2.8	3.0	3.0
115							5.4	4.8	4.8	3.4	3.6	3.0	2.2	2.4	2.4
120							5.0	4.0	4.2	2.8	3.0	2.2		1.6	1.8
125								3.4	3.6	2.0	2.4	1.6			
130									3.0	1.6	1.8				
135									2.4						
140									2.0						
145									1.6						

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Working range

Main boom

Telescopic boom



12,2 - 66,0 m
(40.0 - 216.5 ft)



7,6 m (24.9 ft)



360 °



0,8 t (1,800 lb)



Feet	40.0	55.0	69.9	84.9	99.3	113.4	126.8	141-148.2	153-156.8	165.3	176.1	191.0	201.7	210.0	216.5
10	188.0	172.0	164.0												
15	127.0	128.0	127.0	116.0											
20	91.0	90.0	82.0	78.0	70.0	67.0									
25	55.0	61.0	59.0	56.0	50.0	49.0	43.8								
30	36.6	42.6	45.0	43.0	36.8	36.8	36.8	30.6	28.8	26.8					
35		31.2	34.0	33.8	28.4	29.0	29.4	27.2	22.4	25.6	22.8				
40		23.6	26.2	27.0	22.4	23.2	23.8	23.8	21.6	21.0	20.6	18.8			
45		18.0	21.0	22.4	19.2	19.0	19.6	19.8	19.6	17.2	17.2	15.4	15.2	14.0	13.6
50			16.8	18.8	17.4	15.4	17.6	16.6	16.4	14.2	14.2	12.6	12.4	11.2	11.0
55			13.6	15.6	15.8	12.6	15.8	14.0	13.8	11.8	11.8	10.4	10.2	9.0	9.0
60			10.8	12.8	13.4	10.2	13.4	11.8	11.8	9.6	9.6	8.4	8.2	7.2	7.2
65				10.6	11.2	8.4	11.4	10.0	10.0	8.0	8.0	6.8	6.8	5.8	5.6
70				8.8	9.4	6.6	9.8	8.4	8.4	6.4	6.6	5.4	5.4	4.4	4.4
75				7.4	8.0	5.2	8.4	7.2	7.0	5.2	5.4	4.2	4.2	3.2	3.2
80					6.6	3.8	7.2	6.0	6.0	4.2	4.2	3.2	3.2	2.2	2.2
85					5.4	2.8	6.0	5.0	5.0	3.2	3.4	2.2	2.2		
90						1.8	5.0	4.0	4.0	2.4	2.4	1.4	1.4		
95							4.0	3.2	3.4	1.6	1.8				
100							3.4	2.6	2.6						
105							2.6	1.8	2.0						
110							2.0								

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Working range

Main boom and bi-fold swingaway

Working range



12,2 - 66,0 m
(40.0 - 216.5 ft)



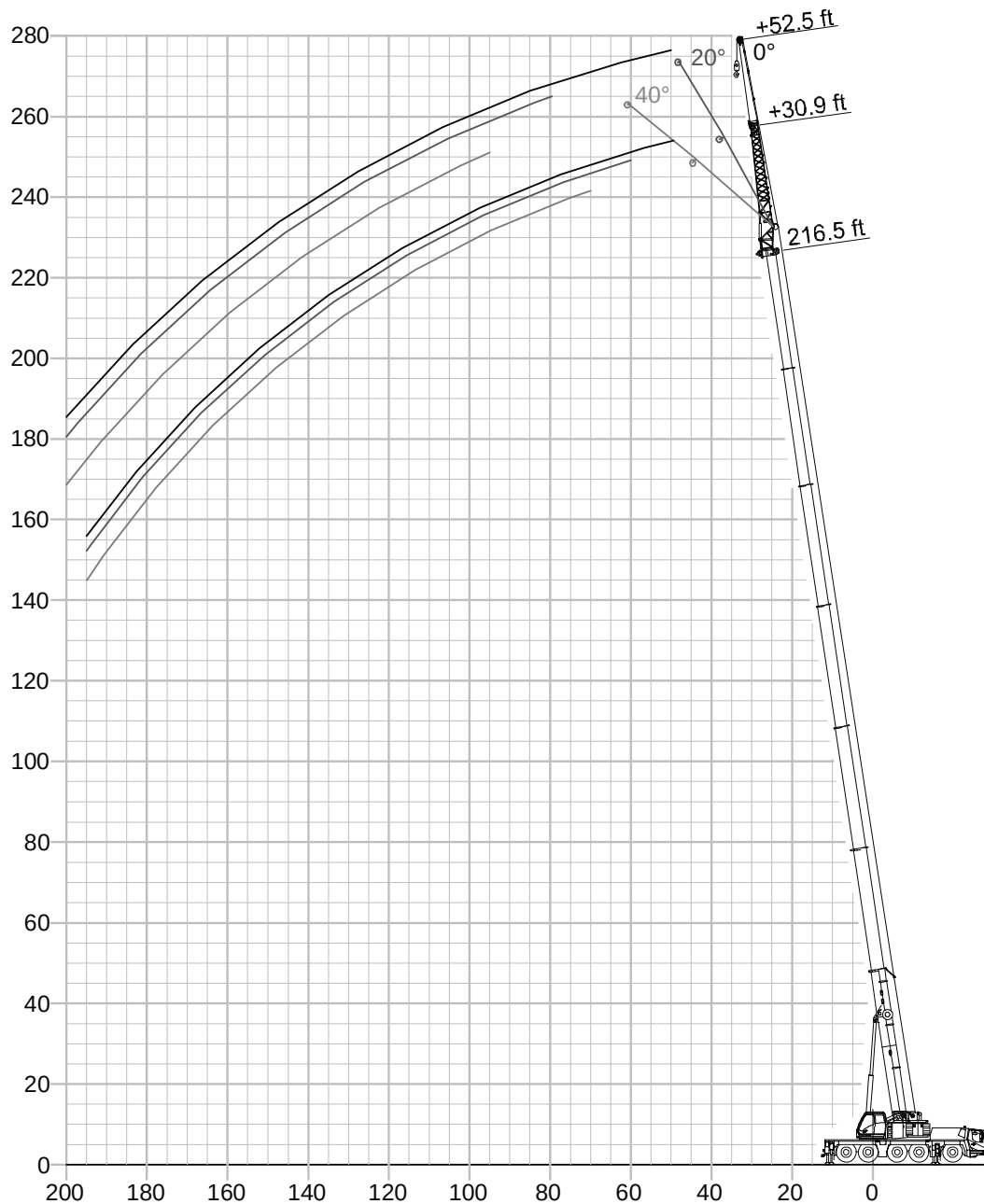
7,6 m (24.9 ft)



360°



35,5 t (78,260 lb)



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Load chart

Main boom and bi-fold swingaway

Swingaway (hydraulic luffing)



39m - 66,0 m
(128.3 ft - 216.5 ft)



11,2 m - 16 m
(30.9 ft / 52.5 ft)



7,6 m
(25 ft)



360°



35,5 t
(78,200 lb)



Pounds x 1000

Feet	128.3			178.1-179.3			203.7			216.5			ft
Feet	30.9			30.9			30.9			30.9			
	0°	* 0° - 20°	* 20° - 40°	0°	* 0° - 20°	* 20° - 40°	0°	* 0° - 20°	* 20° - 40°	0°	* 0° - 20°	* 20° - 40°	
30	26.2												30
35	25.6	22.0											35
40	25.0	21.0	15.4	14.8									40
45	24.4	20.0	15.2	14.8			9.8						45
50	23.6	19.0	14.8	14.8	14.8		9.8			7.6			50
55	22.4	18.0	14.6	14.8	14.8	12.2	9.8			7.6			55
60	21.2	17.4	14.2	14.8	14.8	12.2	9.8	9.8		7.6	7.6		60
65	20.0	16.6	13.8	14.8	14.8	12.0	9.8	9.8		7.6	7.6		65
70	18.8	15.8	13.6	14.8	14.8	12.0	9.8	9.8	9.6	7.6	7.6	7.6	70
75	17.8	15.2	13.2	14.8	14.6	12.0	9.8	9.8	9.6	7.6	7.6	7.6	75
80	16.8	14.6	13.0	14.2	14.2	11.8	9.8	9.8	9.6	7.6	7.6	7.6	80
85	16.0	14.0	12.8	13.6	13.6	11.8	9.8	9.8	9.6	7.6	7.6	7.6	85
90	15.0	13.6	12.6	12.8	12.8	11.8	9.8	9.8	9.6	7.6	7.6	7.6	90
95	14.4	13.0	12.4	12.2	12.2	11.8	9.8	9.8	9.6	7.6	7.6	7.6	95
100	13.8	12.6	12.0	11.4	11.4	11.4	9.8	9.8	9.6	7.6	7.6	7.6	100
105	13.2	12.2	11.8	10.8	10.8	10.8	9.6	9.4	9.2	7.4	7.4	7.4	105
110	12.6	11.8	11.6	10.2	10.2	10.2	9.2	9.2	9.0	7.4	7.4	7.4	110
115	12.2	11.4	11.4	9.6	9.6	9.6	8.8	8.8	8.8	7.0	7.0	7.0	115
120	11.8	11.2	11.2	9.2	9.2	9.2	8.2	8.2	8.2	6.6	6.6	6.6	120
125	11.4	10.8		8.6	8.6	8.6	7.8	7.8	7.8	6.4	6.4	6.4	125
130	10.6	10.6		8.2	8.2	8.2	7.4	7.4	7.4	6.0	6.0	6.0	130
135	9.6	9.6		7.6	7.6	7.6	7.0	7.0	7.0	5.4	5.4	5.4	135
140	8.8	8.8		7.2	7.2	7.2	6.8	6.8	6.8	5.0	5.0	5.0	140
145				6.6	6.6	6.6	6.4	6.4	6.4	4.6	4.6	4.6	145
150				5.8	5.8	6.2	6.0	6.0	6.0	4.2	4.2	4.2	150
155				5.4	5.4	5.6	5.6	5.6	5.6	4.0	4.0	4.0	155
160				5.0	5.0	5.0	5.4	5.4	5.4	3.6	3.6	3.6	160
165				4.8	4.8	4.8	4.8	4.8	5.0	3.2	3.2	3.2	165
170				4.6	4.6	4.6	4.2	4.2	4.4	3.0	3.0	3.0	170
175				4.2	4.2		3.6	3.6	4.0	2.6	2.6	2.6	175
180				4.0	4.0		3.2	3.2	3.4	2.4	2.4	2.4	180
185				3.8	3.8		2.8	2.8	3.0	2.2	2.2	2.2	185
190				3.6	3.6		2.2	2.2	2.4	1.8	1.8	1.8	190
195							2.0	2.0		1.6	1.6	1.6	195
200							1.6	1.6					200

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Load chart

Main boom and bi-fold swingaway

Swingaway (hydraulic luffing)



39m - 66,0 m
(128.3 ft - 216.5 ft)



11,2 m - 16 m
(30.9 ft / 52.5 ft)



7,6 m
(25 ft)



360°



35,5 t
(78,200 lb)



Pounds x 1000

Feet Feet	128.3 52.5			178.1-179.3 52.5			203.7 52.5			216.5 52.5			ft
	0°	* 0° - 20°	* 20° - 40°	0°	* 0° - 20°	* 20° - 40°	0°	* 0° - 20°	* 20° - 40°	0°	* 0° - 20°	* 20° - 40°	
30	13.4												30
35	13.2												35
40	13.0												40
45	12.8			9.4									45
50	12.6	10.2		9.4			6.4			5.2			50
55	12.4	9.8		9.4			6.4			5.2			55
60	12.2	9.4	7.2	9.4	8.6		6.4			5.2			60
65	12.0	9.0	7.0	9.2	8.6		6.4			5.2			65
70	11.8	8.8	7.0	9.2	8.4		6.4	6.4		5.2			70
75	11.6	8.4	6.8	9.2	8.4	6.6	6.4	6.4		5.2			75
80	11.2	8.2	6.6	9.0	8.4	6.6	6.4	6.4		5.2	5.2		80
85	10.6	8.0	6.6	9.0	8.2	6.6	6.4	6.4		5.2	5.2		85
90	10.2	7.8	6.4	9.0	8.2	6.6	6.4	6.4	5.4	5.2	5.2		90
95	9.8	7.6	6.4	9.0	8.0	6.6	6.4	6.4	5.4	5.2	5.2	5.0	95
100	9.4	7.4	6.4	8.8	7.8	6.4	6.4	6.4	5.4	5.2	5.2	5.0	100
105	9.0	7.2	6.2	8.8	7.6	6.4	6.4	6.4	5.4	5.2	5.2	4.8	105
110	8.6	7.0	6.2	8.8	7.4	6.4	6.4	6.4	5.4	5.2	5.2	4.8	110
115	8.4	6.8	6.2	8.6	7.4	6.2	6.4	6.4	5.4	5.2	5.2	4.8	115
120	8.0	6.6	6.0	8.6	7.2	6.2	6.4	6.4	5.4	5.2	5.2	4.8	120
125	7.8	6.6	6.0	8.2	7.0	6.2	6.4	6.4	5.4	5.2	5.2	4.8	125
130	7.4	6.4	6.0	7.8	7.0	6.2	6.4	6.4	5.4	5.2	5.2	4.8	130
135	7.2	6.4	6.0	7.4	6.8	6.2	6.4	6.2	5.4	5.0	5.0	4.8	135
140	7.0	6.2	6.0	7.0	6.6	6.0	6.4	6.0	5.4	5.0	5.0	4.8	140
145	6.8	6.2	6.0	6.6	6.4	6.0	6.0	5.8	5.4	4.6	4.6	4.6	145
150	6.6	6.2	6.0	6.2	6.2	6.0	5.8	5.6	5.4	4.4	4.4	4.4	150
155	6.4	6.0		5.8	5.8	5.8	5.4	5.4	5.4	4.0	4.0	4.0	155
160		6.0		5.4	5.4	5.6	5.2	5.2	5.2	3.6	3.6	3.6	160
165				4.8	4.8	5.2	4.8	4.8	4.8	3.4	3.4	3.4	165
170				4.4	4.4	4.8	4.6	4.6	4.6	3.0	3.0	3.0	170
175				4.0	4.0	4.4	4.4	4.4	4.4	2.8	2.8	2.8	175
180				3.8	3.8	3.8	3.8	3.8	4.0	2.6	2.6	2.6	180
185				3.6	3.6	3.6	3.4	3.4	3.8	2.2	2.2	2.2	185
190				3.4	3.4	3.4	3.0	3.0	3.6	2.0	2.0	2.0	190
195				3.2	3.2		2.6	2.6	3.0	1.8	1.8	1.8	195
200				3.0	3.0		2.2	2.2	2.6	1.6	1.6	1.6	200
205				2.8	2.8		1.8	1.8	2.2				205
210				2.6			1.4	1.4					210
215				2.4									215

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

Working range

Swingaway with boom extension

Working range



12,2 - 66,0 m
(40.0 - 216.5 ft)



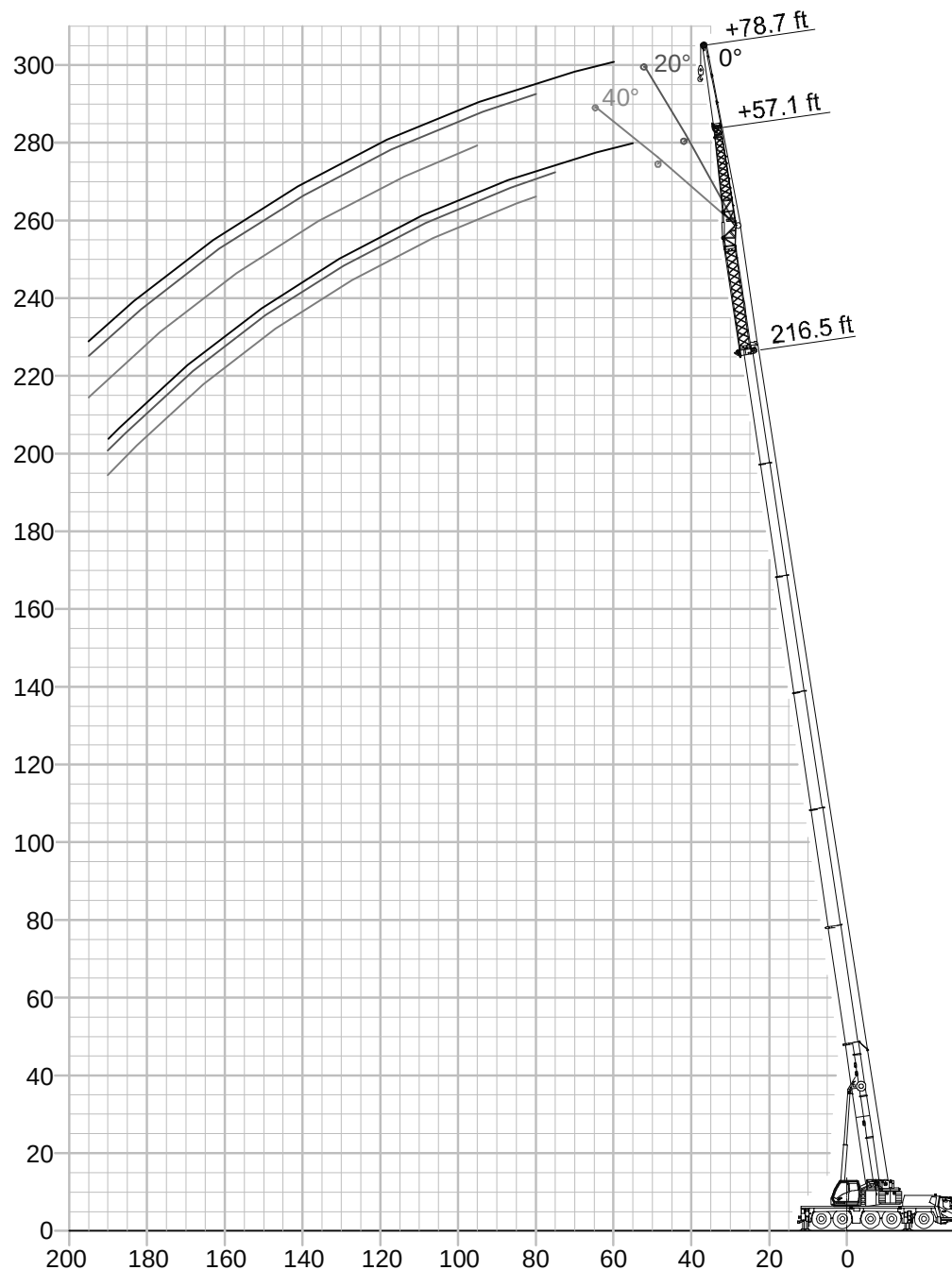
7,6 m (24.9 ft)



360°



35,5 t (78,260 lb)



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Load chart

Swingaway with boom insert

Swingaway (hydraulic luffing)



39m - 66 m
(128.3 ft - 216.5 ft)



24 m
(78.7 ft)



7,6 m
(25 ft)



360°



35,5 t
(78,200 lb)



Pounds x 1000

Feet	128.3			178.1-179.3			203.7			216.5			ft
Feet	78.7			78.7			78.7			78.7			
	0°	* 0° - 20°	* 20° - 40°	0°	* 0° - 20°	* 20° - 40°	0°	* 0° - 20°	* 20° - 40°	0°	* 0° - 20°	* 20° - 40°	
35	9.4												35
40	9.2												40
45	9.0												45
50	8.8			6.0									50
55	8.6	8.0		6.0			3.8						55
60	8.4	7.8		6.0			3.8			3.2			60
65	8.2	7.8		6.0			3.8			3.2			65
70	8.0	7.4	5.2	5.8			3.8			3.2			70
75	8.0	7.2	5.0	5.8	5.6		3.8			3.2			75
80	7.8	6.8	5.0	5.8	5.6	3.8	3.8	3.8		3.2	3.2		80
85	7.6	6.4	4.8	5.6	5.4	3.8	3.8	3.8		3.2	3.2		85
90	7.4	6.2	4.8	5.6	5.4	3.8	3.8	3.8	3.0	3.2	3.2		90
95	7.0	6.0	4.6	5.6	5.4	3.8	3.8	3.8	3.0	3.2	3.2	2.6	95
100	6.6	5.6	4.4	5.4	5.2	3.6	3.8	3.8	2.8	3.2	3.2	2.6	100
105	6.4	5.4	4.2	5.4	5.2	3.6	3.8	3.8	2.8	3.2	3.2	2.6	105
110	6.0	5.2	4.2	5.4	5.2	3.6	3.8	3.8	2.8	3.2	3.2	2.6	110
115	5.8	5.0	4.0	5.4	5.2	3.6	3.8	3.8	2.8	3.2	3.2	2.6	115
120	5.4	4.8	3.8	5.2	5.0	3.4	3.8	3.8	2.8	3.2	3.2	2.6	120
125	5.2	4.6	3.8	5.2	5.0	3.4	3.8	3.8	2.8	3.2	3.2	2.6	125
130	5.0	4.6	3.6	5.2	5.0	3.4	3.8	3.8	2.8	3.2	3.2	2.6	130
135	4.8	4.4	3.6	5.0	5.0	3.4	3.8	3.8	2.8	3.2	3.2	2.6	135
140	4.6	4.2	3.4	5.0	4.8	3.4	3.8	3.8	2.6	3.2	3.2	2.4	140
145	4.4	4.0	3.4	5.0	4.6	3.2	3.8	3.8	2.6	3.2	3.2	2.4	145
150	4.2	4.0	3.2	5.0	4.6	3.2	3.8	3.8	2.6	3.2	3.2	2.4	150
155	4.0	3.8	3.2	4.8	4.4	3.2	3.8	3.8	2.6	3.0	3.0	2.4	155
160	4.0	3.8	3.0	4.6	4.2	3.2	3.8	3.8	2.6	3.0	3.0	2.4	160
165	3.8	3.6	3.0	4.4	4.2	3.2	3.8	3.8	2.6	2.8	2.8	2.4	165
170	3.6	3.6	3.0	4.2	4.0	3.2	3.6	3.6	2.6	2.6	2.6	2.4	170
175	3.6			4.0	4.0	3.2	3.6	3.4	2.6	2.4	2.4	2.4	175
180	3.4			3.4	3.4	3.2	3.4	3.4	2.6	2.2	2.2	2.2	180
185	3.4			3.0	3.0	3.0	3.2	3.2	2.6	2.0	2.0	2.0	185
190	3.2			2.6	2.6	3.0	3.0	3.0	2.6	1.8	1.8	1.8	190
195	3.2			2.4	2.4	2.6	2.6	2.6	2.6	1.4	1.4	1.4	195
200				2.2	2.2	2.2	2.2	2.2	2.6				200
205				2.4	2.0	2.0	1.8	1.8	2.2				205
210				2.2	2.0				1.8				210
215				2.4	1.8				1.6				215
220				2.2	1.6								220
225				2.4									225

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Specifications

Superstructure



Boom

12,2 m to 66,0 m (40.0 ft to 216.4 ft) seven section TWIN LOCK boom. Maximum tip height 69,0 m (226 ft).



Boom elevation

1 cylinder with safety valve, boom angle from -1,5° to +83°.



Load moment an 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, tiltable (approx. 20°), safety glass, adjustable operator's seat with suspension, engine-independent heater. Armrest-integrated crane controls. Ergonomically arranged instrumentation and crane operating controls.



Slewing

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



Counterweight

435.5 tonnes (78,200 lbs) consisting of various sections (30,7 t (67,700 lbs) within 2,75 m (9 ft) vehicle width). Hydraulic removal system.



Hydraulic system

2 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: 600 l (159 gal).



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.

* Optional equipment

- Bi-fold swingaway 9,4/ 16,0 m - (32 / 52 ft) - with hydraulic offset and luffing under load (0° - 40°), controlled from the crane cab
- 8m (26 ft) boom extension for a maximum total length of 24 m (78.7 ft)
- Auxiliary hoist (in lieu of compensation counterweight)
- Auxiliary boom nose using two parts of line
- Air-conditioning system

Carrier



Chassis

Special 5-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. Spotlight for each outrigger beam integrated in carrier decking.



Engine

Mercedes Benz OM471LA, diesel, 6 cylinders, water cooled, turbocharged, 390 kW (522 HP) at 1700 rpm (80/1269 EWG fan loose). Max. torque: 2460 Nm (1814 ft lb) at 1300 rpm. Fuel tank: 325 l + 325 l (86 + 86 gal). Engine emission: Euromot 5 / EPA / CARB Tier 4 final (non road).



Transmission

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



Drive/Steer

10 x 6 x 10.



Axle lines

5 axle lines, axle lines 1, 2, 3, 4 and 5 steered, axle line 2, 4 and 5 driven.



Suspension

MEGATRAK®. All wheels with independent hydropneumatic suspension and hydraulic lockout. Longitudinal and transverse level control with automatic on highway levelling system. Range +195 mm/-105 mm (+7.7 in / -4.1 in). Active suspension control on outrigger control units.



Tires

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



Steering

Dual circuit, hydraulic power assisted steering with emergency steering pump. Axle lines 1, 2, 3, 4 and 5 steer on highway. Separate electronic hydraulic (steer by wire) steering of the 3rd, 4th and 5th axle line for all wheel steering and crabbing.



Brakes

Service brake: pneumatic dual circuit disc 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, 4 and 5.



Driver's Cab

Two operator designed, safety glass, driver seat with pneumatic suspension, engine dependent hot water heater incl. 24 h timer. Complete instrumentation and driving controls. Air conditioning. 12 V plug. Fire extinguisher.



Electrical system

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

* Optional equipment

- 10 x 8 x 10
- 10 tires, size 445/95 R25 (16.00 R25) - Vehicle width 2,75 m (9 ft)
- 10 tires, size 525/80 R25 (20.5 R25) - Vehicle width 2,88 m (9.45 ft)
- MAXbase variable outrigger positioning
- Secondary water retarder
- Reverse camera system

* Other 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



Travel speed



Carrier frame



Gradeability



Low range



Tires



Hose reel



Swing-Away



Dolly



Storage box +
rigging gear



Weight per axle in kg



Driveline



Brackets

Notes

Notes

Notes

Notes

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