

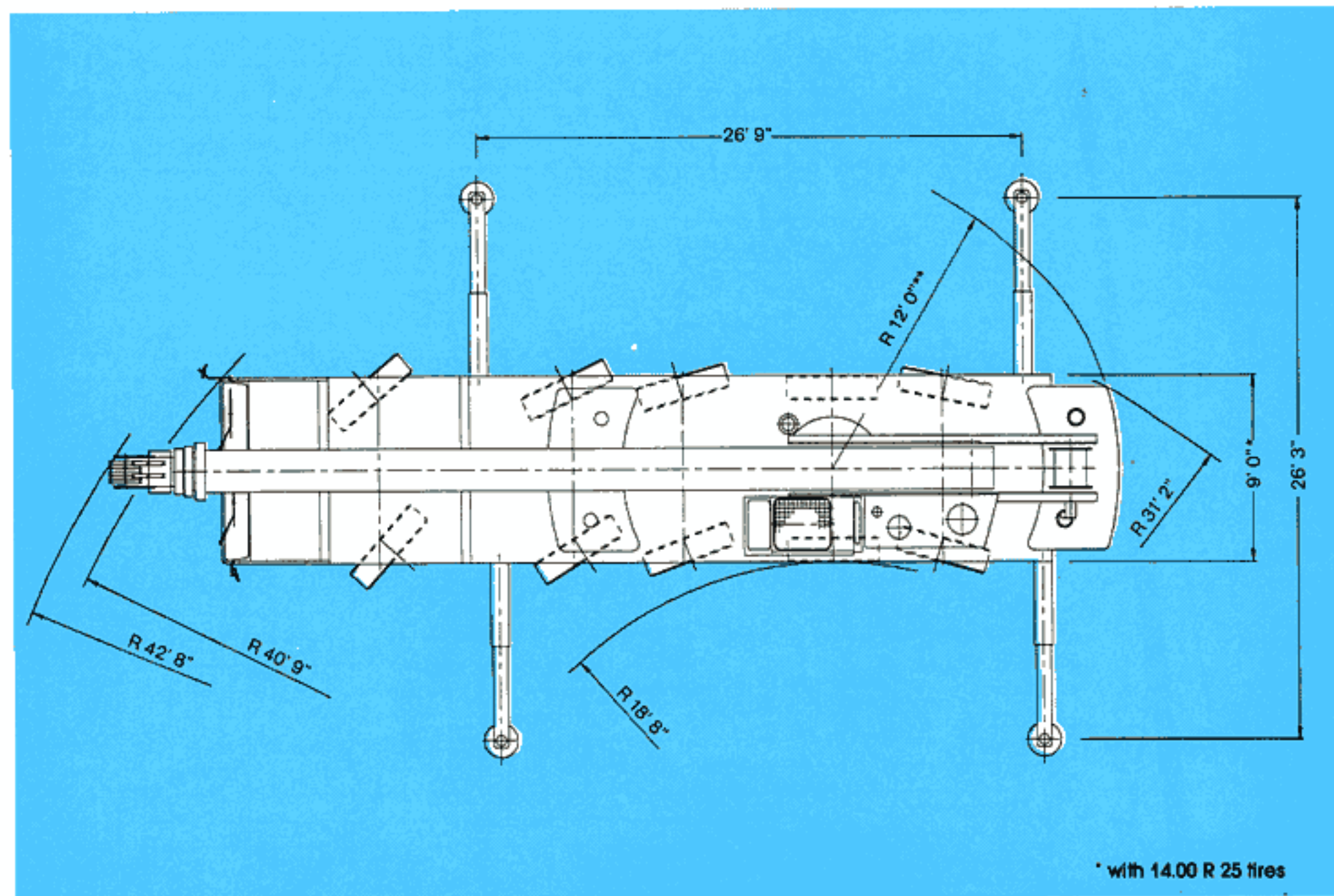
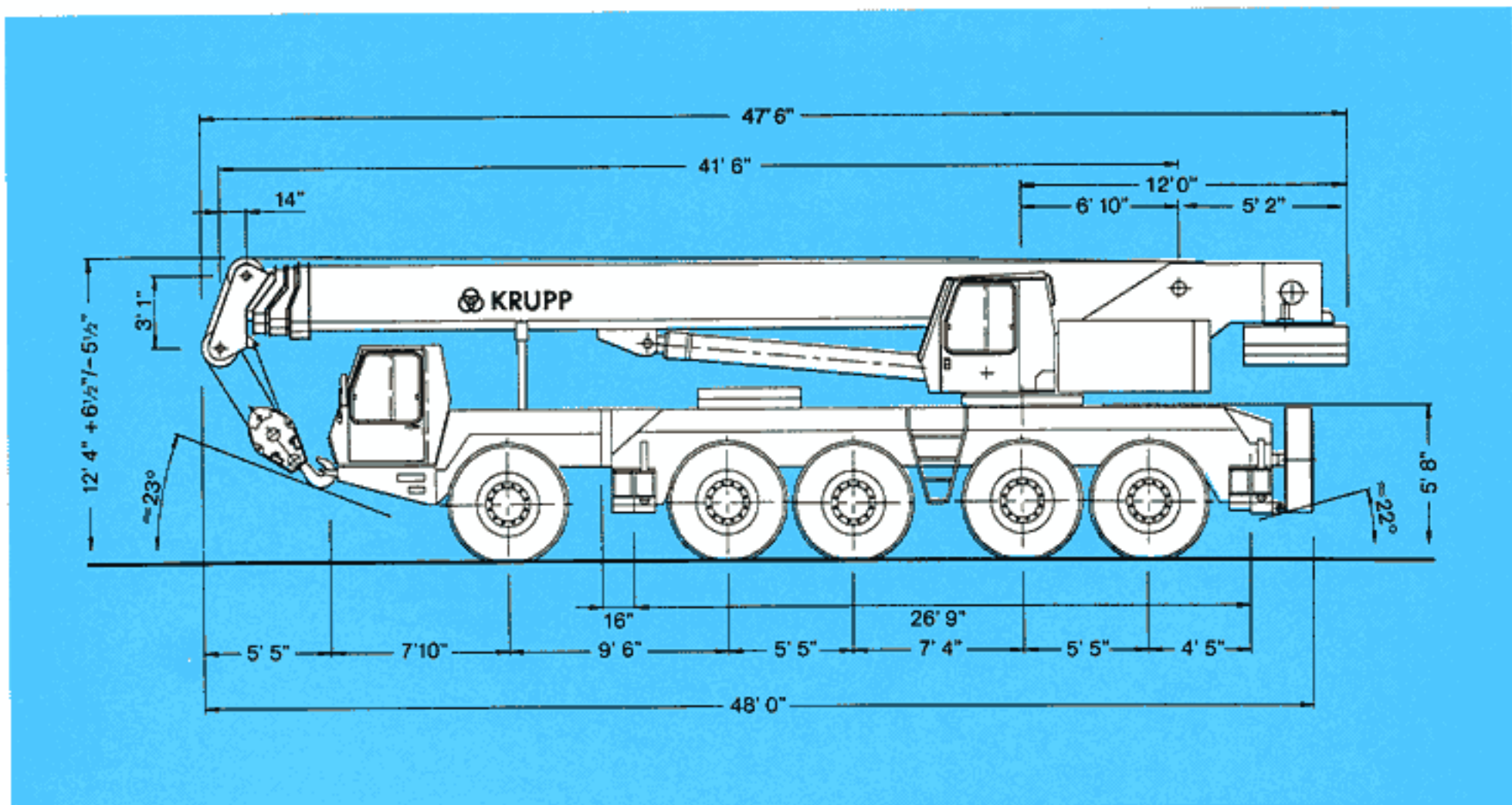


110 ton Capacity All-Terrain-Crane



KMK 5110

Dimensions



****with main hoist only**
14' 4" with auxiliary hoist in place



KRUPP KMK 5110

Hook Elevation Diagram

Main boom and lattice extension - 79 ft./52 ft./32 ft. 0 - 16 - 30° offsets

32.6' lbs.
Counterweight

79'
Lattice
Extension

Main Boom
Fixed Length
135 ft.

Lifting
Capacity
in 1000 lbs.

Radius	
35	5.4
40	5.3
45	5.0
50	4.7
55	4.7
60	4.4
65	4.1
70	3.7
75	3.6
80	3.4
85	3.3
90	3.3
95	3.1
100	3.0
105	2.8
110	2.6
115	2.6
120	2.5
125	2.4
130	2.4
135	2.3
140	2.1
145	2.0
150	2.0
155	1.8
160	1.7
T-1	1
T-2	1
T-3	1

* 1000 lbs



R (ft) → 10 20 30 40 50 60 70 80 90 100 110 120 130 140

H (ft) ↑ 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220



Carrier

Chassis:	Special KRUPP 5-axle carrier, 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 chassis, levelling device.
Engine:	Mercedes-Benz OM 442 LA, Diesel, 8 cylinders, water-cooled, with turbocharger, 329 kW (447 HP) at 2100 min ⁻¹ (DIN 6271 IFN). Max. torque: 1765 Nm at 1100–1500 min ⁻¹ . Tank capacity: approx. 100 gal.
Transmission:	Allison automatic CLBT 755.
Transfer case:	Transfer case with 2 speeds and longitudinal differential lock.
Axle lines:	5 axle lines: 2, 3 and 5 are driven axle lines; 1, 2, 3 and 5 are steering axle lines; the 4th axle line is rigid.
Suspension:	All axle lines with hydropneumatic suspension and hydraulic axle lock-out. Suspension level control. Range: +6½"/–5½". Possible combinations for transverse slope.
Tires:	10 tires 14.00 R 25.
Steering:	Dual-circuit, stand-by steering pump.
Brakes:	Service brake: pneumatic dual-circuit, acting on all wheels. Permanent brake: hydraulic retarder integrated with Allison automatic transmission. Hand brake: pneumatically operated spring-loaded brake acting on 2nd, 3rd, 4th and 5th axle line.
Driver's cab:	Aluminium , 2-man-design, safety glass, driver's seat with hydraulically cushioned, engine-driven hot water heater. Complete instrumentation and driving controls.
Electrical system:	Three-phase generator 28 V / 55 A, 2 batteries 12 V / 170 Ah, lighting system and signals.

Superstructure

Frame:	KRUPP-made, torsion-resistant welded construction in high strength steel.
Engine:	Mercedes-Benz OM 366 A, Diesel, 6 cylinders, water-cooled, 126 kW (171 HP) at 2400 min ⁻¹ (DIN 6271 IFN). Max. torque 560 Nm at 1500 – 1600 min ⁻¹ . Tank capacity: approx. 50 gal.
Hydraulic system:	3 separate circuits. Tank capacity: approx. 300 gal hydraulic oil.
Control system:	Infinite variation of all crane movements by control levers with automatic reset to zero.
Main hoist:	Rope drum with special grooving and integrated 2 speed planetary gear with multiple-disc brake and axial piston variable displacement motor.
Boom elevation:	1 cylinder with safety check valve, boom angle from –3° to +84°.
Swing:	Axial-piston fixed displacement motor, planetary gear and holding brake.
Cab:	Aluminium , full vision, safety glass, adjustable operator's seat with hydraulic suspension, engine-driven hot-water-heater, instrumentation and operating controls for carrier and superstructure.
Safety installations:	Hoist and lowering limit switch, pipe break safety valves, pressure relief valves.
Telescopic boom:	Welded construction in high strength steel, 1 pivot basic section, 3 telescopic sections. Total boom length: 135 ft, hydraulic full power boom.

Additional equipment

Drive:	10 x 8
Tires:	10 tires 16.00 R 25 / 20.5 R 25.
Swing-away lattice:	2-stage, stowing alongside boom, 33 - 52 ft.
Aux. hoist:	2nd hoisting gear.
Driver's cab:	Motor-independent heater usable as engine preheater.
Safe load indicator:	Electronic load moment safety device with automatic cut-out and digital display for actual and admissible load, radius and various working conditions.
Lattice extension:	

Further equipment upon request, subject by change without notice.



Main boom

Lifting capacities in 1000 lbs



42 – 135 ft



360°



Counterweight **32.6*** lbs

Radius ft	42 ft	57 ft	73 ft	73 ft	73 ft	104 ft	104 ft	135 ft	Radius ft		
10*	220.0								10*		
10	192.6	146.7							10		
15	152.2	146.7							15		
20	115.7	113.9	87.3	101.5	67.9	63.1	38.8		20		
25	90.1	88.4	86.9	86.9	66.9	59.5	38.8		25		
30	72.6	71.0	72.0	70.0	58.7	52.2	35.7	34.0	30		
35		58.8	59.8	57.9	52.7	46.5	31.2	33.2	35		
40		48.7	50.1	47.5	48.0	41.9	27.7	30.2	40		
45		39.7	41.0	38.5	43.4	38.1	25.2	27.6	45		
50			34.1	31.8	36.4	33.7	23.3	25.4	50		
55			28.8	26.7	31.0	28.5	22.0	23.5	55		
60			24.7	22.7	26.7	24.4	21.1	21.9	60		
65			20.4	18.3	22.4	21.0	20.5	20.4	65		
70						18.2	20.1	19.2	70		
75						15.8	19.7	18.1	75		
80						13.8	18.3	16.1	80		
85						12.0	16.5	14.2	85		
90						10.4	14.9	12.7	90		
95						8.9	13.5	11.2	95		
100								10.0	100		
105								8.8	105		
110								7.8	110		
115								6.9	115		
120								6.0	120		
T1 T2 T3	T1	0	0.5	0.5	1	0	1	0	1	T1	T1 T2 T3
%	T2	0	0	0.5	0	1	1	1	1	T2	%
	T3	0	0	0	0	0	0	1	1	T3	

*over rear only

* 1000 lbs



Main boom

Lifting capacities in 1000 lbs



42 – 135 ft



360°

22,0*

Counterweight lbs

Radius ft	42 ft	57 ft	73 ft	73 ft	73 ft	104 ft	104 ft	135 ft	Radius ft
10	191.9	146.7							10
15	151.6	146.7							15
20	110.1	108.4	87.3	101.5	67.9	63.1	38.8		20
25	85.6	83.9	85.0	82.9	66.9	59.5	38.8		25
30	68.9	67.3	68.3	66.3	58.7	52.2	35.7	34.0	30
35		53.8	55.3	52.5	52.7	46.5	31.2	33.2	35
40		42.2	43.6	41.0	46.2	41.9	27.7	30.2	40
45		34.1	35.4	33.0	37.8	35.0	25.2	27.6	45
50			29.3	27.1	31.5	28.9	23.3	25.4	50
55			24.6	22.5	26.7	24.3	22.0	23.5	55
60			20.9	18.7	22.9	20.6	21.1	21.9	60
65			17.7	15.6	19.7	17.4	20.5	19.9	65
70						14.7	19.6	17.2	70
75						12.5	17.3	14.9	75
80						10.6	15.3	13.0	80
85						9.0	13.6	11.3	85
90						7.6	12.2	9.9	90
95						6.3	10.9	8.6	95
100								7.5	100
105								6.5	105
110								5.6	110
115								4.8	115
120								4.0	120
T1	0	0.5	0.5	1	0	1	0	1	T1
T2	0	0	0.5	0	1	1	1	1	T2
T3	0	0	0	0	0	0	1	1	T3
%									%

*1000 lbs

Notes for lifting capacities

Load capacities above bold line are based on structural strength, and tipping must not be relied upon as a limitation of lifting capacity.

Rated loads must not be exceeded.

Rated loads do not exceed 85% of tipping load with the machine properly levelled on firm ground.

360° duties – on outriggers fully extended.

Note counterweight required as listed in relevant lifting capacity columns.

For safe crane operation due allowance must be made to compensate for high winds, side load, pendulum action and other hazardous conditions. No side pull permitted.

Hook blocks, slings and / or boom attachments are considered part of load, and their weight must be deducted from the rated lifting capacity to determine the net load.

Boom must be extended in accordance with sequence as noted on lifting capacity chart.

Consult crane manual to determine weight reduction for load handling devices and boom attachments.

Operate crane strictly in compliance with operator's manual.



Main boom + swing-away extension

Lifting capacities in 1000 lbs



33–52 ft



360°

Counterweight

32.6*

lbs

Radius		Main boom length 135 ft				Radius	
		Lattice extension length 33 ft		Lattice extension length 52 ft			
		167 ft	166 ft	186 ft	185 ft		
ft		0°	16°	0°	16°	ft	
30		18.2		9.7		30	
35		18.2		9.7		35	
40		18.2		9.7		40	
45		18.2	14.6	9.7		45	
50		18.2	14.5	9.7		50	
55		17.7	13.9	9.7	7.3	55	
60		17.0	13.3	9.7	7.3	60	
65		17.0	12.7	9.6	7.3	65	
70		16.2	12.2	9.3	7.3	70	
75		15.5	11.7	8.9	7.3	75	
80		14.8	11.2	8.6	7.2	80	
85		14.2	10.7	8.3	7.0	85	
90		13.5	10.3	8.1	6.9	90	
95		12.8	9.9	7.8	6.7	95	
100		12.2	9.5	7.6	6.6	100	
105		11.3	9.1	7.3	6.5	105	
110		10.1	8.7	7.1	6.4	110	
115		9.1	8.4	6.9	6.3	115	
120		8.1	8.1	6.8	6.2	120	
125		7.3	7.3	6.6	6.1	125	
130		6.5	6.5	6.4	6.0	130	
135		5.7	5.7	6.3	5.9	135	
140		4.9	4.9	5.8	5.8	140	
145		4.2	4.2	5.1	5.1	145	
150		3.6	3.6	4.4	4.4	150	
155		3.0	3.0	3.8	3.8	155	
160		2.4	2.4	3.3	3.3	160	
				2.7	2.7		
	T 1	1	1	1	1	T 1	
	T 2	1	1	1	1	T 2	
	T 3	1	1	1	1	T 3	



33–52 ft



360°

Counterweight

32.6*

lbs

Radius		Main boom length 120 ft				Radius	
		Lattice extension length 33 ft		Lattice extension length 52 ft			
		152 ft 0°	151 ft 16°	171 ft 0°	169 ft 16°		
ft						ft	
25		23.0				25	
30		23.0		12.1		30	
35		23.0	17.0	12.1		35	
40		22.9	17.0	12.1		40	
45		21.8	17.0	11.7		45	
50		20.8	16.4	11.1	8.5	50	
55		19.9	15.7	10.6	8.5	55	
60		19.1	15.0	10.1	8.2	60	
65		18.3	14.3	9.6	7.9	65	
70		17.5	13.7	9.2	7.6	70	
75		16.8	13.1	8.8	7.4	75	
80		16.1	12.5	8.5	7.1	80	
85		15.1	11.9	8.1	6.9	85	
90		13.5	11.4	7.9	6.7	90	
95		12.0	10.9	7.6	6.5	95	
100		10.8	10.5	7.4	6.4	100	
105		9.6	9.6	7.2	6.3	105	
110		8.6	8.6	7.0	6.2	110	
115		7.6	7.6	6.8	6.1	115	
120		6.8	6.8	6.7	6.0	120	
125		5.9	5.9	6.5	5.9	125	
130		5.1	5.1	6.2	5.9	130	
135		4.3	4.3	5.4	5.4	135	
140				4.7	4.7	140	
145				4.1	4.1	145	
150				3.5	3.5	150	
155				2.9	2.9	155	
	T 1	1	1	1	1	T 1	
	T 2	1	1	1	1	T 2	
	T 3	0.5	0.5	0.5	0.5	T 3	



**Main boom + swing-away extension**

Lifting capacities in 1000 lbs



33-52 ft



360°

Counterweight

22.0*

lbs

Radius		Main boom length 135 ft				Radius	
		Lattice extension length 33 ft		Lattice extension length 52 ft			
		167 ft 0°	166 ft 16°	186 ft 0°	185 ft 16°		
ft						ft	
30		18.2		9.7		30	
35		18.2		9.7		35	
40		18.2	14.6	9.7		40	
45		18.2	14.5	9.7		45	
50		18.2	13.9	9.7	7.3	50	
55		17.7	13.3	9.7	7.3	55	
60		17.0	12.7	9.6	7.3	60	
65		16.2	12.2	9.3	7.3	65	
70		15.5	11.7	8.9	7.3	70	
75		14.8	11.2	8.6	7.2	75	
80		14.2	10.7	8.3	7.0	80	
85		12.8	10.3	8.1	6.9	85	
90		11.3	9.9	7.8	6.7	90	
95		10.0	9.5	7.6	6.6	95	
100		8.8	8.8	7.3	6.5	100	
105		7.8	7.8	7.1	6.4	105	
110		6.8	6.8	6.9	6.3	110	
115		6.0	6.0	6.7	6.2	115	
120		5.2	5.2	5.9	5.9	120	
125		4.5	4.5	5.2	5.2	125	
130		3.8	3.8	4.6	4.6	130	
135		3.1	3.1	4.0	4.0	135	
140				3.4	3.4	140	
T 1		1	1	1	1	T 1	
T 2		1	1	1	1	T 2	
T 3		1	1	1	1	T 3	

*1000 lbs



33-52 ft



360°

Counterweight

22.0*

lbs

Radius		Main boom length 120 ft				Radius	
		Lattice extension length 33 ft		Lattice extension length 52 ft			
		152 ft 0°	151 ft 16°	171 ft 0°	169 ft 16°		
ft						ft	
25		23.0				25	
30		23.0		12.1		30	
35		23.0	17.0	12.1		35	
40		22.9	17.0	12.1		40	
45		21.8	17.0	11.7		45	
50		20.8	16.4	11.1	8.5	50	
55		19.9	15.7	10.6	8.5	55	
60		19.1	15.0	10.1	8.2	60	
65		18.3	14.3	9.6	7.9	65	
70		17.5	13.7	9.2	7.6	70	
75		16.0	13.1	8.8	7.4	75	
80		14.0	12.5	8.5	7.1	80	
85		12.3	11.9	8.1	6.9	85	
90		10.8	10.8	7.9	6.7	90	
95		9.5	9.5	7.6	6.5	95	
100		8.3	8.3	7.4	6.4	100	
105		7.3	7.3	7.2	6.3	105	
110		6.4	6.4	7.0	6.2	110	
115		5.5	5.5	6.4	6.1	115	
120		4.8	4.8	5.6	5.6	120	
125		4.0	4.0	4.9	4.9	125	
130		3.2	3.2	4.3	4.3	130	
135				3.6	3.6	135	
140				3.0	3.0	140	
T1		1	1	1	1	T1	
T2		1	1	1	1	T2	
T3		0.5	0.5	0.5	0.5	T3	

*1000 lbs



Weights / Working speeds



Axle	1	2	3	4	5	Total weight
1000 lbs	26,5	26,5	26,5	26,5	26,5	132,5*

* incl. 22.000 lbs counterweight



Lifting capacity (tons)	Sheaves	Parts of line	Weight lbs
80	7	4 – 13	1760
50	3	1 – 7	1450
20	1	1 – 3	700



Gear	1	2	3	4	5	R	Gradeability max.
On-road (mp/h)	8,3	13,4	21,3	31,3	43,1	9,1	
Off-road (mp/h)	5,3	8,6	13,7	20,0	27,6	5,9	55 %
Tires	14.00 R 25						



Drives	infinitely variable	Rope diameter / Rope length	Max. single line pull
Main hoist	0 – 420 ft / min single line	19 mm (3/4") / 790 ft	17500 lbs
Auxiliary hoist	0 – 420 ft / min single line	19 mm (3/4") / 590 ft	17500 lbs
Swing gear	0 – 1,9 min ⁻¹		
Boom elevation	approx. 65 seconds to reach – 3° + 84°		
Telescoping	approx. 200 seconds for boom length from 42 – 135 ft		



Telescopic boom



On outriggers



Working range



Axle load



Hook blocks and hook



Crane movements



Speed



Swing-away lattice



KRUPP Hydraulic Mobile Cranes

Product Range

All-Terrain Cranes		Max. lifting capacity	Max. hook height
KMK 2025		25 ton	121 ft
KMK 3045		45 ton	150 ft
KMK 4080		80 ton	180 ft
KMK 4100		100 ton	190 ft
KMK 5110		110 ton	215 ft
KMK 5125		125 ton	216 ft
KMK 5175		175 ton	250 ft
KMK 6190		190 ton	350 ft
KMK 6275		275 ton	330 ft
KMK 7300		300 ton	330 ft



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