



Krupp Hydraulic Truck-mounted Crane 100 GMT 120 ton Capacity





Superstructure Specifications

Boom

42'0" – 137'0" 4-section full power boom

Telescoping cycle:

1. section 65 sec.
2. section 72 sec.
3. section 47 sec.

High speed:

1. section 47 sec.
2. section 46 sec.
3. section 31 sec.

*) Jibs

38'0" swing-away lattice extension and inserts

58'0" offsetable lattice extension (15° and 30°)

82'0" power luffing jib

Main Hoist

Axial piston motor with planetary gear and fail-safe brake

Single line pull max.: 16.800 lbs

Single line speed max.: 417 fpm

Drum diameter: 20"

Rope diameter: 3/4"

Rope length: 850 ft

*) Auxiliary Hoist

Axial piston motor with planetary gear and fail-safe brake

Single line pull max.: 16.800 lbs

Single line speed max.: 417 fpm

Drum diameter: 20"

Rope diameter: 3/4"

Rope length: 850 ft

Hook Blocks

65 ton

*) 120, 35, 15 ton and 9 ton single hook

Boom Elevation

Hydraulic cylinder with integral holding valve, boom angle

from -1.5 to +82.0 degrees

Elevation cycle: 83 sec.

High speed: 45 sec.

Swing Gear

Axial piston motor with planetary gear, holding and service brake,

swing speed 0 – 2.5 rpm variable

Engine

6 cyl. Daimler Benz OM 352 A

water-cooled, 139 hp at 2300 rpm

Tank capacity: 50 gal. diesel

Hydraulic system

3 separate circuits: 2 axial piston pumps with integrated infinitely variable speed and load control,

1 axial piston pump. *) Oil cooler.

Tank capacity: 350 gal. hydraulic oil

Control system

Infinite variation of all crane-motions by hydraulic pilot circuit, dead-man-position

Counterweight

29 760 lbs, in 3 sections, hydraulically removable

Operator's cab

Full vision, all steel, safety glass, fully adjustable operator's seat with hydraulic suspension, independent heating and ventilation, complete engine instrumentation and crane operating controls.

Safety installations

Hoist limit switch, lock valves, pressure relief valves.

*) Electronic load moment safety device with automatic cut-out and indicators for load moment and working radius, lowering limit switch.

Carrier specifications

Chassis

Krupp heavy-duty 5-axle carrier, welded box-type frame from high tensile steel

Engine

12 cyl. Daimler Benz OM 404, water-cooled, 420 hp at 2400 rpm

Tank capacity: 150 gal.

Transmission

Allison 5 speed automatic gear-box MAN transfer case, 2 speed with differential lock

Axles

- | | |
|---|----------------|
| 1. driven steering axle | 4. driven axle |
| 2. steering axle | 5. driven axle |
| 3. steering axle | |
| driven axles = planetary axles | |
| 4. + 5. axle with interaxle differential lock | |

Suspension

1. and 2. axle parabolic leaf springs
3. – 5. axle hydropneumatic suspension system and axle lock-outs

Tyres

14 tyres 14.00 – 24 PR 22

4th and 5th axle dual tyres

Steering

ZF semi-integral ball-nut hydraulic power steering

Brakes

Service brake: pneumatic dual-circuit acting on all wheels

Permanent brake: retarder of Allison automatic transmission

Auxiliary brake: pneumatically operated spring-loaded brake acting on 1st to 3rd axle

Driver's cab

All-steel, two-man-design with bunk, safety glass, adjustable hydraulically suspended seats, independent heating and ventilation. Complete instrumentation and driving controls.

Outriggers

Independent horizontal and vertical hydraulic motion of each beam. Control on each side of chassis. Sight level device.

Electrical equipment

Three-phase alternator 24 V/55 A

2 batteries 12 V/180 Ah

Performance

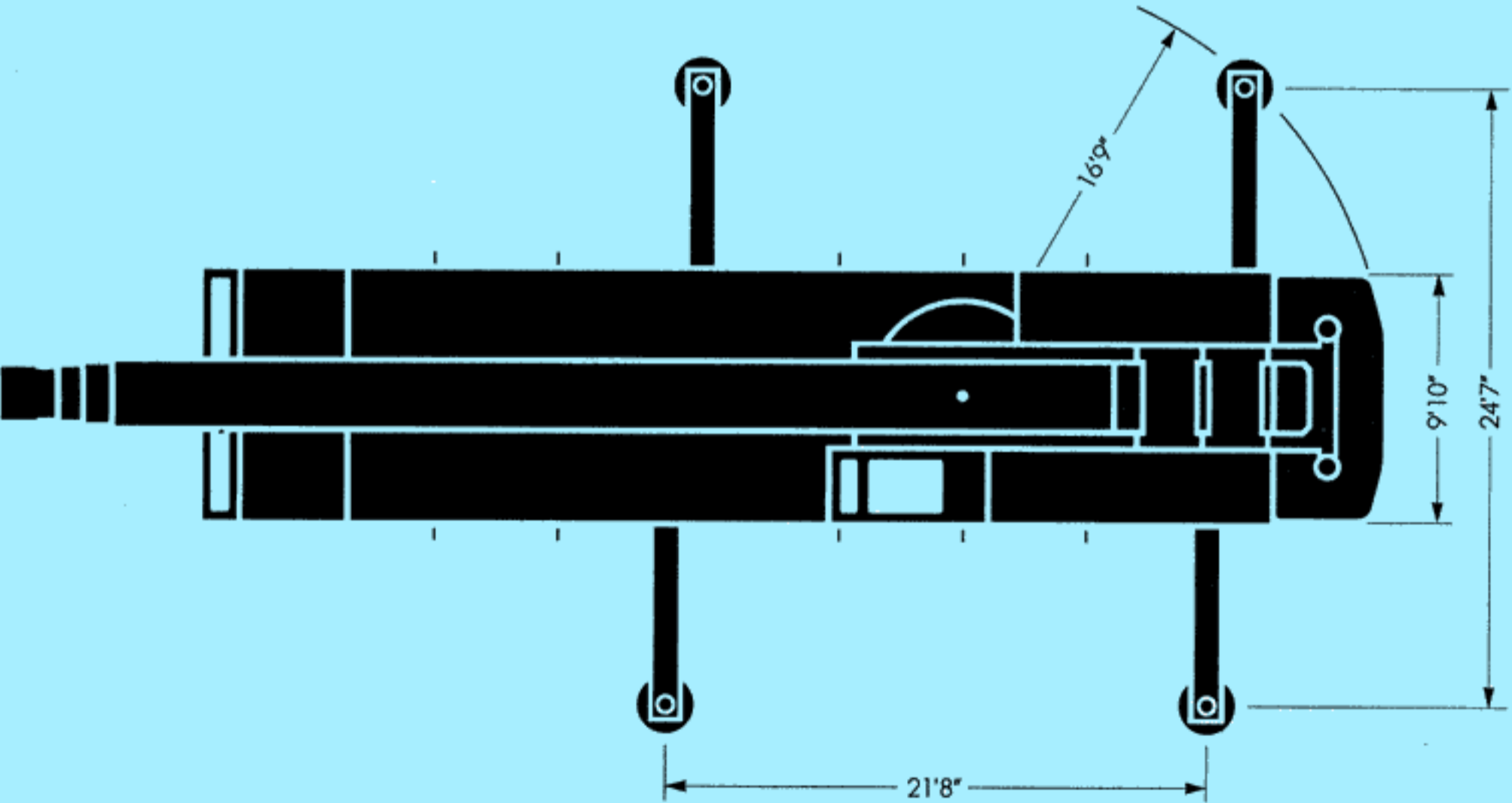
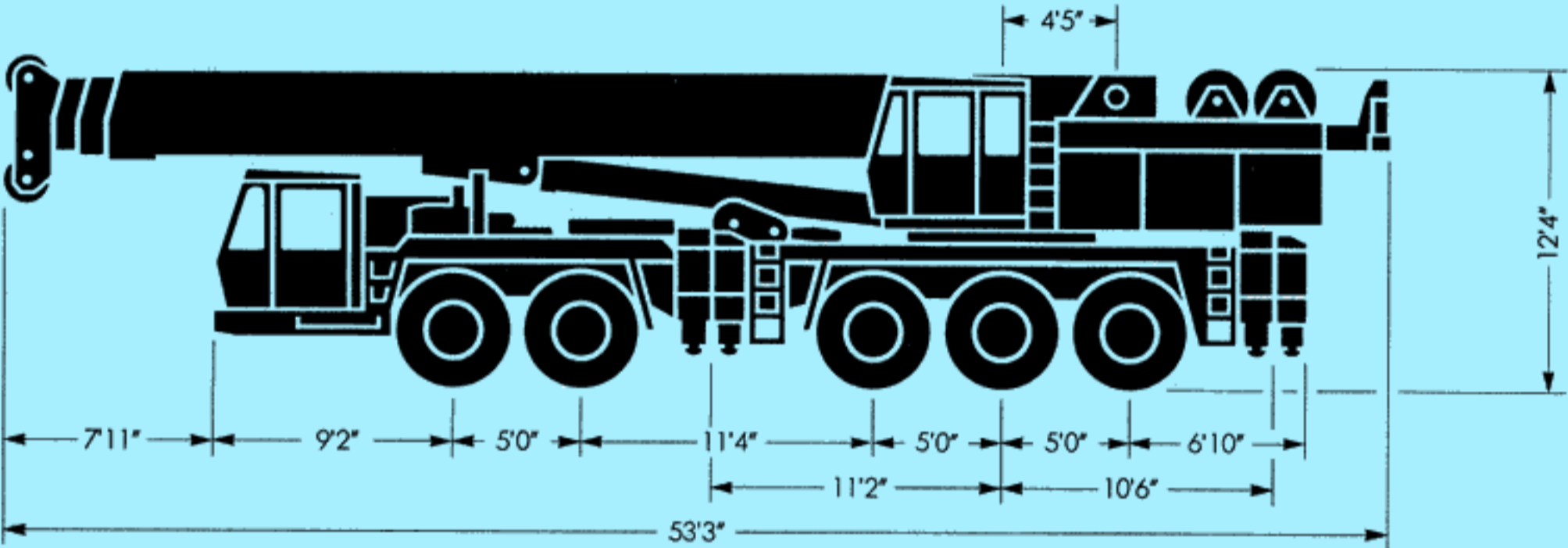
Travelling speeds: max. 42 mph
min. 0,1 mph

Gradeability: 50%

Turning radius: 54 ft

*) Optional items

Dimensions



Lifting capacities in 1000 lbs

Main boom + swing-away extension

Radius	Boom length (ft)										
	42'0"			74'0" *)			105'0"		137'0"		+ 38'0"
	Hook height max. (ft)										
	45'0"			77'0"			108'0"		140'0"		178'0"
	Counterweight in 1000 lbs										
(ft)	29.7	7.7	29.7	29.7	7.7	29.7	29.7	7.7	29.7	7.7	29.7
	A	A	F	A	A	F	A	A	A	A	A
10	240.8	180.3		143.3	132.3						
11	230.0	170.2		143.3	132.3						
12	218.6	160.7		143.3	132.3						
13	206.5	152.2		143.3	132.3						
14	193.2	141.0		143.3	127.1						
15	180.8	130.1	37.0	143.3	121.4	37.0	72.8	66.1			
20	139.0	92.8	29.5	136.8	91.1	29.5	72.8	66.1	40.8	37.5	
25	107.6	70.5	22.5	105.9	69.2	22.5	72.1	60.7	40.8	37.5	
30	85.5	55.1	17.2	84.0	54.7	17.2	63.0	50.5	40.8	37.5	16.5
35	67.2	43.4	13.2	67.6	43.2	13.2	55.0	42.6	40.8	35.6	16.5
40				53.3	33.1	10.2	48.9	32.9	39.3	31.5	16.5
45				43.1	25.5	7.6	42.5	25.5	35.1	27.8	16.0
50				35.4	20.0	5.0	35.1	20.1	30.8	23.2	15.2
55				29.5	15.6		29.5	15.6	27.5	18.9	14.0
60				24.5	12.3		24.9	12.3	25.1	15.5	13.1
65				21.0	9.6		21.1	9.6	22.8	12.6	12.4
70							17.7	7.3	20.5	10.2	11.5
75							15.0	5.4	18.1	8.5	10.7
80							12.6	3.8	16.1	6.8	10.0
85							10.9	2.3	14.0	5.4	9.1
90							9.1		12.3	4.1	8.4
95							7.5		10.6	3.1	7.8
100									9.3		7.1
105									7.9		6.1
110									6.9		5.6
115									5.9		4.9
120									4.9		4.1
125									3.9		3.4
130									3.3		2.7

*) 74 ft boom – section 1 and 2 equally extended

A Crane on outriggers 360°

F Crane free on wheels over rear ± 10°

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.

Notes for lifting capacities

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

360° duties – on outriggers fully extended, other than noted above (coloured lifting range).

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 the load, and their weight must be deducted from the rated lifting capacity to determine the net load.

**Lattice extension (straight / off-set)**

Radius	Boom length (ft)		
	137'0" + 57'0" = 194'0"		
	Hook height max. (ft)		
	196'0"	192'0"	185'0"
	Off-set angle		
	0°	15°	30°
	Counterweight in 1000 lbs		
(ft)	29.7		
	A		
35	11.5		
40	11.5		
45	11.4		
50	10.8		
55	10.3	5.4	
60	9.7	5.3	
65	9.1	5.1	4.2
70	8.6	4.9	3.9
75	7.8	4.8	3.8
80	6.6	4.6	3.6
85	5.4	4.3	3.5
90	4.3	4.1	3.4
95	3.4	4.0	3.2
100		3.8	3.1
105		3.1	3.0
110			2.9

Boom must be fully extended when lifting with the 3rd (power pinned) boom section or with the swing-away extension.

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

Operate crane strictly in compliance with operator's manual.

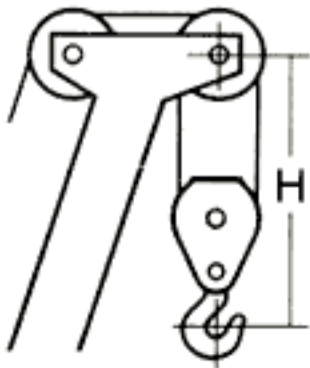
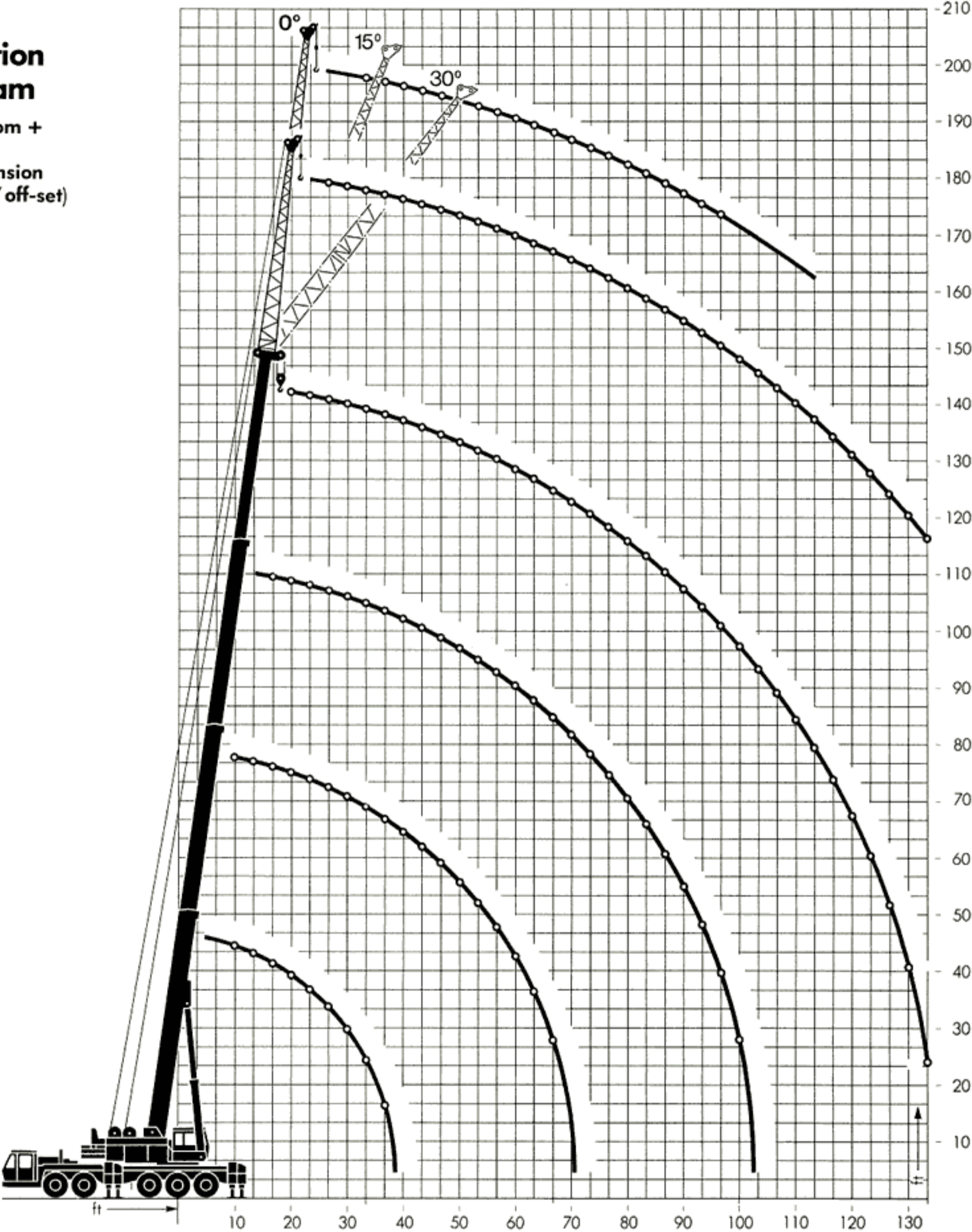
360° Power luffing jib

Counterweight 29.760 lbs

Main boom	Radius	Jib length (ft)		
ft	ft	49'0"	66'0"	82'0"
42	25	33.1		
	30	32.4	24.4	
	35	26.6	23.9	16.3
	40	22.4	23.3	15.4
	45	18.6	19.8	14.5
	50		17.3	13.8
	55			13.2
	60			12.5
	65			11.2
	70			9.8
74	25	33.1		
	30	33.1		
	35	30.4	24.2	
	40	25.1	23.8	16.0
	45	21.0	22.1	15.1
	50		18.8	14.2
	55		16.5	13.6
	60		14.5	12.9
	65		12.8	12.2
	70			10.7
105	35	30.3		
	40	27.0	20.5	14.0
	45	23.8	20.0	13.5
	50	20.1	19.4	13.2
	55		18.2	12.8
	60		16.1	12.3
	65		13.9	11.9
	70		11.9	11.5
	75			10.9
137	35	14.1		
	40	13.0	12.4	
	45	11.6	11.3	8.8
	50	10.1	10.0	8.6
	55	8.7	9.0	8.4
	60		8.0	8.1
	65		7.2	7.4
	70		6.2	6.5
	75			5.9
	80			5.3
	85			4.5

Hook elevation diagram

Main boom + extension and extension (straight / off-set)



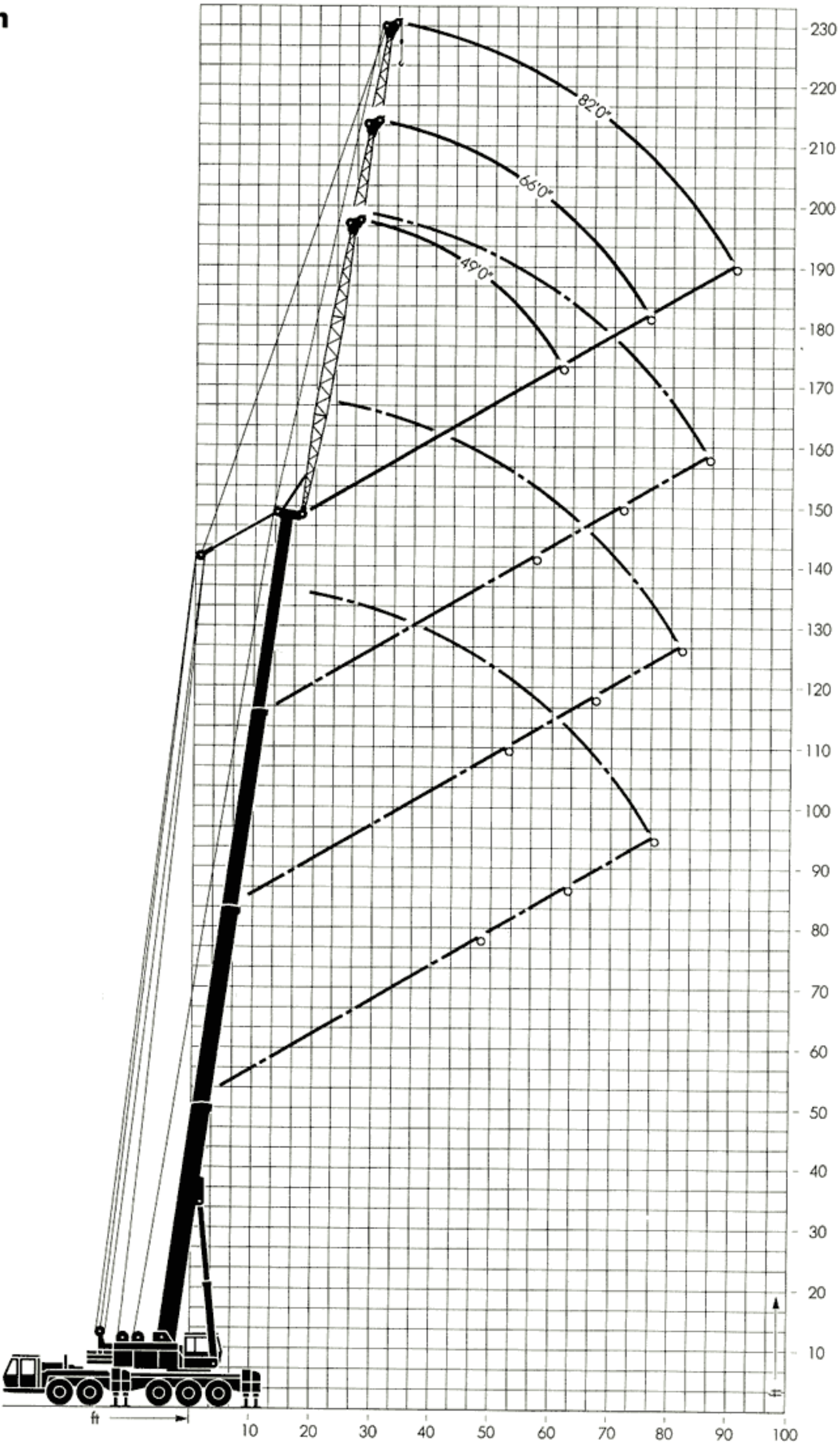
Hooks

Capacity	ton	120	65	35	15	9
Sheaves		9	5	3	1	0
Distance H	ft	7'6"	7'3"	6'7"	5'9"	8'10"
Weight	ton	1.0	0.9	0.42	0.31	0.29



Hook elevation diagram










Power luffing jib





Krupp Hydraulic Mobile Cranes

Product Range

Truck Cranes		Max. lifting capacity	Max. hook height
100 GMT		120 ton	220 ft*
180 GMT		250 ton	320 ft*
250 GMT		365 ton	345 ft*
350 GMT		450 ton	365 ft*
500 GMT		600 ton	430 ft*
All-Terrain Cranes			
25 GMT-AT		25 ton	122 ft
35 GMT-AT		35 ton	129 ft
70 GMT-AT		80 ton	178 ft
140 GMT-AT		165 ton	296 ft*

* incl. power luffing jib


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