

Krupp Hydraulic All-Terrain Crane
70 GMT-AT
80 ton Capacity



Superstructure Specification

Boom

38'0" - 122'0" 4 section full power boom

Telescoping cycle:

1. section 75 sec.
2. section 75 sec.
3. section 47 sec.

High speed

1. section 50 sec.
2. section 45 sec.
3. section 31 sec.

*) Jibs

33'0" swing-away lattice extension alternatively

33'0" - 52'6" 2 stage off-set swing-away lattice extension

Main Hoist

Axial piston motor with planetary gear and fail safe brake

Single line pull max.: 13,700 lbs

Single line speed max.: 330 ft./min.

Drum diameter: 17"

Rope diameter: 3/4"

Rope length: 650 ft.

*) Auxiliary Hoist

Axial piston motor with planetary gear and fail safe brake

Single line pull max.: 10,600 lbs

Single line speed max.: 420 ft./min.

Drum diameter: 13"

Rope diameter: 5/8"

Rope length: 570 ft.

Hook Blocks

70 ton 7 sheaves

*) 30 ton 3 sheaves, 10 ton single sheave, 8 ton single hook

Boom Elevation

Hydraulic cylinder with integral holding valve

Boom angle from -1.4° to $+80^{\circ}$

Elevation cycle: 90 sec.

High speed: 50 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 diesel OM 352A,

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

Tank capacity: 250 gal. hydraulic oil

*) Hydraulic oil cooler for extreme working conditions

Control system

Infinite variation of all crane motions by hydraulic pilot circuit, control levers with automatic dead man position

Counterweight

2200 lbs permanently mounted

*) 15400 lbs, 24200 lbs

Operator's cab

Full vision, all steel, safety glass, fully adjustable hydraulically suspended seat, engine coolant cab heater, complete instrumentation of engine and crane operating controls

*) Stationary diesel cab heater

Safety installations

Anti two block and hoist rope lowering switch, lock valves, pressure relief valves

*) Electronic load moment safety device with automatic shut-off and digital display of actual and permissible load, radius and operating modes

Carrier specification

Chassis

Krupp heavy-duty 4-axle carrier, welded box-type frame from high tensile steel

Engine

8 cyl. Daimler Benz diesel OM 422 A water-cooled, 330 hp at 2300 rpm

Tank capacity: 75 gal. diesel

Transmission

Automatic gear box with torque converter

MAN 2 speed transfer case with longitudinal differential lock

Axles

1. drive/steer axle

2. steering axle

3. drive axle

4. drive axle

Drive axles with planetary gears

Transverse differential lock on all drive axles

*) All wheel drive and steer

Suspension

Parabolic leaf springs with hydraulic suspension lock-out

Tyres

8 tyres 16.00 - 25

*) 20.5 - 25

Steering

ZF semi-integral ball nut hydraulic power steering

Brakes

Service brake:

Pneumatic dual circuit brake system

Front axles with disc brakes

Rear axles with brake drums

Permanent brake:

Hydraulic retarder of automatic gear box

Auxiliary brake:

Pneumatically operated spring-loaded brake acting on 3. and 4. axle

Driver's cab

Single cab, all steel, safety glass, adjustable hydraulically suspended driver's seat

Engine coolant heating system

Complete instrumentation and driving controls

*) Stationary diesel cab heater

Outriggers

Independent horizontal and vertical motion of each beam, operated from crane cab and each side of chassis
Sight level device

Electrical equipment

Three phase alternator 28 V/55 A

2 batteries 12 V/180 Ah

Lights and control circuit 24 V

Performance

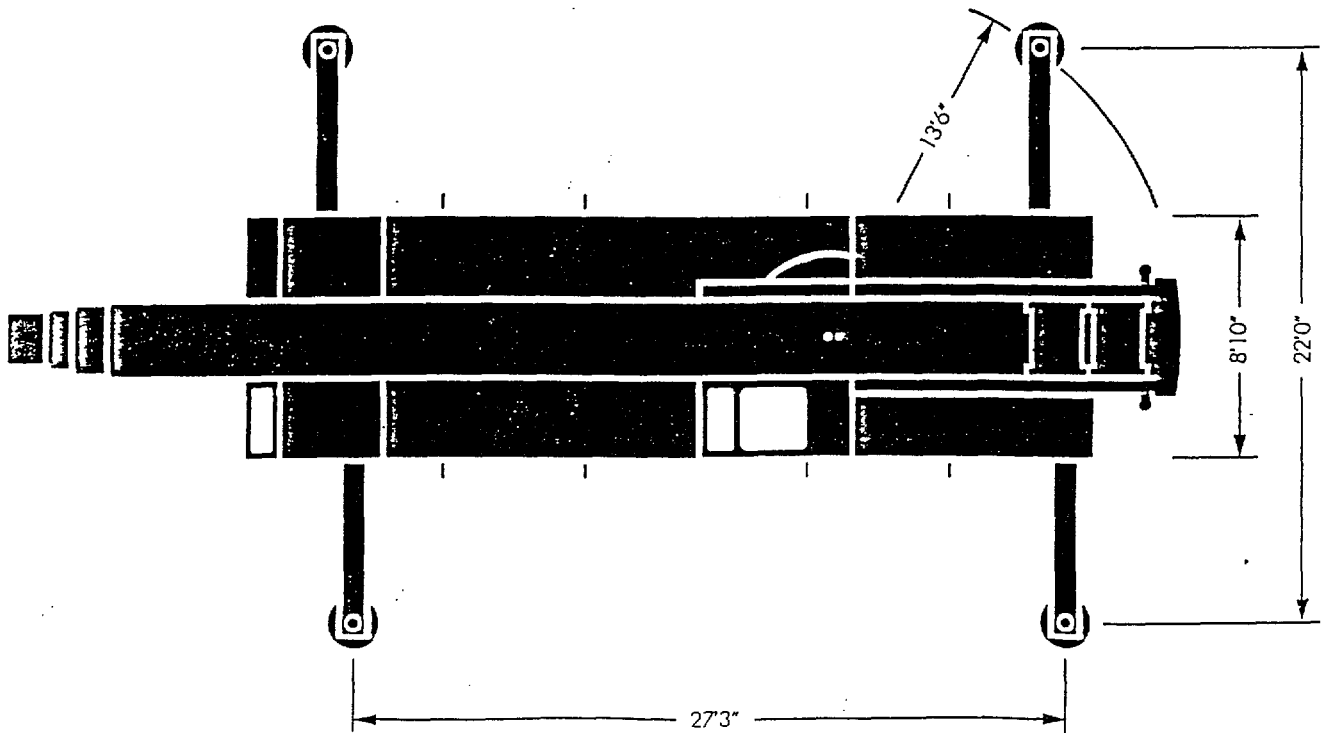
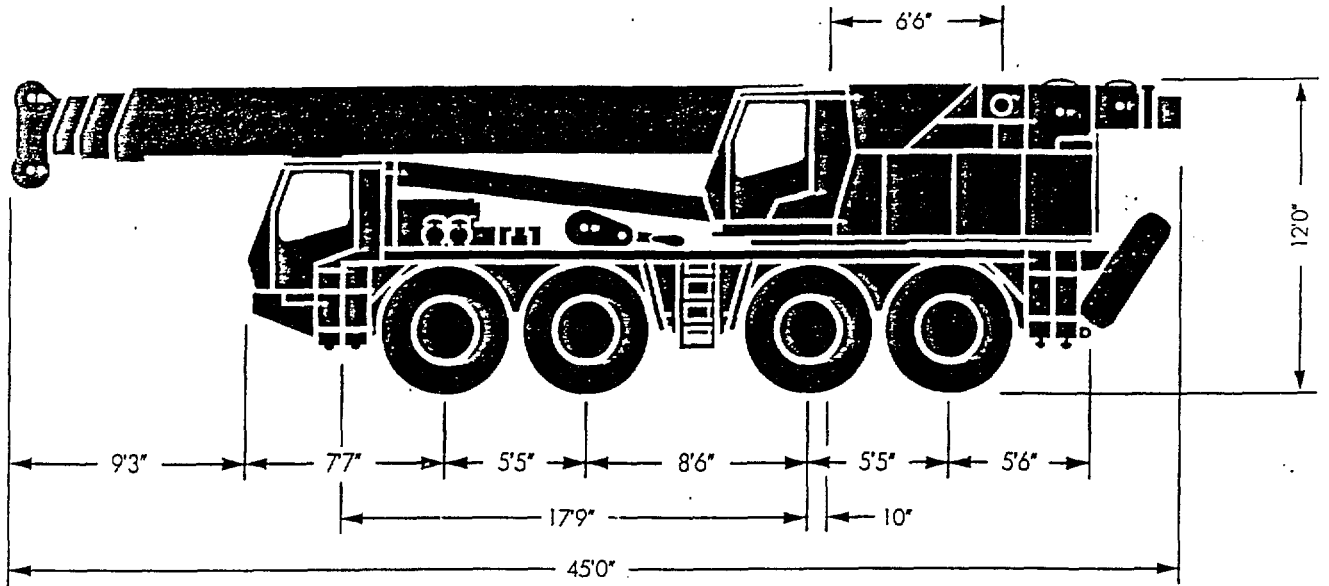
road speed max. 47 mph, min. 0.1 mph

Gradeability 60%, 51%, 45% dependent on counterweight turning radius: 45 ft

oil wheel steer: 33 ft

*) Optional items

Dimensions



Lifting capacities in 1000 lbs

360° Main boom and swing-away lattice extension

Radius	38'0"				66'0"					
	42'0"				69'6"					
	(ft)	24.2	15.4	2.2	F	24.2	15.4	2.2	F	24.2
	10**	160.0								
10	142.1	129.3	127.8	38.4						
11	134.6	118.3	116.1	36.2						
12	127.0	111.6	109.1	33.8	87.3			33.8		
13	119.3	105.7	103.6	31.8	87.3	79.4	79.4	31.8		
14	113.2	100.5	98.6	29.9	87.3	79.4	79.4	29.9		
15	107.3	95.5	93.6	28.3	87.3	79.4	79.4	28.3		
20	85.3	75.7	64.6	20.8	75.5	68.8	64.7	20.8	48.5	
25	68.5	55.9	44.2	15.3	64.3	55.6	44.5	15.3	43.6	
30	52.0	41.2	31.8	11.1	52.2	41.4	32.3	11.1	38.1	
35					41.0	32.2	24.5	8.3	33.4	
40					32.7	25.6	18.3	6.0	29.0	
45					26.6	20.6	13.9	4.3	25.5	
50					22.1	16.7	10.6		21.9	
55					18.2	13.7	8.1		18.2	
60									15.0	
65									12.5	
70									10.6	
75									8.9	
80									7.2	
85										
90										
95										
100										
105										
110										
115										
120										

Notes for lifting capacities

- * 66'0" boom - section 1 and 2 equally extended
- * 117'0" boom - section 1 and 3 retracted by 2'6" ft each
- F free on wheels, plus/minus 10° over rear
- ** over rear only

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

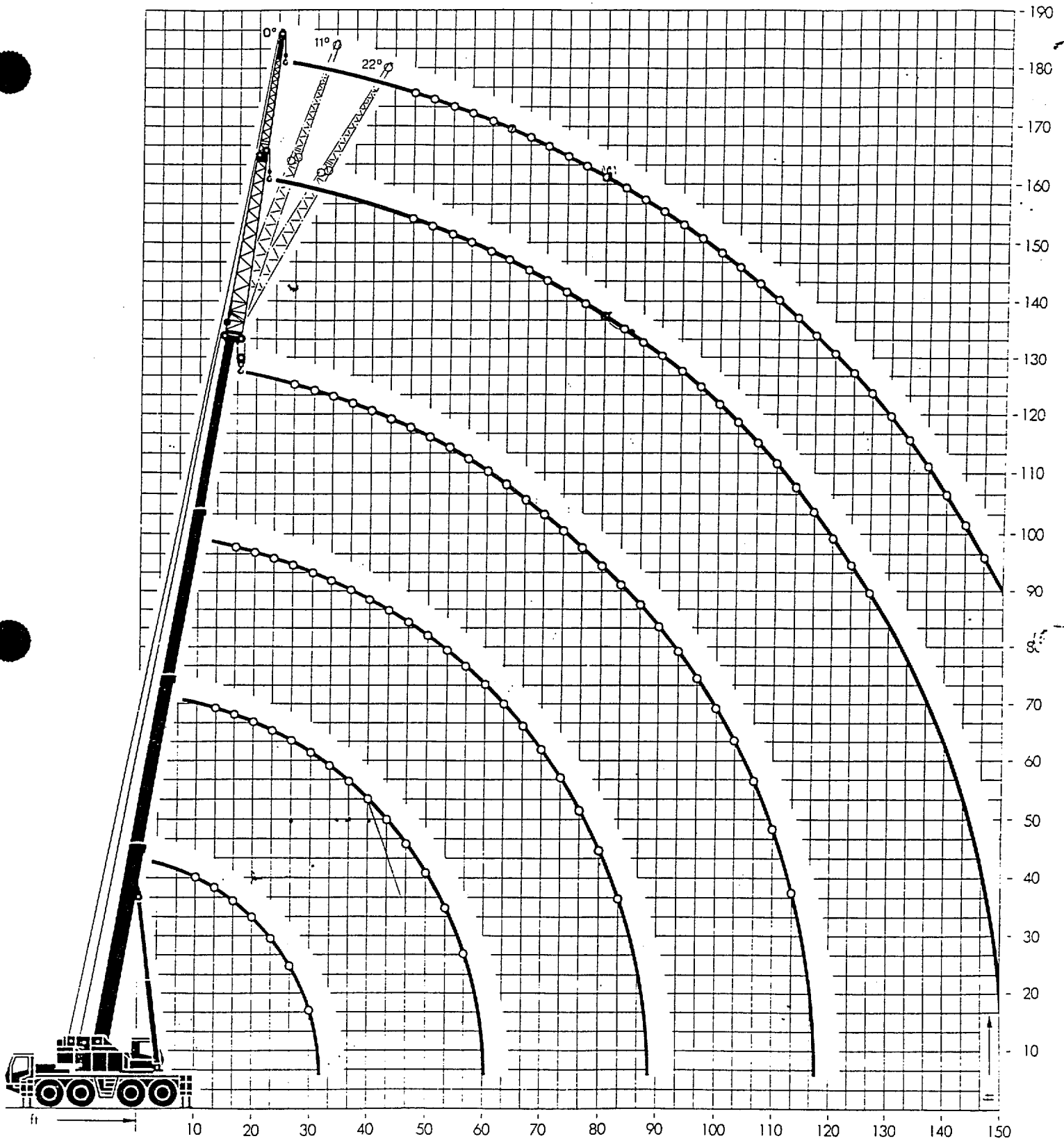
360° duties on outriggers fully extended, except free on wheel duties as noted.

Note counterweight required as listed in relevant lifting capacity columns.

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

Hook elevation diagram

Main boom + 2-stage off-set lattice extension



Original (ft)										Rated Capacity (1000 lbs)
122'0"			117'0" + 33'0" **1				122'0" + 33'0"			
at max. lift										
125'0"			153'0"				158'0"			
Weight in 1000 lbs										
2.2	24.2	15.4	2.2	24.2	15.4	2.2	24.2	15.4	2.2	15
										10** 10
										11 12 13 14 15
44.1										20
39.7		26.4	26.4							25
32.4	26.4	26.3	26.3	17.4	15.3	15.3				30
24.1	26.4	24.7	24.7	15.6	14.2	14.2	12.1	12.1	12.1	35
17.9	24.7	22.5	20.3	14.4	13.1	13.2	12.1	12.1	12.1	40
13.5	22.7	20.7	16.0	13.2	12.1	12.1	12.1	12.1	12.1	45
10.4	20.2	18.4	12.7	12.2	11.1	11.1	12.1	11.7	11.7	50
7.9	18.4	15.7	10.0	11.6	10.5	10.5	11.9	10.9	10.9	55
5.8	16.6	13.0	8.1	10.7	9.8	9.7	11.3	10.2	10.0	60
4.2	14.9	10.8	6.4	10.0	9.1	8.4	10.4	9.6	8.4	65
2.8	12.9	9.1	5.0	9.4	8.5	6.8	9.8	9.0	6.8	70
	11.2	7.6	3.8	8.9	8.0	5.6	9.3	8.4	5.6	75
	9.6	6.3	2.8	8.2	7.5	4.6	8.9	7.9	4.6	80
	8.2	5.1		7.7	6.9	3.6	8.0	6.9	3.6	85
	7.0	4.2		7.3	5.9	2.9	7.3	5.9	2.9	90
	5.8	3.3		6.8	5.1	2.2	6.8	5.1	2.2	95
	5.0	2.6		6.4	4.3		6.4	4.3		100
	4.2			5.5	3.5		5.5	3.5		105
	3.4			4.8	3.0		4.8	2.9		110
				4.1	2.4		4.1	2.4		115
				3.2			3.2			120

Hook block and 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.

Boom must be fully extended when lifting with the swing-away extension.

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

Operate crane strictly in accordance with operator's manual.

Lifting capacities in 1000 lbs on outriggers

360° Main boom with 33'0" - 52'6"

2-stage off-set swing away lattice extension

Radius	Boom length (ft)					
	122'0" + 33'0" = 155'0"			122'0" + 52'6" = 174'6"		
	Hook height max. (ft)					
	158'0"	157'0"	155'0"	178'0"	176'0"	172'0"
(ft)	Off-set angle					
	0°	11°	22°	0°	11°	22°
30	12.1					
35	12.1					
40	12.1	12.1		8.1		
45	12.1	12.0	11.1	8.1	8.1	
50	12.1	11.3	10.3	8.1	8.1	
55	11.9	10.5	9.5	8.1	7.8	6.9
60	11.3	9.8	9.0	7.8	7.4	6.5
65	10.5	9.1	8.6	7.5	7.1	6.2
70	9.8	8.7	8.0	7.2	6.8	5.9
75	9.3	8.0	7.5	6.9	6.4	5.5
80	8.9	7.7	7.2	6.5	6.1	5.2
85	8.0	7.3	6.9	6.2	5.7	4.9
90	7.4	6.9	6.5	5.8	5.2	4.7
95	6.9	6.6	6.2	5.5	4.8	4.5
100	6.4	6.3	5.9	5.3	4.6	4.3
105	5.5	5.5	5.7	5.0	4.4	4.1
110	4.9	4.9	5.1	4.7	4.2	3.9
115	4.2	4.2	4.4	4.4	4.1	3.7
120	3.3	3.3	3.8	3.8	3.8	3.5
125				3.2	3.5	3.4
130				2.7	2.9	3.1
135				2.4	2.4	2.8
140				1.9	2.0	2.2

Counterweight 24250 lbs

Hooks

Capacity	ton	70	30	10	8
Sheaves		7	3	1	0
Distance H	ft	6'0"	6'0"	5'3"	6'9"
Weight	ton	0.9	0.4	0.22	0.3