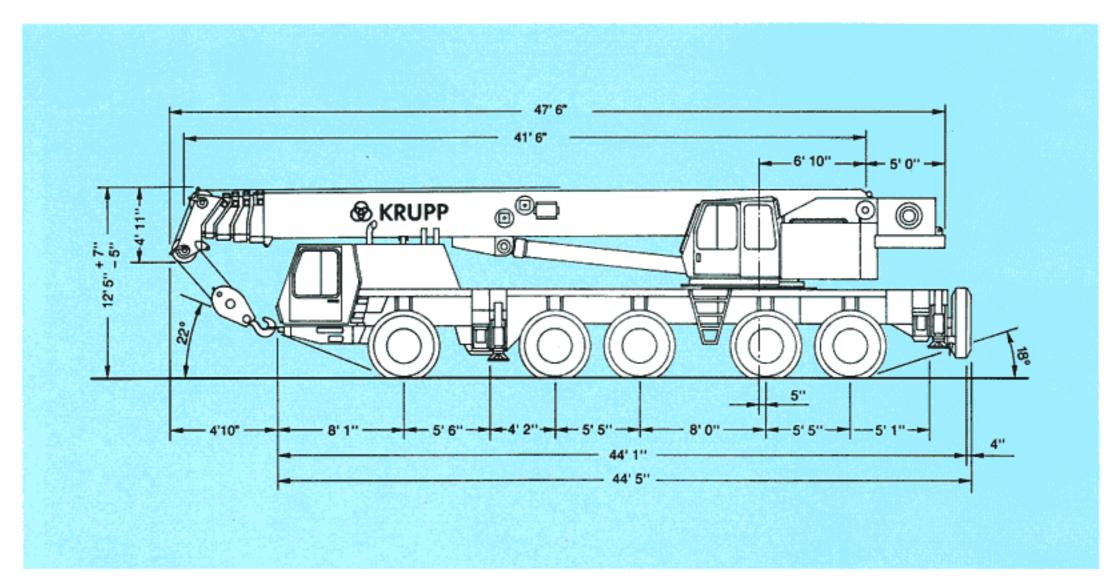


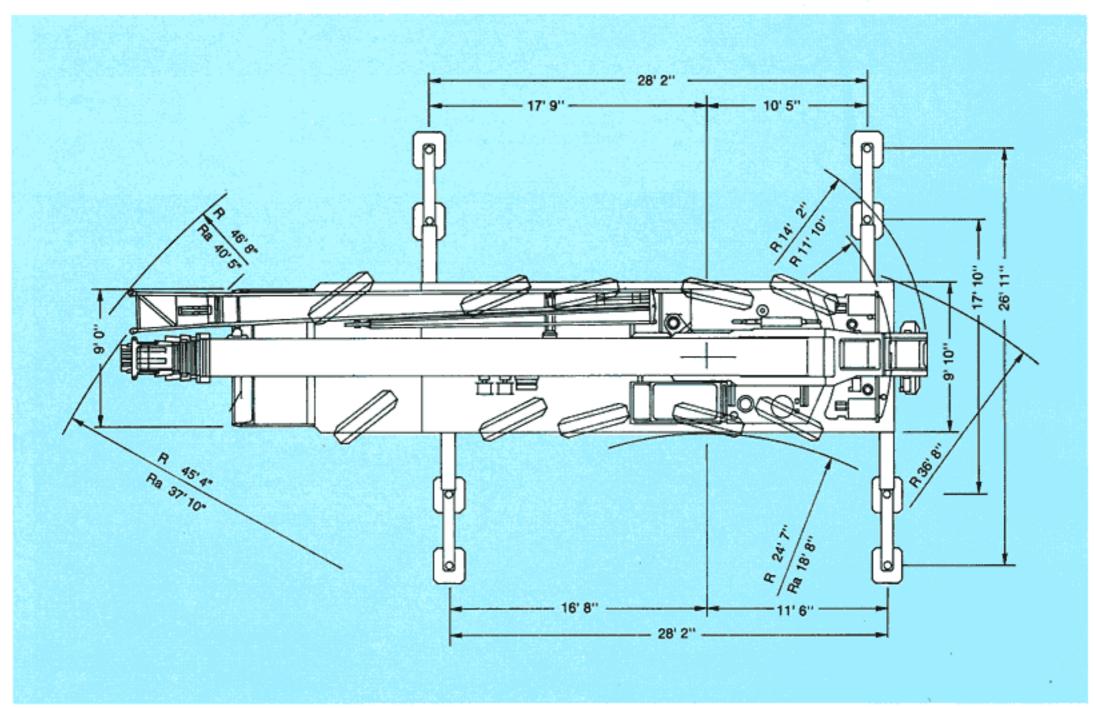
## 120 ton Capacity All-Terrain-Crane



# KNK 5120

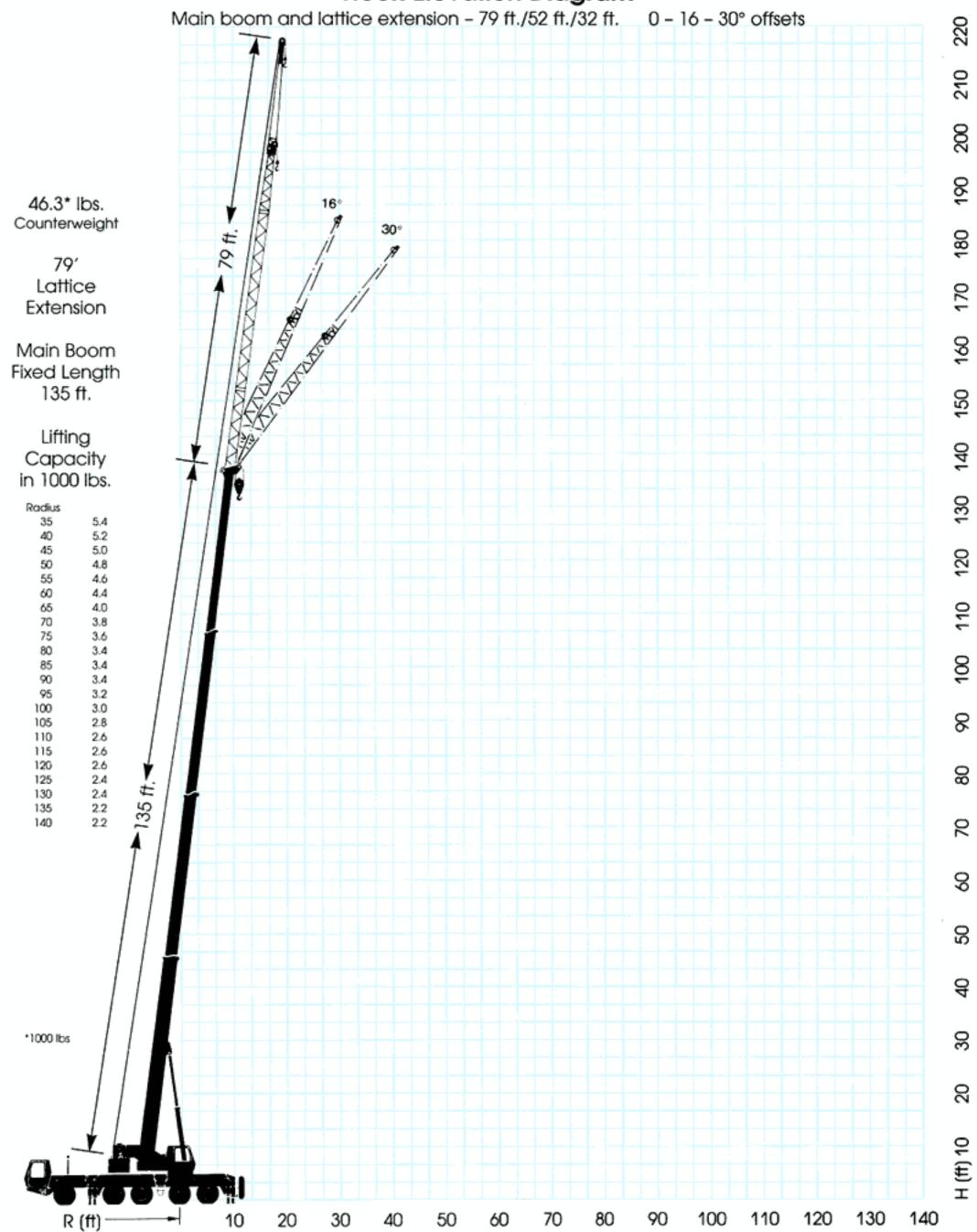
## **Dimensions**





## **®** KRUPP

#### KRUPP KMK 5120 Hook Elevation Diagram



## Main Boom + swing-away extension

Lifting Capacities in 1000 lbs





Counterweight 46,3\* lbs

				Main boom	length 135 ft			Rodius
Radius		Lattic	ce extension length	33 ff	Laiti	ce extension length	53 M	Kodius
n		0*	16*	30*	0+	16*	30*	n
30		18.2			9.8			30
35		18.2	14.6		9.8			35
40		18.2	14.6	11.0	9.8	7.2		40
45		18.2	14.6	11.0	9.8	7.2		45
50		18.2	14.0	11.0	9.8	7.2	6.0	50
55		17.6	13.4	10.8	9.8	7.2	6.0	55
60		17.0	12.8	10.6	9.6	7.2	6.0	60
65		16.2	12.2	10.2	9.2	7.2	6.0	65
70		15.6	11.6	9.8	9.0	7.2	6.0	70
75		14.8	11.2	9.6	8.6	7.2	6.0	75
80		14.2	10.8	9.2	8.4	7.0	6.0	80
85		13.4	10.2	9.0	8.0	6.8	6.0	85
90		12.8	9.8	8.8	7.8	6.8	6.0	90
95		12.2	9.4	8.4	7.6	6.6	6.0	95
100		11.6	9.0	8.2	7.4	6.6	6.0	100
105		11.0	8.8	8.0	7.2	6.4	6.0	105
110		10.4	8.4	7.8	7.0	6.4	6.0	110
115		9.4	8.0	7.6	6.8	6.2	5.8	115
120		8.2	7.8	7.4	6.6	6.2	5.8	120
125		7.4	7.6	7.2	6.4	6.0	5.6	125
130		6.4	6.8	7.0	6.2	6.0	5.6	130
135		5.6	6.0	6.2	6.2	5.8	5.6	135
140		5.0	5.2	5.2	6.0	5.6	5.4	140
145		4.4	4.4	4.6	5.4	5.6	5.4	145
150		3.6	3.8	3.8	4,8	5.2	5.2	150
160					3.6	4.0	4.0	160
	TI	1	1	1	1	1	1	TI 6 [T1 72 [TA]
1111111111	T2	1	1	1	1	1	1	12
%	T3	1	1	1	1	1	1	13 %
/0	T4	0	0	0	0	0	0	T4 /0

Counterweight 27,8\* lbs

Radius		Latti	Main boom length 135 ft  Lattice extension length 33 ft  Lattice extension length 53 ft								
n		0-	16*	30°	0*	16*	30⁺	ft			
30		18.2			9.8			30			
35		18.2	14.6		9.8			35			
40		18.2	14.6	11.0	9.8	7.2		40			
50		18.2	14.0	11.0	9.8	7.2	6.0	50			
60		17.0	12.8	10.6	9.6	7.2	6.0	60			
70		15.6	11.6	9.8	9.0	7.2	6.0	70			
80		14.2	10.8	9.2	8.4	7.0	6.0	80			
85		13.2	10.2	9.0	8.0	6.8	6.0	85			
90		11.4	9.8	8.8	7.8	6.8	6.0	90			
95		10.0	9.4	8.4	7.6	6.6	6.0	95			
100		8.8	9.0	8.2	7.4	6.6	6.0	100			
105		7.6	8.2	8.0	7.2	6.4	6.0	105			
110		6.4	7.0	7.4	7.0	6.4	6.0	110			
115		5.6	6.0	6.4	6.6	6.2	5.8	115			
120		4.6	5.2	5.4	5.8	6.2	5.8	120			
125		4.0	4.4	4.6	5.0	5.8	5.6	125			
130		3.2	3.6	3.8	4.4	5.0	5.4	130			
135		2.6	2.8	3.0	3.6	4.2	4.6	135			
140		2.0	2.2	2.2	3.0	3.6	4.0	140			
145					2.4	3.0	3.2	145			
150					2.0	2,4	2.6	150			
155						1.8	2.0	155			
	11	1	1	1	1	1	1	11 6 11 72 73 74			
11/12/12/14	12	1	1	1	1	1	1	12			
%	T3	1	1	1.	1	1	1	13 %			
/0	14	0	0	0	0	0	0	T4 /0			

## **Main boom**

#### Lifting capacities in 1000 lbs

42 - 135 ft	r <del> /</del> 1	0	360°					Count	erweight	9.3*	lbs
Radius ff	42 ff	57 ft	73 ft	73 ft	73 ft	104 ft	104 ft	135 ff		Radius ft	
10	218.0	147.0	87.0							10	
15	150.0	147.0	87.0	116.0	68.0					15	
20	108.0	106.0	87.0	101.0	68.0	63.0	38.8			20	
25	84.0	82.0	83.0	81.0	67.0	60.0	38.8	34.0		25	
30	67.0	65.0	66.0	63.0	59.0	52.0	35.6	34.0		30	
35		47.0	48.0	45.0	51.0	45.0	31.2	33.2		35	
40		35.4	36.6	33.8	39.4	35.8	27.8	30.2		40	
45		27.4	28.6	25.8	31.4	28.0	25.2	27.6		45	
50			22.6	20.0	25.4	22.0	23.2	25.0		50	
55			18.2	15.6	20.8	17.6	22.0	20.6		55	
60			14.6	12.2	17.2	14.0	20.4	16.8		60	
65						11.2	17.4	14.0		65	
70						8.8	14.8	11.6		70	
75						6.6	12.8	9.4		75	
80						5.0	11.0	7.6		80	
85						3.4	9.4	6.2		85	
90						2.2	8.0	4.8		90	
95								3.6		95	
100								2.6		100	
105										105	
110										110	
115										115	
120										120	
T1 T2 T3 T	1 0	0.5	0.5	1	0	1	0	1	TI 🔍		<b>[]</b>
0/-	2 0	0	0.5	0	1	1	1	1	T2	0/	
%	3 0	0	0	0	0	0	1	1	13	%	

\*1000 lbs

									Cou	nterweight	0*	lbs
Radius ft		42 ft	57 ff	73 ff	73 ft	73 ff	104 ff	104 ff	135 ff	Radi	us	
10		218.0	147.0	87.0						10	)	
15		144.0	142.0	87.0	116.0	68.0			100	15		
20		104.0	101.0	87.0	86.0	68.0	63.0	38.8		20		
25		80.0	69.0	63.0	59.0	67.0	51.0	38.8	34.0	25		
30		57.0	49.0	46.0	42.4	50.0	38.2	35.6	34.0	30		
35			37.6	35.4	32.0	39.0	29.6	31.2	29.2	35		
40			28.4	27.8	24.4	31.2	22.8	27.8	23.4	40		
45			21.6	21.8	18.4	25.4	17.6	25.2	18.6	45		
50				17.2	13.8	20.4	13.6	21.6	15.0	50		
55				13.2	10.4	16.0	10.4	18.0	12.0	55		
60				9.8	7.2	12.6	7.8	15.2	9.6	60		
65							5.6	13.0	7.6	65		
70							3.8	11.0	5.8	70		
75							2.4	9.2	4.4	75		
80								7.6	3.2	80		
85								6.2	2.0	85		
90								5.0		90		
95										95		
100										100	)	
105										105	;	
110										110		
115										11:	5	
120										120		
TI TE TE	TI	0	0.5	0.5	1	0 -	1	0	1	TI Q T	j 72 j 72	
0/	T2	0	0	0.5	0	1 -	1	1	1	12		
%	T3	0	0	0	0	0	0	1	1	тз (	%	

\*1000 lbs



#### **Main boom**

#### Lifting capacities in 1000 lbs

42 - 135 ft	1	<del>-1</del> 1		60°					Count	erweight 46.3* lb
Radius ft		42 ff	57 ff	73 <b>n</b>	73 ft	73 ff	104 ft	104 ff	135 ft	Radius ft
10*		240.0								10*
10		218.0	147.0	87.0						10
15		168.0	147.0	87.0	116.0	68.0				15
20		125.0	123.0	87.0	101.0	68.0	63.0	38.8		20
25		97.0	96.0	87.0	87.0	67.0	60.0	38.8	34.0	25
30		79.0	77.0	76.0	76.0	59.0	52.0	35.6	34.0	30
35			64.0	65.0	63.0	53.0	47.0	31.2	33.2	35
40			54.0	55.0	53.0	48.0	41.8	27.8	30.2	40
45			46.0	47.0	45.0	44.0	38.0	25.2	27.6	45
50				41.0	39.0	40.6	34.8	23.2	25.4	50
55				36.0	33.8	37.6	32.2	22.0	23.6	55
60				31.0	28.6	33.4	29.6	21.0	21.8	60
65							26.0	20.4	20.4	65 .
70							22.4	20.0	19.2	70
75							19.4	19.6	18.0	75
80							16.8	19.2	17.0	80
85							14.6	18.8	16.2	85
90							12.6	18.0	15.0	90
95									13.2	95
100									11.8	100
105									10.4	105
110									9.2	110
115									8.0	115
120									7.0	120
O TI TE TE	TI	0	0.5	0.5	1	0	1	0	1	TI @ T1 T2 T3
0/-	T2	0	0	0.5	0	1	1	1	1	T2 %
%	T3	0	0	0	0	0	0	1	1	13 70

\*over rear only

27.8\* Counterweight lbs Radius Radius 73 ff 73 ft 73 ff 104 ft 104 ff 135 ff 42 ft 57 ft ft 10. 10\* 10 147.0 87.0 218.0 10 15 116.0 68.0 15 161.0 147.0 87.0 38.8 20 20 116.0 114.0 87.0 101.0 68.0 63.0 87.0 67.0 60.0 38.8 34.0 25 25 90.0 89.0 87.0 34.0 30 72.0 70.0 59.0 52.0 35.6 30 73.0 71.0 35 31.2 33.2 35 59.0 60.0 58.0 53.0 47.0 30.2 40 48.0 48.0 27.8 40 49.0 50.0 41.8 45 27.6 45 39.4 40.4 37.8 43.0 38.0 25.2 50 50 33.0 30.4 35.6 32.6 23.2 25.4 22.0 23.6 55 30.0 26.8 55 24.8 27.4 60 21.0 21.8 22.2 60 22.8 20.4 25.4 65 18.6 20.4 20.4 65 70 20.0 18.4 70 15.6 75 13.2 19.0 15.8 75 80 11.0 16.8 13.6 80 85 9.2 14.8 11.6 85 10.0 90 95 8.6 7.4 6.2 95 100 100 105 105 110 5.2 110 4.2 115 115 3.4 120 120 T1 T2 T3 TI TE TE TI 0.5 0.5 0 11 T2 12 0 0 0 0.5 % % Т3 Т3 0 0 0

\*1000 lbs

\*1000 lbs



## Main Boom + swing-away extension

Lifting Capacities in 1000 lbs



33/53 ft





Counterweight

2.3\*

33/33 11			300				Countries	weigili	,,,	1103
				Main boom	length 135 ft					
Radius									Radius	
		Latt	ice extension length	33 ft	Lott	ice extension length	53 ff			
n		0.	16*	30°	0*	16*	30*		n	
25		18.2							25	
30		18.2	144		9.8				30	
35		18.2	14.6	11.0	9.8	7.0			35 40	
40		18.2	14.6		9.8 9.8	7.2 7.2				
45		18.2	14.6	11.0			40		45	
50		18.2	14.0	11.0	9.8	7.2 7.2	6.0 6.0		50	
55		17.6	13.4	10.8	9.8				55	
- 60		17.0	12.8	10.6	9.6	7.2	6.0		60	
65		15.8	12.2	10.2	9.2	7.2	6.0		65	
70		13.2	11.6	9.8	9.0	7.2	6.0		70	
75		11.2	11.2	9.6	8.6	7.2	6.0		75	
80		9.4	10.4	9.2	8.4	7.0	6.0		80	
85		7.8	8.8	9.0	8.0	6.8	6.0		85	
90		6.4	7.2	7.8	7.6	6.8	6.0		90	
95		5,2	6.0	6.4	6.4	6.6	6.0		95	
100		4.2	4.8	5.2	5.2	6.6	6.0		100	
105		3.2	3.8	4.2	4.4	5.4	6.0		105	
110		2.4	2.8	3.2	3.4	4.6	5.2		110	
115			2.0	2.4	2.6	3.6	4.4		115	
120					2.0	2.8	3.4		120	
125						2.2	2.8		125	
130							2.0		130	
	TI	1	1	1	1	1	- 1	TI		
6 Y1 Y2 Y3 Y4	T2	1	1	1	1	1	1	12	71 72 7	TITE
%	T3	1	1	1	1	1	1.1	T3	%	
/0	T4	0 -	0	0	0	0	0	T4	70	

\*1000 lbs

#### 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.

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.



## Weights/Working speeds



Axle	1	2	3	4	5	Total weight
1000 lbs	23,5	23,5	23,5	20,0	20,0	110,5



Lifting capacity tons	Sheaves	Parts of line	Weight lbs
100	7	4 – 13	2200
50	3	1 - 7	1200
20	1	1- 3	780



Gear	1	2	3	4	5	R	Gradeability max.
On-Road (mph)	8,0	13,0	21,0	31,0	43,0	9,0	
Off-Road (mph)	4,6	7,3	11,4	16,8	23,1	4,9	52 %
Tyres	11 20 70 11						



Drives	infinitely variable	Rope diameter/Rope length	Max. single line pull
Main hoist	0 – 390 ft/min single line	19 mm (3/4") 780 ft	15000 lbs
Auxiliary hoist	0 - 390 ft/min single line	19 mm (3/4") 590 ft	15000 lbs
Swing	0 - 1,8 min-1		Ç.
Boom lift	approx. 65 seconds to reach – 3° to +84°		
Telescoping	approx. 200 seconds for boom length from 42 - 135 ft		\$ ·



Telescopic boom



Hook blocks and hook



On outriggers



Crane movement



Working range



Speed



Axle load



Swing-away lattice



#### Carrier

Chassis: Special KRUPP 5-axle carrier, all-welded torsion-resistant box-type construction made of close grain steel.

Outriggers: 4 - 2 stage hydraulically telescoping beams with vertical cylinders and outrigger pads.

Independent horizontal and vertical movement control on each side of the chassis.

Mercedes Benz OM 442 LA, Diesel, 8 cylinders, water-cooled, with turbocharger and supercharger intercooler,

370 kW (503 HP) at 2100 min -1. (EG 80/1269 fan loose).

Max. torque: 2020 Nm at 1100 - 1600 min-1.

Tank capacity: 100 gal.

**Transmission:** Allison automatic CLBT 755.

Engine:

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 lockable hydropneumatic suspension and hydraulic axle lock-out. Suspension level control.

Range:  $+6\frac{1}{2}$ "/ $-5\frac{1}{2}$ ".

Tires: 10 tires 14.00 R 25.

Steering: Dual-circuit, stand-by steering pump.

Brakes: Service brake: pneumatic dual-circuit, acting on all wheels, air dryer.

Permanent brake: hydraulic retarder, integrated within Allison automatic powershift.

Hand brake: pneumatically operated spring-loaded brake acting on 2nd, 3rd. 4th and 5th axle line.

\*\*Driver's cab: Aluminum, 2-man-design, safety glass, driver's seat with hydraulic suspension, engine 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 24 V.

#### Superstructure

Frame: Torsion-resistant welded construction in high strength steel.

Engine: Mercedes-Benz OM 366 A, Diesel, 6 cylinders, water-cooled, 104 kW (141 HP) at 1800 min -1.

(EG 80/1269 fan rigid). Max. torque: 566 Nm at 1500 - 1600 min-1.

Tank capacity: 50 gal.

Hydraulic system: 3 separate circuits.

Tank capacity: 330 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 planetary gear with multiple-disk brake and axial piston motor.

**Derricking** 1 cylinder. Boom angle from  $-1,5^{\circ}$  to  $+85^{\circ}$ .

**Slewing:** Vane motor, planetary gear, service brake and holding brake.

Cab: Aluminium, full vision, safety glass, adjustable operator's seat with hydraulic suspension, motor-dependent

hot-water heater. Armrest-integrated crane controls. Ergonomically arranged instrumentation and crane operating.

Safety installations: Hoist and lowering limit switch, pipe beak 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 extension.

Electrical system: Three-phase generator 28 V/55 A, 2 batteries 12 V/143 Ah.

#### Additional equipment

Drive: 10 x 8

 Steer:
 All-wheel steer. 10 x 10

 Tires:
 16.00 R 25/20,5 R 25

**Swing-away lattice:** 2-stage, stowing alongside boom, 33 – 52 ft + 26 ft insert.

Aux. hoist: 2nd hoisting gear.

**Driver's cab/cab:** Engine-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.

Subject to technical modification



## **& KRUPP CRANES** NORTH AMERICA, inc.

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