



SANY

Quality Changes the World



SANY ALL-TERRAIN CRANE SAC 2200

ULTRA-LONG BOOM. STRONG LIFTING CAPACITY



P1

Product features
Chassis

P2

Product features
Superstructure

P3

Technical parameters



SPECIFICATION/CHASSIS

Frame

Antitorque box-structure frame welded with fine-grain high-strength steel plate

Suspension

All axle suspending devices are hydro-pneumatic suspensions with adjustable height.

Outrigger

4-point support welded with fine-grain high-strength steel plate, Grade I and II outriggers capable of full-hydraulic level extension, vertical cylinder of outrigger capable of automatic level adjustment and electronic display, and vertical and horizontal spans 9.045X8.5m.

Engine

8-cylinder water-cooled diesel engine OM502LA, with a fuel tank of 500L, Rated power: 390kW/1800rpm, max. torque: 2400Nm/1100rpm.

Wheel and tire

There are ten wheels, 16.00R25 445/95R25, optional 14.00R25 385/95R25.

Steering

10×10, Axles 1 and 2 use hydraulic-assisted steering system with rod system feedback; Axles 3, 4 and 5 uses electro-hydraulic controlled steering, supporting auxiliary steering for speed control and special steering mode (optional). ZF servo power steering gear and dual-loop hydraulic steering mechanism with emergency steering pump, conforming to the standard of 70/311 (EWG)

Brake

Dual-loop brake system, engine brake and exhaust brake equipped to engine, hydraulic retarder embedded in transmission, air servo brake in all wheels

Transmission system

ZF 12-gear transmission with automatic AS-TRONIC shift system, 12 gears forward and 2 gears backward; the transmission is directly connected to the retarder, with a two-grade transfer case.

Axle

Axes 1, 2, 4, and 5 are driven axles, with inter-wheel differential 1, 2, 3, 4, and 5 all-wheel steering;

Driver's cab

In ergonomic design and original and unique model, it is highly comfortable and provides clear and simple instrument board, convenient touch function panel, Adjustable seat with comfortable backrest and air-suspended damper, three-point safety belt, steering wheel with height and angle adjustable, safety glass and electric windows and doors used across the crane, windscreen equipped with defrosting fan, air conditioner and engine hot-water circulation heating system, with heatable electric-control driving mirror, CD radio and reverse motor display .

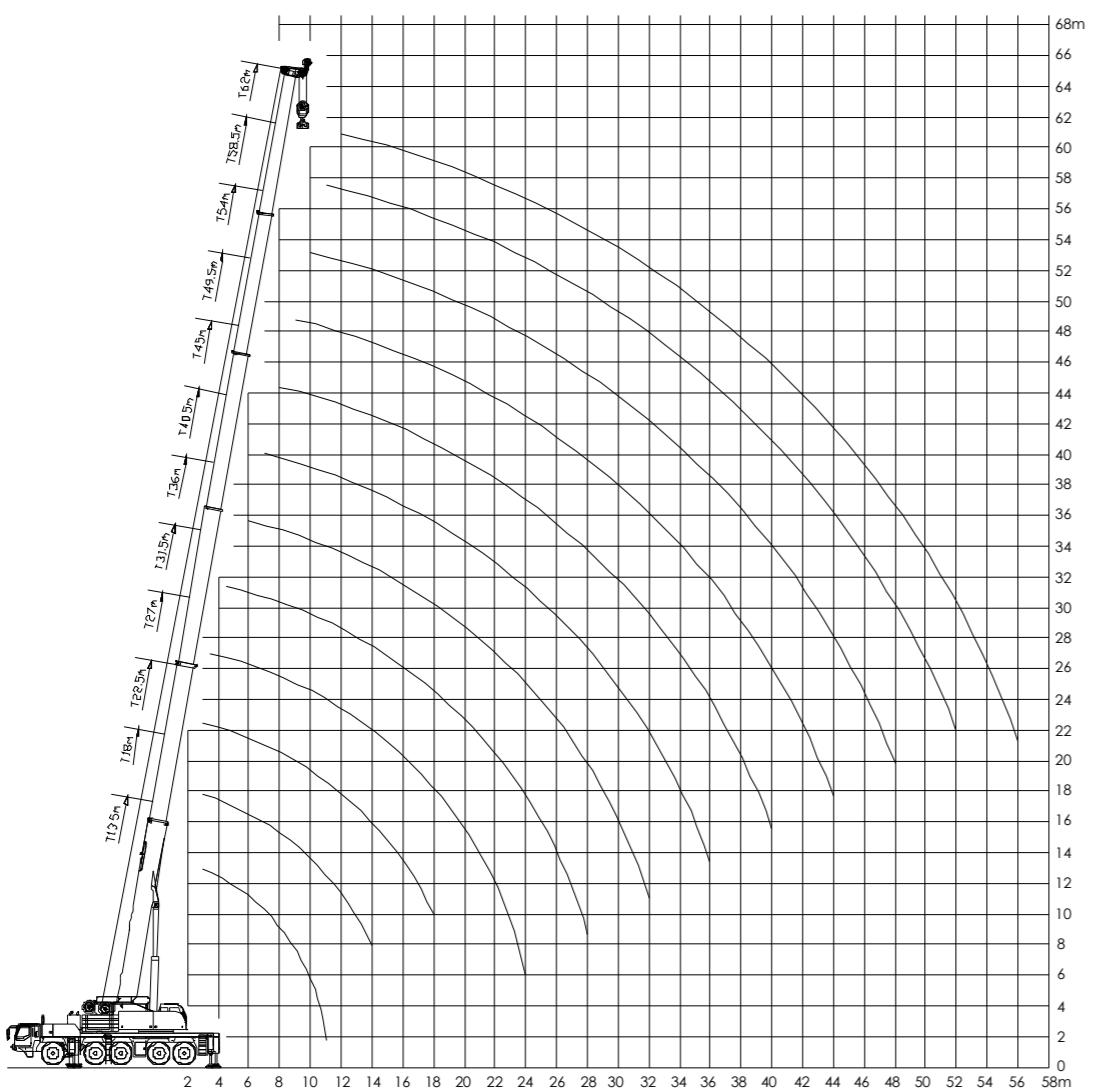
SPECIFICATION SUPERSTRUCTURE

Operator's room	Frame-type steel structure body, sliding door design, large area inlaid type safety glass, super-large inner space, extra wide manipulation field of vision. 10.4-inch large screen TFT display. Adjustable steering wheel. Adjustable high-back seat, left and right armrests, integrated operating handle, heating and cooling air conditioner. Front top window equipped with windscreen wiper.
Hydraulic system	Tandem constant delivery pump, tandem piston variable displacement pump, system flow rate 443lpm. Load feedback, constant power control. Standard full-flow high-pressure hydraulic oil filter. Volume of hydraulic oil tank 680L, external oil level gauge, and standard hydraulic oil cooler
Hoist	Mutually independent main and auxiliary lifting mechanisms, planet gear deceleration mode of two-point variable displacement piston hydraulic motor drive. High- and low-speed self adaptive control of winch. The reel had the dual-polyline cast rope groove. Spring brake, multi-disk brake of hydraulic release. Anti-rotation high strength wire rope, with the diameter of 19mm
Slewing device	hydraulic motor drive planet gear reducer. Multi-disk slewing brake, pedal brake in control chamber
Luffing device	double-acting hydraulic luffing cylinder. Luffing range: -2° – +78°
Boom	five booms, high strength steel plates, hexagon section. Stretching range: 11.5m–42.5m, maximum lifting height: 43.8m
Safety device	boom extension balance valve, lifting balance valve, luffing cylinder balance valve, vertical cylinder bidirectional hydraulic lock; slewing mechanism cushion valve, turntable device; lifting height limiter; 3-circle protection device; independently developed load moment limiter, touch screen graphic display. Real-time display of operating radius, boom elevation angle, boom length, rated load, actual load, and moment percentage. Function of automatic alarm

TECHNICAL PARAMETER

Type	Item	Unit	Parameter	Type	Item	Unit	Parameter
Dimensional parameters	Overall length	mm	15530	Weight parameters	Overall weight (traveling)	kg	60000
	Overall width	mm	2995		Front axle load (front axles 1, 2)	kg	12000
	Overall height	mm	4000		Rear axle load (rear axles 3, 4, 5)	kg	12000
	Axle distance	mm	2750/1650/2490/1650		Model of engine		OM502LA
Traveling parameters	Wheel distance	mm	2552	Power parameters	Rated engine power	kw/rpm	390/1800
	Maximum traveling speed	km/h	81		Rated engine torque	N.m/rpm	2400/1100
	Minimum turning radius	m	<10		Emission reference standard		Euro IIIA
	Minimum ground clearance	mm	325		Max. rated lifting capacity	t	220
Operating speed parameters	Approach angle	°	20	Main Performance parameter	Minimum rated range	m	3
	Departure angle	°	17		Maximum lifting moment	kN.m	6900
	Brake distance (30km/h)	m	<10		Fully extended boom	kN.m	3540
	Maximum gradeability	%	58		Outrigger span (longitudinal and transverse)	m	9.0 × 8.5
Lifting height	Oil consumption/100km	L	72		Base boom	m	14
	Maximum single-rope lifting speed of main winch (no load)	m/min	130		Fully extended boom	m	62.5
	Maximum single-rope lifting speed of auxiliary winch (no load)	m/min	130		Longest boom + jib	m	103.5
	Full extension/retraction time of boom	s	550/550		Base boom	m	13.5
Length of jib	lifting/dropping time of boom	s	60/90		Fully extended boom	m	62
	Maximum slewing speed	r/min	1.8		Longest boom + jib	m	105
	Full extension/retraction time of horizontal outrigger	s	50/40		jib offset	°	0 ~ 40
	Full extension/retraction time of supporting cylinder	s	50/40				

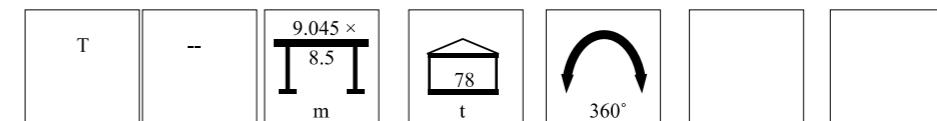
SAC2200 WORKING RANGES



LOAD CHART FOR MAIN BOOM

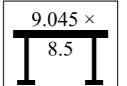
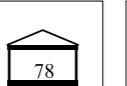
	13.5 220 *	18	18	18	18	22.5	22.5	22.5	22.5	27	
m > t	3	180	151	124.5	112.2	94.1	141	123.5	103.6	96.9	
%	3.5	165	145	124.5	107.8	90.3	133	123.5	103.6	95	112.7
	4	150	135	120.7	107.8	85.5	127.4	119.7	103.6	90.3	106.8
	4.5	140	129	115.9	104.5	80.8	114	112	103.6	86.5	100
	5	128	121	108.3	104.5	77	108.8	106.4	103.6	82.7	94.1
	6	118	109	99	96	72.5	100	97	95	76	84.3
	7	106	95	88.2	85.5	66.6	88.7	86.2	84.6	71.3	78.5
	8	88	85	79.4	77	61.7	82	78.4	77	66.5	71.4
	9	78	76	74.5	71.5	57.8	74	71.5	69.4	61.8	65.3
	10	69	69	67.3	64.7	53.9	66.3	64.7	63.7	56.1	59.2
	11	45	61.7	62.7	59.8	51	61.7	61.2	58	52.3	55.1
	12		56.4	56.4	56.1	48.5	55.4	55.1	52.3	49.4	51
	14		46	46.5	47	44.1	46	47	43.7	43.2	44.9
	16						38.1	39.2	36.6	37.5	37.6
	18						31.9	33.4	32.3	31.8	31.4
	20									26.6	
	22									23	
	24									11.9	
	26										
	28										
	30										
n	18	16	14	12	10	14	14	12	10	12	
2	0	0	0	0	0	46	0	0	0	92	
3	0	46	0	0	0	46	46	0	0	46	
4	0	0	46	0	0	0	46	46	0	0	
5	0	0	0	46	0	0	0	46	46	0	
6	0	0	0	0	46	0	0	0	46	0	
	9	9	9	9	9	9	9	9	9	9	
m/s											

Notes:with added devices, over rear



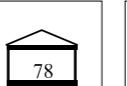
LOAD CHART FOR MAIN BOOM

	T	--							
									
		m > < t							
	27	27	27	27	31.5	31.5	31.5	31.5	36
3									
3.5	118	101	67.6	66.6					
4	116	96	63.7	62.7					
4.5	113	91.2	59.8	58.8	89.2	89.4	97.9	61.8	50
5	110	85.2	56.8	55.9	85.3	85.5	93	58	47
6	99	74.2	51	51	77.4	77.5	90.3	52.3	43.1
7	86	63	46.1	46.1	69.6	69.7	83	47.5	39.2
8	79	59.4	42.6	42.1	63.7	63.8	73.2	43.7	36.3
9	73	55.8	39.2	39.2	57.8	58.2	66.5	40.4	33.3
10	63.7	52.1	36.3	36.3	53.9	54.1	60.8	37.5	30.9
11	60.2	47.5	33.8	33.8	50	51.2	56.1	35.2	28.9
12	54.1	45.1	31.4	31.9	47.4	47.4	52.9	32.3	26.9
14	46.5	40.4	27.9	28.1	41.8	42.1	44.1	29	23.9
16	38.7	35.5	24.8	25.1	36.2	36.4	38.3	25.7	21.4
18	32.4	30.2	22.5	22.9	31.9	32.2	32.6	23.1	19.3
20	27.9	28.2	20.6	21	27.3	27.7	28.5	21	17.5
22	24.1	23.6	18.9	19.3	23.5	24	24.9	19.2	16.2
24	13.1	17.4	15.9	16.4	20.4	20.8	21.8	17.7	14.9
26					17.9	18.3	19.2	16.4	13.8
28					12.4	12.8	13.8	14.6	13.1
30									14
32									10.9
n	12	10	7	7	9	9	10	7	5
2	46	0	0	0	92	46	46	0	0
3	46	92	0	0	46	92	46	0	0
4	46	46	0	0	46	46	46	92	0
5	0	0	92	46	0	0	46	46	92
%	6	0	0	46	92	0	0	46	92
	m/s	9	9	9	9	9	9	9	9

T	--	 9.045 x 8.5 m	 78 t	 360°		
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LOAD CHART FOR MAIN BOOM

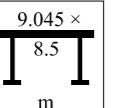
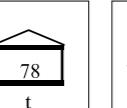
	T	-							
									
		m > < t							
	36	36	36	36	36	40.5	40.5	40.5	40.5
6									
7	69.6	76	57.8	53.9	43.1				
8	64.7	71	52.9	51	39.7	56.8	54.1	51	42.1
9	59.8	67	49	47	36.8	53.9	51	46.1	45.1
10	54.9	60	45.6	44.1	34.8	51	46.1	45.1	36.8
11	51	55	42.1	40.4	32.3	47.5	43.1	42.6	34.3
12	47	51	39.2	38	30.4	44.6	40.7	39.4	31.4
14	44.1	47	36.8	36.1	28.7	41.2	38.2	38.2	30.4
16	37.7	42.5	32.3	32.3	25.6	36.8	34.3	34.2	26.8
18	33.8	36.6	28.9	29.5	22.5	32.3	31.6	30.9	24.6
20	31.1	32.5	25.8	27.1	20.4	29.1	28	29	22.6
22	27.3	30.5	23.5	25.2	18.8	26.1	26.5	26.7	20
24	23.7	28	22.2	24.5	17.3	23.5	23.5	24	18.8
26	21.1	24.5	20.5	23.5	16.1	21.4	21.9	21.9	17.6
28	18.5	20.1	18.9	21.5	14.8	19	19.5	19.5	16.3
30	16.4	17.9	17.5	19.6	13.9	17.2	17.8	18.2	14.9
32	14.5	16	15.9	17	13	15.4	15.9	16.3	13.9
34	11.5	12.9	13.2	14.2	12.4	13.8	14.3	15	13.1
36									13.7
n	7	8	6	6	5	6	6	6	4
2	92	46	0	0	0	92	46	46	0
3	46	46	92	46	0	46	92	46	46
4	46	46	46	46	46	46	46	46	46
5	46	46	46	46	92	46	46	46	92
6	0	46	46	92	92	46	46	92	46
	m/s	9	9	9	9	9	9	9	9

T	--	 9.045 x 8.5 m	 78 t	 360°		
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LOAD CHART FOR MAIN BOOM

T	-
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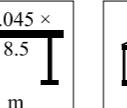
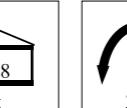
		m > t									
		40.5	45	45	45	45	45	49.5	49.5	49.5	49.5
6		36.3									
7		33.8	47.4	44.6	37.7	36.8	33.3				
8		30.9	43.6	41.7	35.8	35.7	31.9	36.2	34.7	31.4	31.1
9		29	41.2	38.9	33.8	32.3	29.9	34.5	33.2	29.9	29.6
10		27.2	39.2	36.7	32.3	30.9	28.3	32.5	31.6	28.4	27
11		25.5	36.8	34.5	30.9	29.1	27	31.2	30.1	27.1	25.8
12		22.9	32.8	30.8	27.9	25.9	24.2	28.8	27.3	24.8	23.5
14		20.4	29.9	27.8	25.8	23.5	21.5	25.8	24.8	22.6	21.3
16		18.5	27	25.3	23.7	22	19.5	23.8	22.8	21	19.6
18		16.8	24.6	23.1	22.1	20.1	18	21.9	20.9	19.3	17.9
20		15.5	22.2	21.3	20.5	18.4	16.5	20	19.4	17.9	16.5
22		14.3	20.3	19.7	19.2	16.8	15.3	18.1	18	16.8	15.3
24		13.1	18.1	18	17.6	15.6	14.3	16.6	16.5	15.6	14
26		12.3	16.7	16.7	17	14.4	13.3	15.5	15.5	14.3	13.1
28		11.3	14.9	15	15.5	13.5	12.5	14.4	14.5	13.8	12.8
30		11	13.7	14	14.5	12.5	11.8	13.4	13.6	12.9	11.8
32		10.3	12.2	13.2	13.1	11.6	11	12.6	12.8	12	11.1
34		9.5	11.1	12.1	12.4	10.9	10.5	11.5	11.7	11.3	10.4
36											
38											
40											
n		4	5	5	4	4	4	4	4	3	
2		0	92	46	46	0	0	92	46	46	0
3		0	92	92	46	92	46	92	92	46	92
4		92	46	92	46	92	92	92	92	92	92
5		92	46	46	92	92	92	46	92	92	92
6		92	46	46	92	46	92	46	46	92	92
m/s		9	9	9	9	9	9	9	9	9	9

T	-					
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LOAD CHART FOR MAIN BOOM

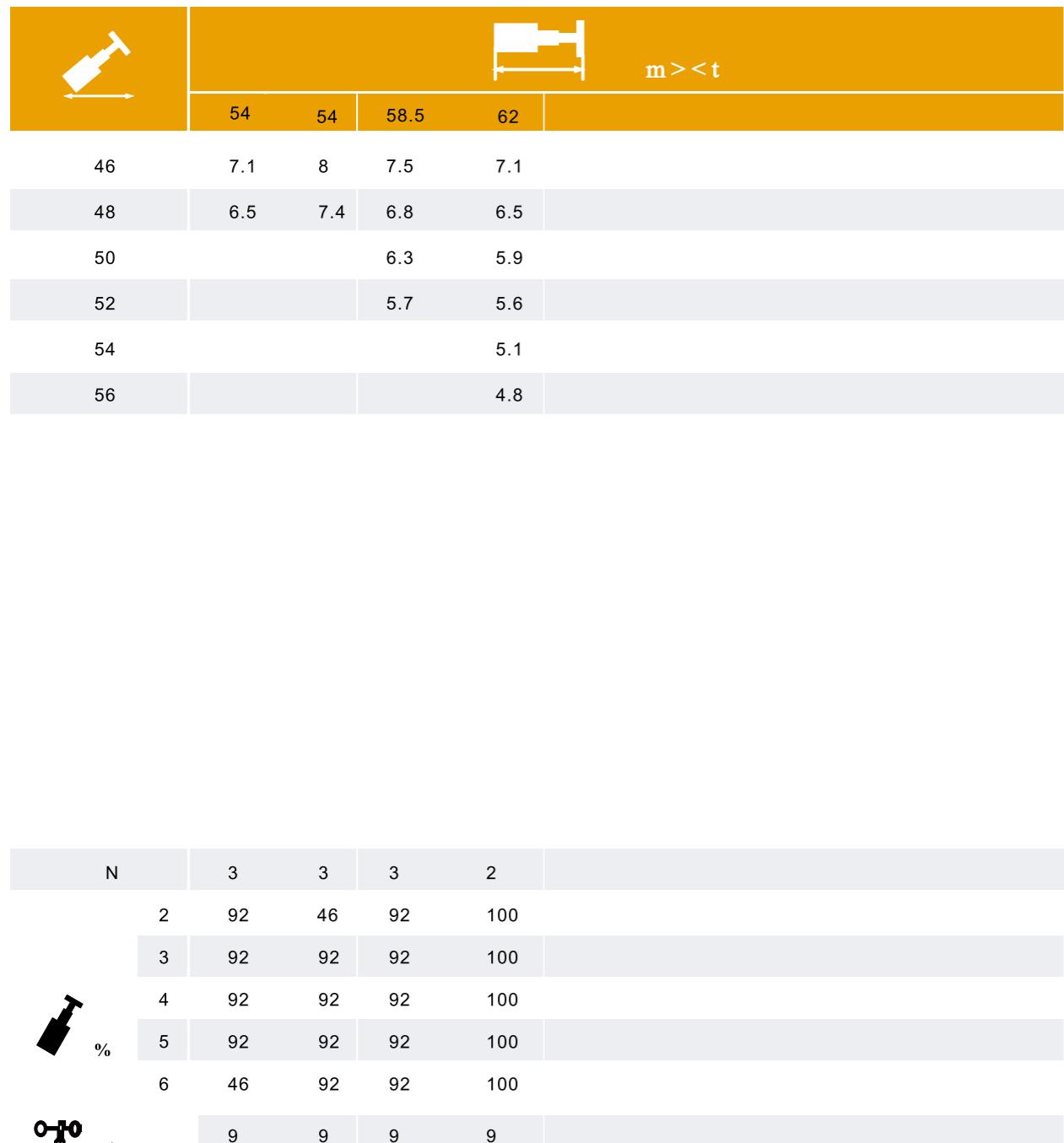
T	-
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		m > t			
		54	54	58.5	62
10		30.9	28.3		
11		30.1	27.2	25.7	
12		29.1	26.2	25.2	20.9
14		26.3	24.2	23.2	20.1
16		24.4	22.3	21.6	18.9
18		22.5	20.5	20.2	17.9
20		21	18.4	18.9	16.3
22		18.8	17.1	17.7	15.3
24		17.5	15.9	16.6	14.5
26		16.5	15.4	15.5	13.6
28		15.4	14.4	14.1	12.3
30		14.4	13.5	13.2	11.6
32		13.3	12.6	12.4	11
34		12.1	11.8	11.9	10.3
36		11.3	11.2	11.2	9.8
38		10.2	10.6	10.2	9.3
40		9.5	10	9.6	8.8
42		8.6	9.4	8.8	8.3
44		7.8	8.8	8	7.7
n		3	3	3	2
2		92	46	92	100
3		92	92	92	100
%		4	92	92	100
5		92	92	92	100
6		46	92	92	100
m/s		9	9	9	

T	-					
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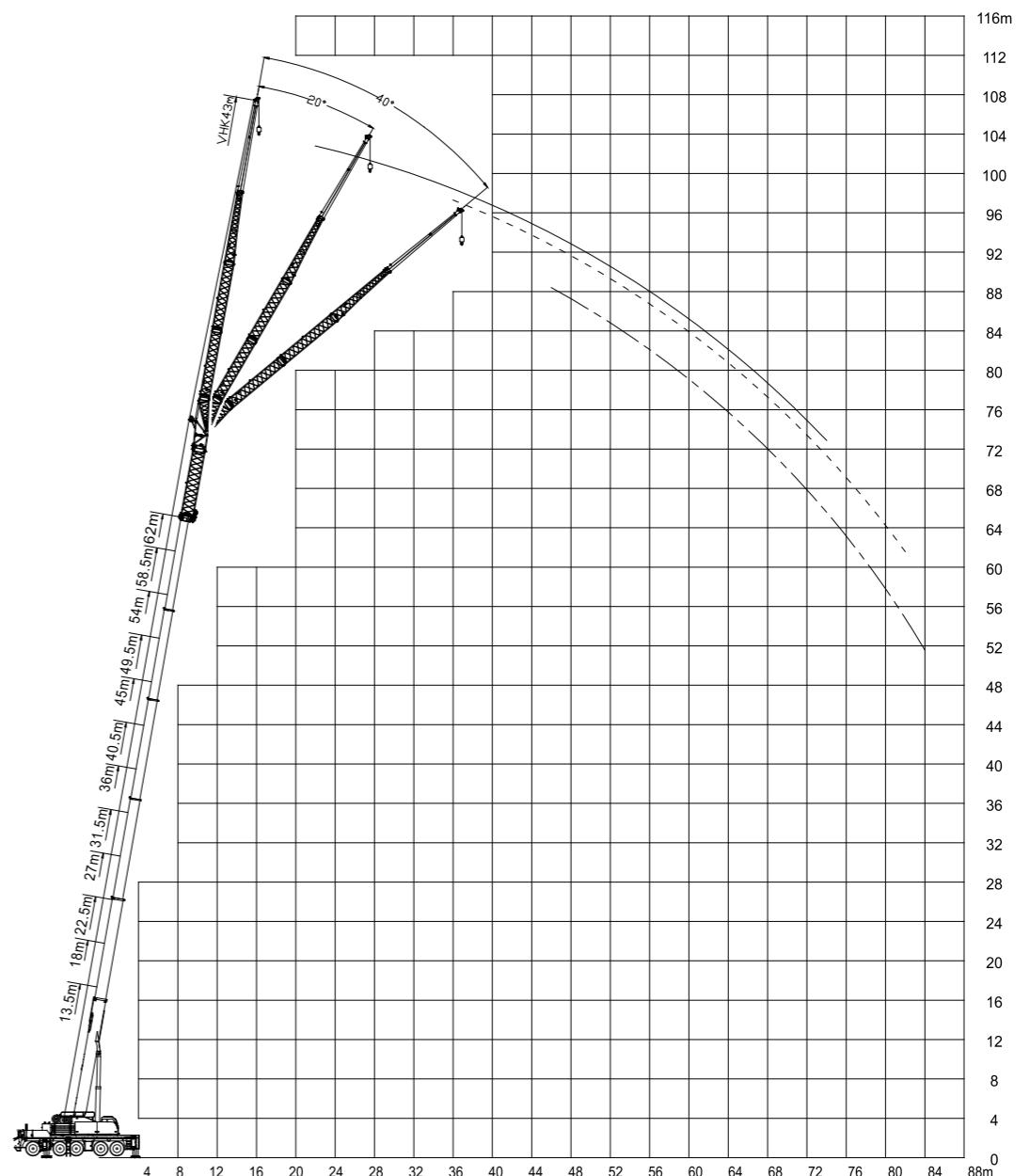
LOAD CHART FOR MAIN BOOM

T	-
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T	-	9.045×8.5 m				
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SAC2200 WORKING RANGES

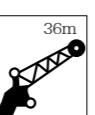
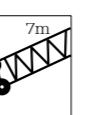
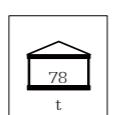


LOAD CHART FOR JIB

Outriggers fully extended, 78t counterweight,
jib offset 0 degrees , jib length 43m(36+7)



6

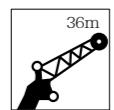
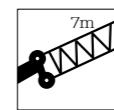
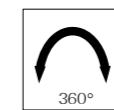
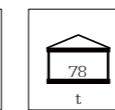


LOAD CHART FOR JIB

Outriggers fully extended, 78t counterweight,
jib offset 20 degrees , jib length 43m(36+7)



m/s



Notes



Quality Changes the World

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The machines illustrated may show optional equipment which can be supplied at additional cost.