

SUMITOMO HAS COMBINED
THE NEWEST INNOVATIONS OF MODERN TECHNOLOGY TO
CREATE A HIGH-PERFORMANCE CRANE
WITH ENDLESS POSSIBILITIES FOR THE FUTURE.

SA Series



ALL TERRAIN CRANE
SA 800

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■ MAIN SPECIFICATIONS

● CRANE SPECIFICATIONS				
Crane Name	80t All Terrain Crane			
Performance	Main boom	12.0m	80ton X 3.5m	
		20.25m	42ton X 6.5m	
		28.55m	27ton X 7.0m	
		36.8m	20ton X 9.0m	
		45.1m	12ton X 12.0m	
Boom length	Single Top			
		6.5ton		
		Jib	45.1m boom + 1.3m adapter + 7.25m jib	6.5ton X 12m
			45.1m boom + 1.3m adapter + 12.85m jib	3.5ton X 21.3m
45.1m boom + 1.3m adapter + 18.5m jib	2.2ton X 18.5m			
Rated lifting capacity X radius				
Maximum lifting height	45.1m main boom	45.5m (12ton)		
	45.1m boom + 1.3m adapter + 18.5m jib	65m (2.2ton)		
Maximum working radius (Class A)	45.1m main boom	36m (1.0ton)		
	45.1m boom + 1.3m adapter + 18.5m jib	44.5m (0.63ton)		
Boom length	12.0 - 45.1m	5-section box-shaped hydraulic telescope boom of box shaped + wire rope type telescope device in 2 modes selection		
Jib length	7.25 - 18.5m	3-section box-shaped hydraulic telescope boom of box shaped + wire rope type telescope device		
Working speed	Main winch hoisting line speed	130m/min (4th layer)		
	Aux. winch	120m/min (3rd layer)		
	Boom derricking time	59 sec / -2° ~ 82°		
	Boom extending speed	136 sec / 33.1m		
	Slewing speed	0.8 / 2.1 rpm		
Crane engine	Maker	Hino H07CT diesel engine		
	Type	4 cycle, water cooled, direct injection, turbo		
	Piston displacement	6.728 lit.		
	Max.output horsepower	180ps/2100rpm		
	Max.output torque	67kg-m/1,600 rpm		
● CARRIER SPECIFICATIONS				
Traveling dimensions (Carrier only)	Overall length	10,725mm		
	Overall width	2,750mm		
	Overall height	2,940mm		
	Wheel base	6,100mm (2550 + 1900 + 1650)		
	Treads	1st, 2nd (2300mm) 3rd,4th (2290mm)		
Traveling weight (Carrier only)	Weight	28,410kg		
Performance	Maximum traveling speed	70km/h		
	Gradeability	35°		
	Minimum turning radius	10.2m (4 wheel steering), 6.3m (8 wheel steering)		
Carrier	Model	CVS FM4390		
	Drive system	8 X 4 (8 X 6)		
	Tire size	16.00 R25		
	Transmission	Automatic transmission		
	Suspension	Hydropneumatic suspension, Hydraulically lockable, Manual or automatic levelling alternatively		
	Steering	Front, counter, crab, rear (4 mode)		
	Braking	Service brake:	1st, 2nd axle disc brake	
			3rd, 4th axle drum brake	
		Parking brake:	Spring applied	
		Auxiliary brake:	Liquid retarder	
	Battery	155AH X 2		
	Fuel tank	400 lit.		
Driver's cab	2 passenger, full cabin			
Outrigger	H type, extended 7.4 / 6.2 / 5.0m			
Carrier engine	Maker	Mercedes Benz OM442A		
	Model	4 cycle, 8 cylinder, direct injection		
	Piston displacement	14.62 lit.		
	Max.output horsepower	354ps/2100rpm		
	Max.output torque	163kg-m/1,400 rpm		

■ CRANE STRUCTURE

Hydraulic tank	Hydraulic oil 800 lit.	
Hoisting mechanism	Hydraulic motor-driven, Spur gear speed reduction type, Speed selector	
	Wire rope	(Main winch) Ø20 X 250mm Toughflex
		(Auxiliary winch) Ø20 X 175mm Toughflex
Slewing	Irregular winding prevention device	
	Hydraulic motor-driven, Pin-lock slewing device, Hi-Low speed selector	
Boom derricking mechanism	Double-acting hydraulic cylinder, speed selector	
Boom extending mechanism	Double-acting hydraulic cylinder, section 2,3 operates simultaneously; section 4, 5 operates simultaneously, section 2,3,4,5 operates simultaneously	
Slewing circle	Ball bearing type	
Crane's cab	Mold pressed cab, large curved glass front, window regulator, 6-way adjustable full reclining seat	
Counterweight	Hydraulic automatic rigging system	
Safety devices	Overhoist prevention device, overload prevention device, drum lock device, slewing lock device, water level device, hydraulic check device, slewing indicator monitor, boom angle indicator, slewing alarm device, outrigger self-check device, sound alarm, service monitor, lever lock.	

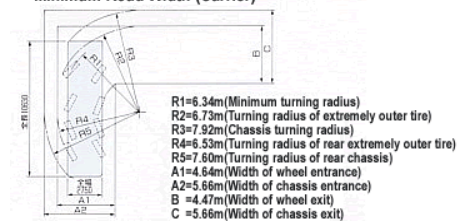
■ STANDARD EQUIPMENT

Carrier	Hydraulic outrigger, air-conditioner, radio, spare tire
Superstructure	Main winch, auxiliary winch, radio (AM/FM with clock), cooler & heater, back mirror, sunshade, sunvisor, wiper
Attachment	45.1m main boom, jib, 80ton hook, 6.5ton hook
Accessories	Standard tools, reserve tools

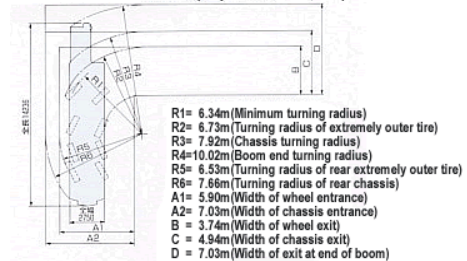
■ OPTIONAL EQUIPMENT

Carrier	Pontoon flooring
Superstructure	Slewing sound alarm, superstructure rigging system, drum light, monitor camera (jib), monitor camera (drum), spark arrestor, drum mirror (aux. winch)
Attachment	Single top, 35ton hook, 15ton hook
Others	Microphone, speakers, overload warning light

■ Minimum Road Width (Carrier)

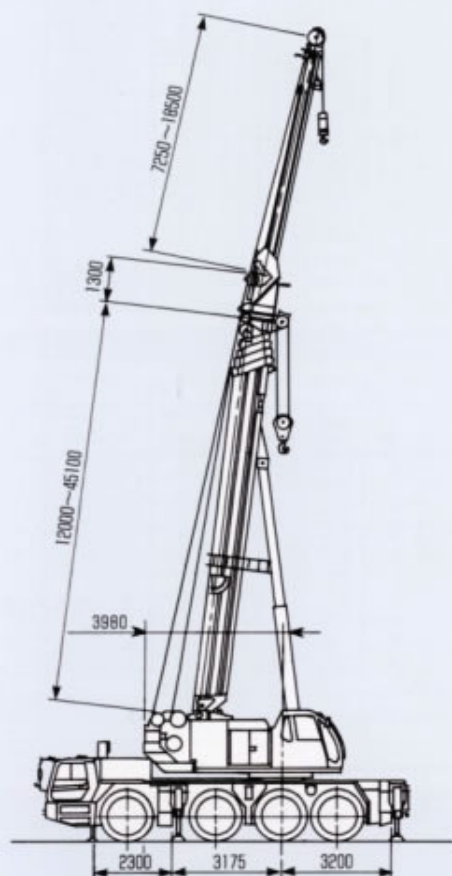


■ Minimum Road Width (Superstructure, Jib)



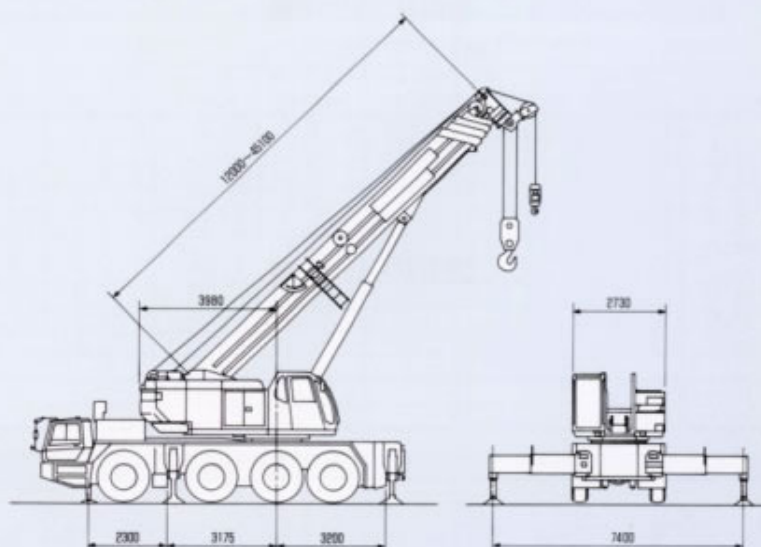
DIMENSIONS

Jib Operating Dimensions



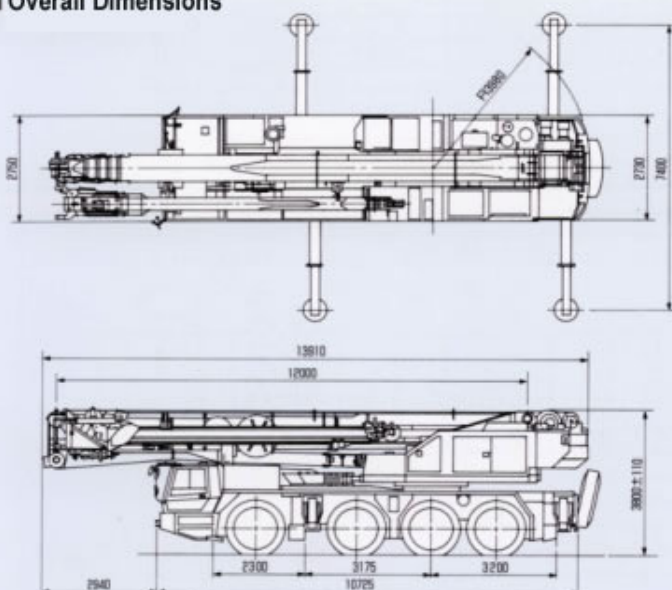
Unit : mm

Main Boom Operating Dimensions



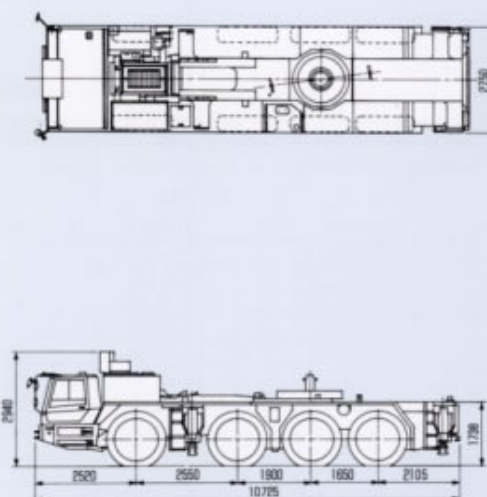
Unit : mm

Overall Dimensions



Unit : mm

Carrier Dimensions



Unit : mm

RATED LIFTING CAPACITY (MAIN BOOM)

CLASS A									
Boom (m) Working Radius (m)		12.0	20.25		28.55		36.8		45.1
3.0		80.0	42.0	20.0					
3.5		80.0	42.0	20.0	27.0	20.0			
4.0		71.0	42.0	20.0	27.0	20.0			
5.0		56.0	42.0	20.0	27.0	20.0	20.0	20.0	
6.0		46.0	42.0	20.0	27.0	20.0	20.0	20.0	12.0/6.5
7.0		38.5	39.0	20.0	27.0	20.0	20.0	20.0	12.0
8.0		33.0	33.0	20.0	24.2	20.0	20.0	18.5	12.0
9.0		28.2	27.9	20.0	21.8	19.1	20.0	17.2	12.0
10.0			22.6	20.0	19.9	17.9	18.0	16.0	12.0
12.0			15.8	17.5	15.7	15.8	15.1	14.0	12.0
14.0			11.6	13.0	11.5	13.6	12.7	12.3	10.9
16.0			8.7	10.0	8.7	10.6	10.0	10.8	9.7
18.0					6.7	8.5	7.9	8.7	8.6
20.0					5.2	6.8	6.3	7.1	7.1
22.0					3.9	5.5	5.1	5.8	5.8
24.0					2.6	4.4	4.1	4.8	4.8
26.0					2.0/25.0	3.9/25.0	3.3	3.9	4.0
28.0							2.3	3.0	3.2
30.0							1.5	2.3	2.4
32.0							0.8	1.6	1.7
34.0								1.3/33.0	1.3
36.0									1.0
Boom Config	Mode	A,B	A	B	A	B	A	B	A,B
	Bm Sec.								
	2nd section	0	50	25	100	50	100	75	100
	3rd section	0	50	25	100	50	100	75	100
	4th section	0	0	25	0	50	50	75	100
5th section		0	0	25	0	50	50	75	100

CLASS B									
Boom (m) Working Radius (m)		12.0	20.25		28.55		36.8		45.1
3.0		80.0	42.0	20.0					
3.5		73.2	42.0	20.0	27.0	20.0			
4.0		65.2	42.0	20.0	27.0	20.0			
5.0		52.0	42.0	20.0	27.0	20.0	20.0	20.0	
6.0		42.4	42.0	20.0	27.0	20.0	20.0	20.0	12.0/6.5
7.0		35.0	34.8	20.0	27.0	20.0	20.0	20.0	12.0
8.0		26.5	26.6	20.0	24.2	20.0	20.0	18.5	12.0
9.0		20.8	21.1	20.0	21.0	19.1	20.0	17.2	12.0
10.0			17.2	18.7	17.1	17.9	18.0	16.0	12.0
12.0			12.0	13.3	12.0	13.8	13.3	14.0	12.0
14.0			8.6	9.8	8.7	10.4	9.9	10.7	10.7
16.0			6.2	7.4	6.5	8.1	7.6	8.3	8.4
18.0					4.7	6.3	6.0	6.6	6.7
20.0					3.0	4.9	4.7	5.3	5.4
22.0					1.6	3.8	3.5	4.2	4.4
24.0						2.7	2.4	3.2	3.4
26.0						2.2/25.0	1.4	2.2	2.5
28.0							0.7	1.5	1.7
30.0								0.8	1.1
32.0									
34.0									
36.0									
Boom Config	Mode	A,B	A	B	A	B	A	B	A,B
	Bm Sec.								
	2nd section	0	50	25	100	50	100	75	100
	3rd section	0	50	25	100	50	100	75	100
	4th section	0	0	25	0	50	50	75	100
5th section		0	0	25	0	50	50	75	100

RATED LIFTING CAPACITY (MAIN BOOM)

CLASS C									
Boom (m) Working Radius (m)		12.0	20.25		28.55		36.8		45.1
3.0		70.0	42.0	20.0					
3.5		62.0	42.0	20.0	27.0	20.0			
4.0		55.0	42.0	20.0	27.0	20.0			
5.0		43.0	42.0	20.0	27.0	20.0	20.0	20.0	
6.0		33.2	33.0	20.0	27.0	20.0	20.0	20.0	12.0/6.5
7.0		24.4	24.5	20.0	24.0	20.0	20.0	20.0	12.0
8.0		18.7	19.0	20.0	18.9	20.0	20.0	18.5	12.0
9.0		14.8	15.2	16.7	15.1	17.1	16.5	16.2	12.0
10.0			12.4	13.7	12.3	14.2	13.6	13.5	12.0
12.0			8.4	9.6	8.5	10.2	9.7	9.7	10.0
14.0			5.7	7.0	6.0	7.6	7.2	7.3	7.9
16.0			3.4	5.0	3.7	5.7	5.2	5.6	6.1
18.0					2.0	4.2	3.7	4.3	4.7
20.0					0.7	2.8	2.4	3.3	3.4
22.0						1.7	1.3	2.2	2.3
24.0						0.8		1.3	1.4
26.0									0.7
28.0									
30.0									
32.0									
34.0									
36.0									
Boom Config	Mode	A,B	A	B	A	B	A	B	A,B
	Bm Sec.								
	2nd section	0	50	25	100	50	100	75	100
	3rd section	0	50	25	100	50	100	75	100
	4th section	0	0	25	0	50	50	75	100
	5th section	0	0	25	0	50	50	75	100

CLASS D									
Boom (m) Working Radius (m)		12.0	20.25		28.55		36.8		45.1
3.0		70.0	42.0	20.0					
3.5		62.0	42.0	20.0	27.0	20.0			
4.0		55.0	42.0	20.0	27.0	20.0			
5.0		43.0	38.2	20.0	27.0	20.0	20.0	20.0	
6.0		29.5	29.0	20.0	27.0	20.0	20.0	20.0	12.0/6.5
7.0		21.5	21.6	20.0	21.0	20.0	20.0	20.0	12.0
8.0		16.3	16.6	18.2	16.5	18.0	18.0	18.1	12.0
9.0		12.8	13.2	14.6	13.1	14.5	14.5	14.5	12.0
10.0			10.6	12.0	10.5	12.0	11.9	11.9	12.0
12.0			7.0	8.2	7.0	8.5	8.3	8.3	9.0
14.0			4.3	5.8	4.6	6.2	6.0	6.1	6.8
16.0			2.2	3.8	2.5	4.6	4.4	4.6	5.2
18.0					1.0	3.1	2.8	3.5	3.8
20.0						1.9	1.5	2.3	2.6
22.0						0.9		1.4	1.6
24.0									0.8
Boom Config	Mode	A,B	A	B	A	B	A	B	A,B
	Bm Sec.								
	2nd section	0	50	25	100	50	100	75	100
	3rd section	0	50	25	100	50	100	75	100
	4th section	0	0	25	0	50	50	75	100
	5th section	0	0	25	0	50	50	75	100

CLASS E	
Boom (m) Working Radius (m)	12.0
3.0	6.5
3.5	6.5
4.0	6.5
5.0	6.5
6.0	5.5
7.0	3.7
8.0	2.3
9.0	1.1

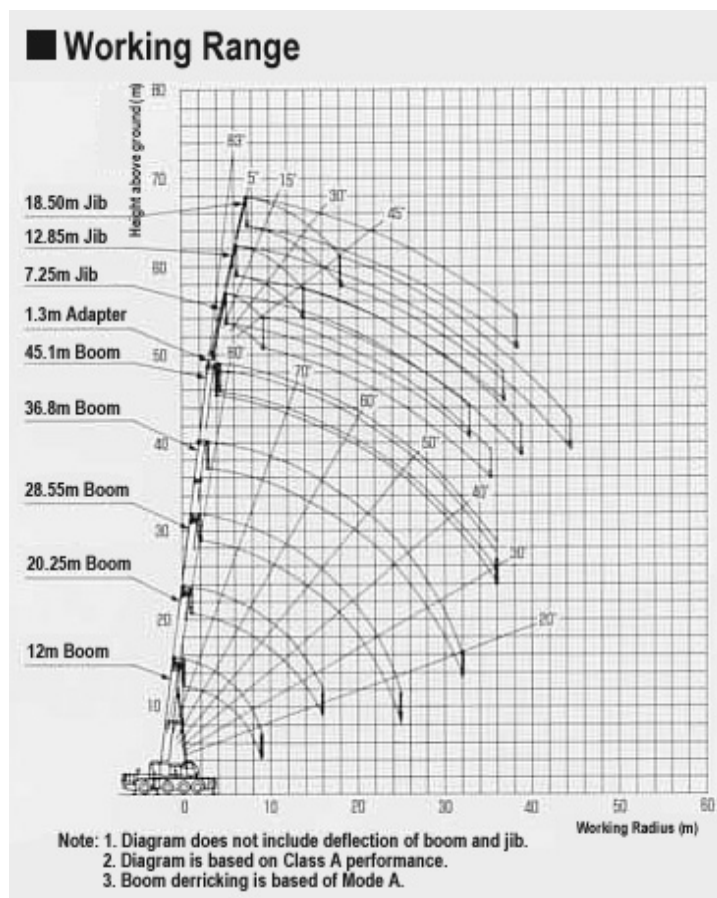
■ RATED LIFTING CAPACITY

1. The rated loads shown do not exceed 78% of tipping load with the machine on firm level ground, and are not less than 1.15 times over-front stability stipulated by mobile crane construction standards.
2. At all times the weight of all lifting equipment in use (including main hook block suspended from boom head) forms part of load and must be subtracted from the rated lifting capacity.

Hook	80t	55t	35t	15t	6.5t
Weight (kg)	1.44t	0.9t	0.5t	0.34t	0.16t

3. The rated lifting capacities for the single top are equivalent to the rated lifting for the main boom to a maximum of 6500 kg. At all times the weight of all lifting equipment in use (including main hook block suspended from boom head) forms part of load and must be subtracted from the rated lifting capacity.
4. When using the main boom with single top installed, 200kg should be subtracted from the rated lifting capacities.
5. Rated lifting capacities enclosed by bold lines are based on crane strength.
6. When jib is in use, check the boom angle given in the load chart. The operating radius of the jib is based on jib install
7. Please use mode A for installation of jib.

Direction	Over side				Over front		Over rear
Outrigger	Outrigger				Front jack		
Counterweight	Fully extended 7.4m	Intermediate y extended 6.2m	Intermediate y extended	Jack out	In use	Not in use	
8.0t	CLASS A	CLASS B	CLASS C		CLASS A	CLASS C	CLASS A
4.5t	CLASS B	CLASS C	CLASS D	CLASS E	CLASS B	CLASS D	CLASS B
0t				CLASS E	CLASS E	CLASS E	CLASS E



■ RATED LIFTING CAPACITY (JIB)

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■ RATED LIFTING CAPACITY (JIB)

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