

# SR-300L ROUGH TERRAIN CRANE

# [SPECIFICATION]

■CRANE	Speci	fication						
Maximum rated capacity	l lifting	30ton×3m						
Boom length		9.35m — 30.5m (4 section)						
Fly jib length		7.9m — 13.0m (2 section, offset 5°,25°,45°)						
	lifting	31.2m (Boom)						
Maximum rated height	rinnig	44.8m (jib)						
Hoisting	Main	125m / min. (at 4th layer)						
line speed (winch up)	winch Auxiliary winch	116m / min. (at 3rd layer)						
Hoisting hook	Main	(Parts of line; 9) : 13.8m / min. (at 4th layer)						
speed (winch up)	winch Auxiliary	(Parts of line; 1) : 116m / min. (at 3rd layer)						
Boom derricking	winch	0° - 83°						
Boom derricking		40s / 0° — 83°						
Boom extending		9.35m — 30.5m / 93s						
Slewing speed	g spece	2.9min <sup>-1</sup>						
Tail slewing rad	iue	3,500mm						
•Equipmen		Box-shaped, 4-section hydraulically telescopic type						
Boom type		(Boom section 3 / 4 simultaneously operated)						
Jib type	,	2 sections (2nd section of draw-out type) (offset angles 5°,25° and 45°)						
Boom extension retraction equip		Two hydraulic cylinders and wire ropes used together						
Boom derricking equipment	g/lowering	One hydraulic cylinder of direct acting type with pressure- compensated flow control valve						
		Driven by axial plunger type hoisting motor through planetary gear						
Winch system Main & Auxiliary	y winches	reduction. Controlled independently by respective operating lever. Equipped with automatic brake.						
Slewing equipm	nent	Ball bearing type						
	Туре	Hydraulic H-beam type (with float and vertical cylinder in single unit)						
		6,600mm (Fully extended)						
Outriggers	Extension	6,000mm (Intermediately extended)						
	Extension width	5,000mm (Intermediately extended)						
		3,800mm (Intermediately extended)						
	Main	2,310mm (Fully retracted)						
Wire rope for hoisting	winch Auxiliary	Diameter: 16mm×Length: 175m						
	winch	Diameter: 16mm × Length: 95m						
Hydraulic	equipme	nt						
Oil pump	Hoisting	4 pumps, plunger and gear type						
Hydraulic motor	motor Slewing	Axial plunger type						
	motor	Axial plunger type						
Control valve		Double acting with integral check and relief valves						
Cylinder Oil reconvoir oo	nooit /	Double acting type						
Oil reservoir ca		500L						
Safety dev	vices							
		ACS (Automatic Crane System with voice alarm), Slewing automatic stop system, Outrigger status detector, Boorn derricking / telescoping holding valve, Overhoist prevention device, Drum lock device (on aux. winch), Winch holding valve, Automatic winch brake, Winch drum roller, Hydraulic safety valves, Outrigger lock pins, Slewing lock, Joystick control safety stop system, Hydraulic oil temperature warning device, Hydraulic oil return filter warning device						
Standard	equipme	nt						
		Hydraulic oil cooler, Working light (on boom, table and cab), Winch drum turning indication device						
Operator's	s cab							
		All steel welded construction, 1 person, Rubber mounted, Adjustable steering wheel, Adjustable seat, Seat belt, Front windscreen wiper & washer (2 speed wiper), Roof window wiper & washer, Cigarette lighter, Ashtray, Floor mat						
Optional e	quipmen	t						
		Winch over unwinding device, Winch drum mirror (Hoist mirror), Cab heater, Cab cooler, Fan, AM/FM Radio, Fire extinguisher, Smoke torch						

Maximum trave		ecification 49km/h								
Grade ability (ta	0 1									
		57% (computed at G.V.W. = 26990kg) 8.2m (2 wheel steer)								
Minimum turnin (center of extrem		4.9m (4 wheel steer)								
Engine										
Model		Mitsubishi 6M60-TL								
_		4 cycle, 6 cylinders, water cooled, direct injection turbo-charged								
Туре		diesel engine with intercooling								
Piston displacement		7.545L								
Max. power		200kW at 2,600min <sup>-1</sup>								
Max. torque		785N⋅m at 1,400min <sup>-1</sup> mendation only								
Equipmen	t and str									
Drive system		4x2 / 4x4								
Torque converte	er	Engine mounted 3 elements 1 stage (with lock up clutch)								
Transmission		Remote mounted full automatic								
Number of spee	eds	4 forward & 1 reverse speed								
		(with HI - Low selector)								
Axles	Front Rear	Planetary, drive/steer type								
	Front &	Planetary, drive/steer type Taper - leaf spring								
Suspension Rear		Hydraulic locking device with shock absorber								
	Service	Air-over hydraulic disk brake on 4 wheels (front and rear independent circuit)								
Brake system	Parking	Spring applied, electrically air released parking brake mounted or front axle, internal expanding type								
	Auxiliary	Exhaust brake								
Steering		Full hydraulic power steering Completely independent front and rear steering (with automatic rear wheel steering lock system)								
Tire size	Front	385 / 95 R25 170E ROAD								
The size	Rear	385 / 95 R25 170E ROAD								
Fuel tank capac	city	300 L								
Batteries		(12V-120AH) ×2								
<ul> <li>Safety dev</li> </ul>	vices									
<b>.</b>		Emergency steering device, Rear wheel steering lock system (automatic), Mis-shifting prevention system, Brake fluid leak warning device, Service brake lock, Suspension lock, Engine overspeed alarm, Radiator coolant level warning device, Air filter service warning device								
<ul> <li>Standard</li> </ul>	equipme	nt								
		Centralized lubricating system								
Optional e	quipmen	t								
		Yellow rev. light								
GENER	AL Din	nensions								
Overall length		11,360mm								
Overall width		2,620mm								
Overall height		3,475mm								
Wheel base		3,650mm								
Treads	Front	2,170mm								
Ticado	Rear	2,170mm								
Passenger cap	-	One person								
	Gross weight	approx. 26,990kg								
Cross vohiele	Front	approx. 13,000kg								
Gross vehicle mass	weight									

KATO products and specifications are subject to improvements and changes without notice.

## ■RATED LIFTING CAPACITY -

Based on ISO 4305

9.35m — 30.5m Bo	om
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										<b>-1</b>			//				/ 1 / 1			
		(6.6	Sm)			(6.0	)m)		(5.0m)					(3.8m)				ed on va	rtical cyl	nders)
Working		ggers fu full rar		nded		Outriggers intermediately extended (over side)			Outriggers intermediately extended (over side)				Outriggers intermediately extended (over side)				Outriggers completely retracted (over side)			
radius (m)	9.35m Boom	16.4m Boom	23.45m Boom	30.5m Boom	9.35m Boom	16.4m Boom	23.45m Boom	30.5m Boom	9.35m Boom	16.4m Boom	23.45m Boom	30.5m Boom	9.35m Boom	16.4m Boom	23.45m Boom	30.5m Boom	9.35m Boom	16.4m Boom	23.45m Boom	30.5m Boom
2.5	30.00*	19.00	12.50	Been	30.00*	19.00	12.50	200	30.00*	19.00	12.50	200111	30.00*	19.00	12.50	Been	12.00	10.35	9.10	200
3.0	30.00*	19.00	12.50		30.00*	19.00	12.50		30.00*	19.00	12.50		26.00	18.90	12.50		11.15	8.25	7.50	
3.5	27.20*	19.00	12.50	7.50	27.20*	19.00	12.50	7.50	27.20*	19.00	12.50	7.50	20.20	15.20	12.50	7.50	9.00	6.75	6.30	5.50
4.0	23.00	19.00	12.50	7.50	23.00	19.00	12.50	7.50	23.00	19.00	12.50	7.50	16.35	12.60	11.40	7.50	7.45	5.60	5.35	5.15
4.5 5.0	21.20 19.40	18.65 17.30	12.50 12.50	7.50 7.50	21.20 19.40	18.65 17.30	12.50 12.50	7.50 7.50	21.20 18.85	17.30 14.70	12.50 12.50	7.50 7.50	13.65 11.40	10.65 9.10	9.85 8.60	7.50 7.50	6.25 5.30	4.65 3.95	4.60 3.95	4.50 3.95
5.0	19.40	16.15	12.50	7.50	19.40	16.15	12.50	7.50	15.65	12.65	12.50	7.50	9.50	7.90	7.55	7.50	4.50	3.30	3.95	3.95
6.0	16.30	15.15	12.00	7.50	16.30	15.15	12.30	7.50	13.15	11.05	10.45	7.50	8.10	6.90	6.70	6.50	3.85	2.80	3.00	3.05
6.5	15.10	14.25	11.50	7.50	15.10	13.50	11.50	7.50	11.25	9.75	9.35	7.50	7.05	6.05	6.00	5.85	3.30	2.35	2.60	2.70
7.0		13.45	10.80	7.50		12.00	10.80	7.50		8.70	8.40	7.50		5.35	5.40	5.35		2.00	2.25	2.40
7.5		12.70	10.20	7.50		10.75	10.20	7.50		7.75	7.60	7.40		4.75	4.85	4.85		1.65	1.95	2.15
8.0		11.80	9.65	7.50		9.65	9.35	7.50		7.00	6.95	6.80		4.25	4.40	4.45		1.40	1.70	1.90
9.0		9.70	8.65	6.80		7.95	7.85	6.80		5.75	5.80	5.75		3.40	3.60	3.70		0.90	1.25	1.50
10.0		7.90	7.85	6.15		6.50	6.70	6.15		4.70	4.90	4.95		2.75	3.00	3.15		0.55	0.90	1.15
11.0		6.50	6.90	5.60		5.35	5.75	5.60		3.85	4.20	4.30		2.20	2.50	2.65			0.60	0.85
12.0		5.45 4.55	6.00 5.20	5.10 4.70		4.50 3.75	5.00 4.35	5.05 4.50		3.15	3.60 3.10	3.75 3.30		1.75	2.10	2.30 1.95				0.65
13.0 13.5		4.55	4.85	4.70		3.75	4.35	4.50		2.60 2.40	2.90	3.30		1.35 1.20	1.70	1.95				
14.0		4.20	4.65	4.35		3.45	3.75	4.00		2.40	2.90	2.90		1.20	1.55	1.65				
15.0			3.90	4.05			3.25	3.55			2.30	2.55			1.15	1.40				
16.0			3.45	3.75			2.85	3.20			2.00	2.25			0.95	1.15				
17.0			3.00	3.35			2.50	2.85			1.70	1.95			0.75	1.00				
18.0			2.65	2.95			2.15	2.50			1.45	1.75			0.60	0.80				
19.0			2.35	2.65			1.90	2.20			1.20	1.55				0.65				
20.0			2.05	2.35			1.65	2.00		_	1.05	1.35				0.50				
20.5			1.95	2.25			1.55	1.85		_	0.95	1.25								
21.0 22.0				2.10 1.90				1.75 1.55		_		1.15 1.00								
22.0				1.90				1.55	_			0.70								
24.0				1.20				0.95				0.70								
27.9				0.95				0.70				0.00								
Standard hook		for 3	0 ton			for 3	0 ton			for 3	0 ton			for 3	0 ton			for 3	0 ton	
Hook mass		250				250					Okg			250	0				Okg	]
Parts of line	9*/7	6	4	4	9*/7	6	4	4	9*/7	6	4	4	9*/7	6	4	4	7	6	4	4
Critical boom angle	—	_	_	—	—	_	-	-	-	<b>.</b>	_	20°	_	—	28°	41°	_	40°	55°	62°
								2			9							(Un	it : Met	ic ton)

							30.5	im E	Зос	m-I	-7.9	9m .	Jib															
0	utriggers	fully ex	tended (	360° full	range)		Outr	iggers ir	ntermedi	ately ext	ended (	over side	)	Outr	iggers ir	itermedi	ately ext	ended (	over side	:)								
Boom	Offs	et 5°	Offse	et 25°	Offse	et 45°	Boom	Offs	et 5°	Offse	et 25°	Offse	et 45°	Boom	Offs	et 5°	Offse	et 25°	Offse	∍t 45°								
angle	Working	Load	Working	Load	Working	Load	angle	Working	Load	Working	Load	Working	Load	angle	Working	Load	Working	Load	Working	Load								
(°)	radius (m)	(ton)	radius (m)	(ton)	radius (m)	(ton)	(°)	radius (m)	(ton)	radius (m)	(ton)	radius (m)	(ton)	(°)	radius (m)	(ton)	radius (m)	(ton)	radius (m)	(ton)								
83.0	4.5	3.50	7.2	2.40	9.1	1.70	83.0	4.5	3.50	7.2	2.40	9.1	1.70	83.0	4.5	3.50	7.2	2.40	9.1	1.70								
75.0	10.5	3.50	12.6	2.40	14.1	1.70	75.0	10.5	3.50	12.6	2.40	14.1	1.70	75.0	10.5	3.50	12.6	2.40	14.1	1.70								
73.0	11.9	3.35	13.9	2.40	15.3	1.69	73.0	11.9	3.35	13.9	2.40	15.3	1.69	73.0	11.9	3.35	13.9	2.40	15.3	1.69								
71.0	13.2	3.11	15.2	2.32	16.5	1.66	71.0	13.2	3.11	15.3	2.32	16.5	1.66	72.0	12.5	3.23	14.6	2.37	15.9	1.68								
69.0	14.5	2.89	16.3	2.19	17.6	1.63	69.0	14.5	2.89	16.3	2.19	17.6	1.63	71.0	13.1	2.98	15.3	2.32	16.5	1.66								
65.0	16.9	2.45	18.7	1.94	19.8	1.57	65.0	16.9	2.45	18.7	1.94	19.8	1.57	69.0	14.3	2.55	16.3	2.19	17.6	1.63								
61.0	19.2	2.12	20.9	1.73	21.8	1.53	64.0	17.5	2.35	19.3	1.88	20.3	1.56	66.0	16.3	1.92	18.0	1.76	19.3	1.58								
58.0	20.8	1.92	22.5	1.60	23.3	1.47	63.0	18.1	2.27	19.8	1.83	20.8	1.55	61.0	18.7	1.35	20.6	1.20	21.7	1.15								
55.0	22.4	1.68	24.0	1.49	24.6	1.39	61.0	19.1	2.01	20.9	1.73	21.8	1.53	55.0	21.8	0.81	23.4	0.74	24.3	0.71								
54.0	22.8	1.60	24.4	1.46	25.0	1.37	59.0	20.2	1.78	21.9	1.62	22.8	1.50	53.0	22.8	0.67	24.4	0.60	25.1	0.59								
50.0	24.8	1.26	26.2	1.16	26.6	1.16	55.0	22.2	1.37	23.7	1.29	24.5	1.25	51.0	23.8	0.53	25.3	0.50	26.0	0.47								
46.0	26.6	0.99	27.8	0.93	28.0	0.93	46.0	26.4	0.75	27.7	0.71	27.9	0.71	Standard hook			for 4.	0 ton										
40.0	28.9	0.69	29.8	0.68			45.0	26.8	0.70	28.0	0.67			Hook mass			80	kg										
34.0	31.0	0.46	31.7	0.45			40.0	28.8	0.48	29.8	0.46			Parts of line														
Standard hook			for 4.	0 ton			Standard hook			for 4.	0 ton			Critical boom angle	4	9°	4	9°	49	Э°								
Hook mass			80	lkg			Hook mass	ok mass 80kg																				
Parts of line				1			Parts of line 1																					
Critical boom angle	32	<u>2</u> °	3	2°	4	4°	Critical boom angle	3	8°	3	8°	4	4°	]														
30.5	m E	300	m+	-7.9	۶m ،	Jib				30	).5r	n B	oor	n+1:	3.0r	n Ji	ib			30.5m Boom+7.9m Jib 30.5m Boom+13.0m Jib								

# 30.5m Boom+7.9m Jib

# (3.8m)

-									
Outriggers intermediately extended (over side)									
Boom	Offs	et 5°	Offse	et 25°	Offset 45°				
angle (°)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)			
83.0	4.5	3.50	7.2	2.40	9.1	1.70			
78.0	8.3	3.50	10.6	2.40	12.2	1.70			
76.0	9.6	3.13	11.9	2.40	13.5	1.70			
73.0	11.4	2.31	13.8	1.87	15.3	1.69			
71.0	12.6	1.87	14.9	1.55	16.4	1.41			
67.0	14.9	1.22	17.1	1.03	18.3	0.97			
61.0	18.3	0.56	20.2	0.48	21.3	0.45			
Standard hook			for 4.	0 ton					
Hook mass	80kg								
Parts of line		1							
Critical boom angle	59° 59° 59°								
611-75102000									

				6.6m)			(6.0m)								
C	Dutriggers	s fully ex	tended (	360° ful	I range)		Outriggers intermediately extended (over side)								
Boom	Offs	et 5°	Offse	et 25°	Offse	et 45°	Boom	Offs	et 5°	Offse	et 25°	Offse	et 45°		
angle	Working	Load	Working	Load	Working	Load	angle	Working	Load	Working	Load	Working	Load		
(°)	radius (m)	(ton)	radius (m)	(ton)	radius (m)	(ton)	(°)	radius (m)	(ton)	radius (m)	(ton)	radius (m)	(ton)		
83.0	5.6	2.20	10.0	1.25	13.2	0.85	83.0	5.6	2.20	10.0	1.25	13.2	0.85		
77.0	10.8	2.20	14.5	1.25	17.2	0.85	77.0	10.8	2.20	14.5	1.25	17.2	0.85		
73.0	14.2	2.18	17.4	1.17	19.8	0.85	73.0	14.2	2.18	17.4	1.17	19.8	0.85		
71.0	15.6	2.02	18.8	1.12	21.1	0.84	71.0	15.6	2.02	18.8	1.12	21.1	0.84		
65.0	19.6	1.61	22.7	1.01	24.5	0.80	65.0	19.6	1.61	22.7	1.01	24.5	0.80		
61.0	22.3	1.42	25.1	0.94	26.7	0.78	61.0	22.3	1.42	25.1	0.94	26.7	0.78		
60.0	23.0	1.38	25.7	0.93	27.2	0.78	60.0	23.0	1.38	25.7	0.93	27.2	0.78		
53.0	27.2	1.19	29.5	0.87	30.4	0.77	58.0	24.2	1.31	26.8	0.91	28.1	0.78		
49.0	29.3	0.94	31.4	0.84	32.0	0.77	54.0	26.5	1.01	28.9	0.88	30.0	0.77		
47.0	30.3	0.83	32.3	0.76	32.8	0.77	52.0	27.5	0.89	29.9	0.82	30.9	0.77		
46.0	30.7	0.78	32.7	0.72	33.1	0.72	50.0	28.5	0.78	30.8	0.72	31.7	0.70		
42.0	32.5	0.61	34.2	0.57	Ť		46.0	30.6	0.58	32.5	0.55	33.0	0.55		
39.0	33.8	0.49	35.3	0.47			44.0	31.4	0.51	33.3	0.47				
Standard hook	for 4.0 ton						Standard hook			for 4.	0 ton				
Hook mass	s 80kg						Hook mass			80	kg				
Parts of line	1						Parts of line			1					
Critical boom angle	3	7°	3	7°	44	4°	Critical boom angle	4	42° 42° 44°						

## 30.5m Boom+13.0m Jib

			(5.0r	m)			(3.8m)									
Outr	Outriggers intermediately extended (over side)								Outriggers intermediately extended (over side)							
Boom	Offs	et 5°	Offse	et 25°	Offse	et 45°	Boom	Offs	et 5°	Offse	et 25°	Offse	et 45°			
angle (°)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	angle (°)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)			
83.0	5.6	2.20	10.0	1.25	13.2	0.85	83.0	5.6	2.20	10.0	1.25	13.2	0.85			
77.0	10.8	2.20	14.5	1.25	17.2	0.85	77.0	10.8	2.20	14.5	1.25	17.2	0.85			
73.0	14.2	2.18	17.4	1.17	19.8	0.85	76.0	11.6	2.20	15.2	1.24	17.8	0.85			
71.0	15.6	2.02	18.8	1.12	21.1	0.84	71.0	15.0	1.47	18.8	1.12	21.1	0.84			
68.0	17.6	1.79	20.7	1.07	22.8	0.82	69.0	16.4	1.17	20.0	0.93	22.2	0.82			
62.0	21.4	1.15	24.5	0.96	26.1	0.79	67.0	17.7	0.93	21.1	0.75	23.3	0.68			
60.0	22.5	0.97	25.5	0.84	27.2	0.78	64.0	19.6	0.64	22.9	0.51	24.8	0.47			
58.0	23.7	0.82	26.6	0.71	28.1	0.68	Standard hook			for 4.	0 ton					
54.0	26.0 0.55 28.6 0.49 29.8 0.48						Hook mass			80	kg					
Standard hook			for 4.	0 ton			Parts of line				1					
Hook mass	k mass 80kg							6	<u>2</u> °	6	2°	6	2°			
Parts of line			1													
Critical boom angle	52	<u>2</u> °	52	2°	5	2°										

### When the outriggers are not used

		Sta	ationary	on rub	ber		F	Pick & c	arry (le	ss than	2 km/h	)			
Working	9.35m	Boom		Boom		n Boom	9.35m Boom 16.4m Boom				23.45n	Working			
radius (m)	Over front	360° full	Over front	360° full	Over front	360° full	Over front	360° full	Over front	360° full	Over front	360° full	radius (m		
		range		range		range		range		range		range			
3.0	13.50	8.10	9.00	6.80	0.50	4.50	10.00	6.10	6.60	5.10	- F0	0.00	3.0		
3.5	12.00	6.80	9.00	5.60	6.50	4.50	8.95	5.10	6.60	4.90	5.50	3.20	3.5		
4.0	10.75	5.80	9.00	4.65	6.50	4.45	8.00	4.30	6.60	4.10	5.50	3.20	4.0		
4.5	9.65	5.00	9.00	3.85	6.50	3.80	7.10	3.65	6.60	3.45	5.50	3.20	4.5		
5.0 5.5	8.70 7.80	4.30	8.20 7.40	3.20 2.70	6.50 6.05	3.25 2.80	6.40 5.75	3.15 2.65	6.00 5.40	2.90 2.40	5.50 5.15	2.95 2.55	5.0 5.5		
6.0	7.00	3.00	6.60	2.70	5.65	2.60	5.20	2.05	5.00	1.95	4.80	2.55	6.0		
6.5	6.25			2.25	5.25	2.45						1.90	6.5		
7.0	0.23	2.50	5.90 5.20	1.65	4.85	1.80	4.70	1.90	4.45 3.90	1.60 1.30	4.45 4.15	1.60	7.0		
8.0			4.00	1.00	4.05	1.30			3.00	0.80	3.45	1.15	8.0		
9.0			3.15	0.60	3.50	0.95			2.40	0.00	2.80	0.80	9.0		
10.0			2.50	0.00	3.00	0.60			1.80		2.30	0.50	10.0		
11.0			2.00		2.50	0.00			1.30		1.90	0.50	11.0		
12.0			1.60		2.30				1.00		1.55		12.0		
13.0			1.25		1.75				0.75		1.25		12.0		
14.0			1.25		1.45				0.75		1.00		13.0		
15.0					1.20						0.75		14.0		
16.0					0.95						0.75		16.0		
17.0					0.75						0.00		17.0		
18.0					0.75						7		17.0		
Standard			for 3	0 ton	0.00	I			for 3	0 ton			Standard hook		
Hook mass			25	Okg				4	25	Okg			Hook mass		
Parts of line				1						4			Parts of line		
Critical boom angle				45°	29°	59°	. –	- 1		51°	38°	58°	Critical boom angle		
									5				×		

### ■Notes for the rated lifting capacity chart

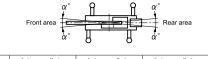
### When the outriggers are used

- 1. The rated lifting capacity charts are based on the jib stowed on the boom side.
- 2. The rated lifting capacity chart indicates the maximum load which can be lifted by this crane provided it is level and standing on firm level ground. The values in the chart include the mass of the main hook and slings for boom operation, and auxiliary hook and slings for jib operation. [30 ton hook (mass: 250kg), 4 ton hook (mass: 80kg)]

Within the chart the figures in the area bordered with a thick line are based on structural limitations while other figures are determined by stability limitations.

- The working radii are the actual values allowing for boom and jib deflection. Therefore you must always operate the crane on the basis of the working radius.
- 4. The jib working radius is based on the jib mounted on the end of the 30.5m boom. When operating at other boom lengths, use the boom angle alone as the criterion.
- 5. Do not operate the jib when the outriggers are completely retracted.
- 6. The lifting capacities for the over sides vary with the outrigger extension width. Therefore for each outrigger extension condition you should work according the rated lifting capacity chart.

Use the rated lifting capacity chart of outriggers full extended for both front and rear areas lifting capacities.



Outrigger	Intermediate	Intermediate	Intermediate	Full retraction
extension status	extension (6.0m)	extension (5.0m)	extension (3.8m)	
Area α∘	35	30	20	3

7. The rated lifting capacity of the rooster sheave is the rated lifting capacity of the boom minus the mass of all attached hook, slings etc. to the boom, with an upper limit of 4,000kg.

[The hook for use with the rooster sheave is the 4 ton hook (mass: 80kg) with one part of line.]

- 8. If the boom length, boom angle and/or working radius exceeds the rated value, use the rated lifting capacity for the rated value or for the next one, whichever gives the smaller rated lifting capacity.
- 9. If you are working with the boom while the jib is rigged, subtract 2.2 ton plus the mass of all attached hook, slings etc. to the boom from the each rated lifting capacity of the boom, with an upper limit of 14 ton.

Do not use the rooster sheave in this situation. And do not operate the boom while the jib is rigged, when the outriggers are retracted.

- 10. In whatever working conditions the corresponding boom critical angel is shown in the chart. The crane can tip over if the boom is lowered below the critical angle even if unloaded. Therefore, never lower the boom below these angles.
- 11. The standard parts of line for each boom length are as indicated in the chart. If you work with a non-standard number of parts of line, do not exceed 37.2kN (3.8tf) per wire rope respectively.
- 12. Crane operation is permissible up to a wind speed of 10m/s. Even in relatively light wind conditions, extra care should be taken when handling loads presenting large wind catching areas.
- 13. Kato bears no liability whatsoever for damage, crane tipping or other accident caused by crane operations which differ from the directions contained in the instruction manual and the warning labels.

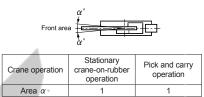
### When the outriggers are not used

- 1. The rated lifting capacity charts are based on the jib stowed on the boom side.
- 2. The rated lifting capacity chart indicates the maximum load the crane can lift when its body is level on firm level ground with all tires inflated to the rated pressure and the suspension cylinder completely retracted. The values in the chart include the mass of the main hook and slings.

Within the chart the figures in the area bordered with a thick line are based on structural limitations while other figures are determined by stability limitations.

[Rated tire pressure: 900kPa (9.0kgf/cm<sup>2</sup>)]

- 3. The working radii are the actual values allowing for boom deflection. Therefore you must always operate the crane on the basis of the working radius.
- 4. The rated lifting capacity differs between the front area capacity and the full range capacity. When slewing from the front to the side, take care that the crane could not be over loaded.



The rated lifting capacity of the rooster sheave is the rated lifting capacity of the boom minus the mass of all attached hook, slings etc. to the boom, with an upper limit of 4,000kg.
 [The hook for use with the rooster shave is the 4 ton hook (mass:

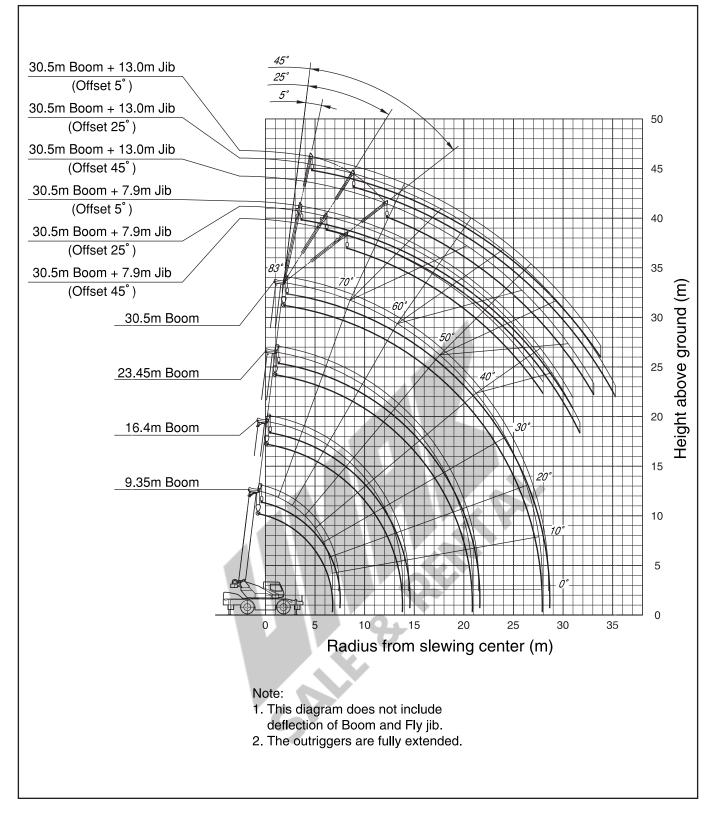
80kg) with one part of line.]

- 6. Do not work with the jib or with a boom length of more than 23.45m.
- 7. For stationary crane-on-rubber operation, the parking brake and service brake lock device must be engaged.
- 8. For pick and carry operation, the super-slow speed switch must be switched to "ON" and the shift lever set to speed 1.
- 9. For pick and carry operation, lower the load to just above the ground and keep your speed strictly below 2km/h to avoid swinging the load.

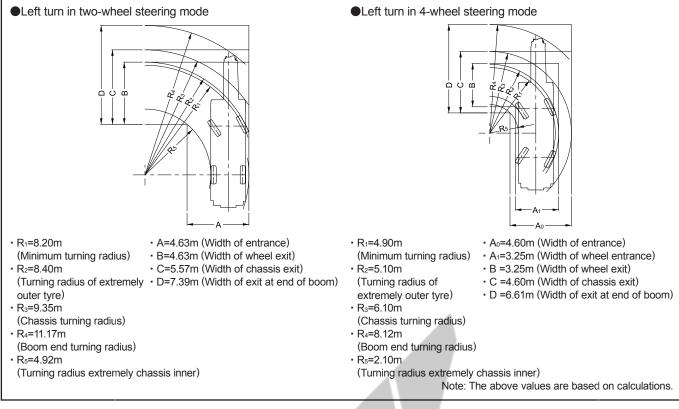
Take particular care to avoid sharp turns, sudden starts and stops.

- 10. Never operate the crane during pick and carry operation. The slewing brake must be applied.
- 11. If the boom length or working radius exceeds the rated value, use the rated lifting capacity for the rated value or for the next one, whichever gives the smaller rated lifting capacity.
- 12. In whatever working conditions the corresponding boom critical angel is shown in the chart. The crane can tip over if the boom is lowered below the critical angle even if unloaded. Therefore, never lower the boom below these angles.
- 13. The standard parts of line for each boom length are as indicated in the chart. If you work with a non-standard number of parts of line, do not exceed 37.2kN (3.8tf) per wire rope respectively.
- 14. Crane operation is permissible up to a wind speed of 10m/s. Even in relatively light wind conditions, extra care should be taken when handling loads presenting large wind catching areas.
- 15. Kato bears no liability whatsoever for damage, crane tipping or other accident caused by crane operations which differ from the directions contained in the instruction manual and the warning labels.

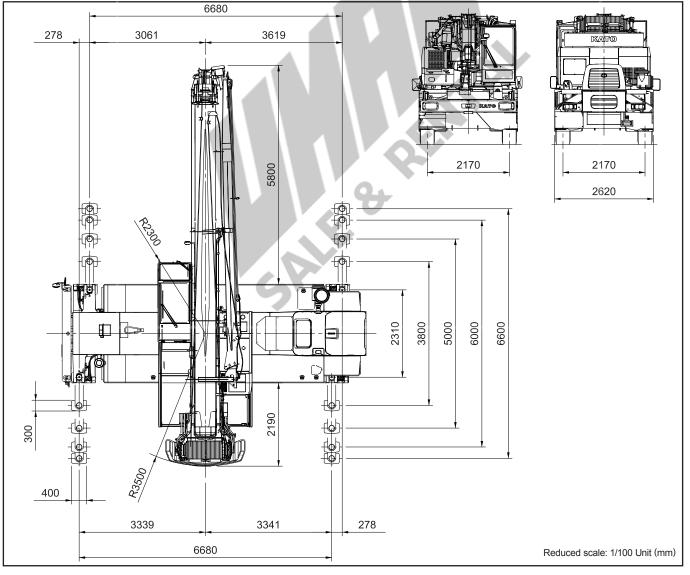
## WORKING RANGE



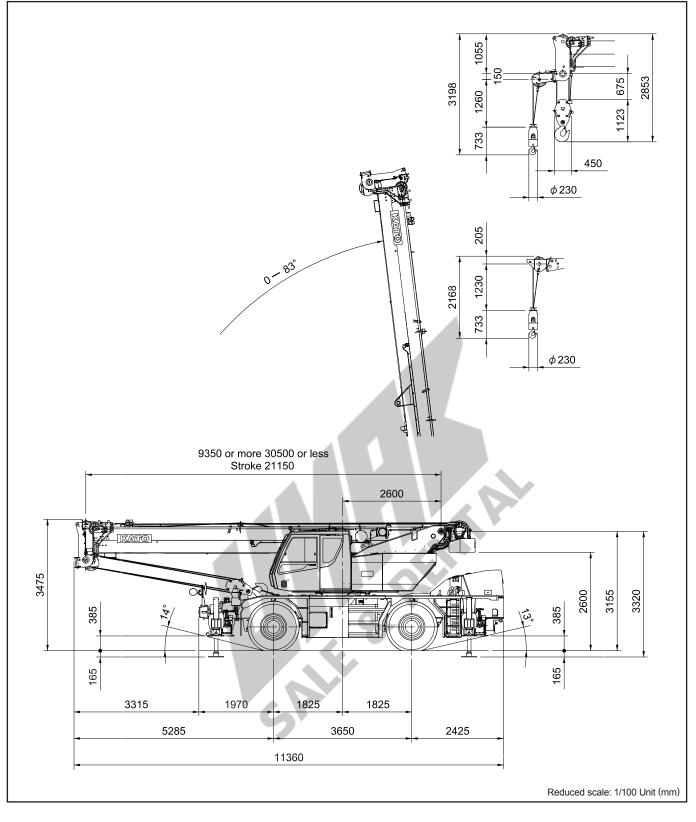
### Minimum path width



### Overall view



### Overall view



\* KATO products and specifications are subject to improvements and changes without notice.

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ISO 9001 よく BUREAU VERITAS Certification

C03391 4.2013-1000 (TI) 1



# **SR-300L**



#### Address inquiries to :

### http://www.kato-works.co.jp

NOTE : Illustrations may include optional equipment. KATO products and specifications are subject to improvements and changes without notice.





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C03381 4.2013-1000(AT)1 Printed in Japan

Innovations For The Future

KATO

R-3001





# **Rough Terrain Crane**

Maximum rated lifting capacity: 30t ×3m Maximum boom length: 30.5m Engine output: 200kW / 2,600min<sup>-1</sup>(ISO Net)



# Powerful & Reliable 4 section round shaped SUPERBOOM

45

25

30,5m

9.35m

83

Fully Hydraulic operated solid 30.5m SUPERBOOM combined with 13m Fly-jib offers you wider working ranges and quick erection in narrow spaces

Maximum Lifting Capacity—	
Boom Length	$-$ 9.35m $\sim$ 30.5m
Boom Derricking Angle ——	0°~83°
Jib Length	—7.9m &13.0m
Jib Off-set Angle	5°, 25°, 45°
Maximum Lifting Height ——	—31.2m(Boom)
	44.8m(Jib)



# **Comfortable** operator's cab for the Professional Works

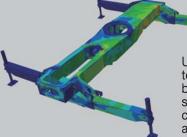
New ACS Moment Limiter Compuload (MS-200) with outrigger width detector and working range limiting function



 Easy touch panel operation
 High quality color display
 Working range limiting function

Big size new cluster meter

- Air duct (option) -
- Durable switches



Up-to-dated design technologies assisted by computer assure steady and rigid chassis frame while all around lifting works.





# **Safe and Steady**



Making front view wider and assuring more safety at travelling with lower position of boom foot pin and smaller front overhang.



# SR-300L ROUGH TERRAIN CRANE

## [SPECIFICATION]

	-									
■CRANE	Speci	fication								
Maximum rated capacity	l lifting	30ton×3m								
Boom length		9.35m — 30.5m (4 section)								
Fly jib length		7.9m — 13.0m (2 section, offset 5° ,25° ,45° )								
Maximum rated	l lifting	31.2m (Boom)								
height	-	44.8m (jib)								
Hoisting line speed	Main winch	125m / min. (at 4th layer)								
(winch up)	Auxiliary winch	116m / min. (at 3rd layer)								
Hoisting hook speed	Main winch	(Parts of line; 9) : 13.8m / min. (at 4th layer)								
(winch up)	Auxiliary winch	(Parts of line; 1) : 116m / min. (at 3rd layer)								
Boom derricking	g angle	0° — 83°								
Boom derricking	•	40s / 0° — 83°								
Boom extending	g speed	9.35m — 30.5m / 93s								
Slewing speed		2.9min <sup>-1</sup>								
Tail slewing rad	ius	3,500mm								
●Equipmen	t and stru									
Boom type		Box-shaped, 4-section hydraulically terescopic type (Boom section 3 / 4 simultaneously operated)								
Jib type		2 sections (2nd section of draw-out type) (offset angles 5° ,25° and 45° )								
Boom extension retraction equip		Two hydrauric cylinders and wire ropes used together								
Boom derricking equipment	g/lowering	One hydrauric cylinder of direct acting type with pressure- compensated flow control valve								
Minch eveters		Driven by axial plunger type hoisting motor through planetary gear reduction.								
Winch system Main & Auxiliary	y winches	Controlled independently by respective operating lever. Equipped with automatic brake.								
Slewing equipment		Ball bearing type								
	Туре	Hydraulic H-beam type (with float and vertical cylinder in single unit)								
		6,600mm (Fully extended)								
Outriggers	<b>_</b>	6,000mm (Intermediately extended)								
	Extension width	5,000mm (Intermediately extended)								
		3,800mm (Intermediately extended)								
		2,310mm (Fully retracded)								
Wire rope for	Main winch	Diameter: 16mm × Length: 175m								
hoisting	Auxiliary winch	Diameter: 16mm × Length: 95m								
Hydraulic	equipme	nt								
Oil pump		4 pumps, plunger and gear type								
Hydraulic	Hoisting motor	Axial plunger type								
motor	Slewing motor	Axial plunger type								
Control valve		Double acting with integral check and relief valves								
Cylinder		Double acting type								
Oil reservoir ca	pacity	500L								
<ul> <li>Safety dev</li> </ul>	vices									
Standard	equipme	ACS (Automatic Crane Stopper with voice alarm), Slewing automatic stop system, Outrigger status detector, Boom derricking / telescoping holding valve, Overhoist prevention device, Drum lock device (on aux. winch), Winch holding valve, Automatic winch brake, Winch drum roller, Hydraulic safety valves, Outrigger lock pins, Slewing lock, Joystick control safety stop system, Hydraulic oil temperature warning device, Hydraulic oil return filter warning device								
Standard	equipine									
		Hydraulic oil cooler, Working light (on boom, table and cab), Winch drum turning indication device								
Operator's	cab									
		All steel welded construction, 1 person, Rubber mounted, Adjustable steering wheel, Adjustable seat, Seat belt, Front windscreen wiper & washer (2 speed wiper), Roof window wiper & washer, Clgarette lighter, Ashtray, Floor mat								
Optional e	quipmen									
		Winch over unwinding device, Winch drum mirror (Hoist mirror), Cab heater, Cab cooler, Fan, AM/FM Radio, Fire extinguisher, Smoke torch								

Maximum trave		
Grade ability (ta	an $ heta)$	57% (computed at G.V.W. = 26990kg)
Minimum turning (center of extrem		8.2m (2 wheel steer)
		4.9m (4 wheel steer)
•Engine		Mitaubiabi OMOO TI EOA
Model		Mitsubishi 6M60-TLE3A
Туре		4 cycle, 6 cylinders, water cooled, direct injection turbo-charged diesel engine with intercooling
Piston displace	ment	7.545L
Max. power		200kW at 2,600min <sup>-1</sup>
Max. torque		785N·m at 1,400min <sup>-1</sup>
Fuel due to KAT	ro's recom	Imendation only
Equipmen	t and stru	ucture
Drive system		4x2 / 4x4
Torque converte	er	Engine mounted 3 elements 1 stage (with lock up clutch)
Transmission		Remote mounted full automatic
Number of spee	eds	4 forward & 1 reverse speed (with HI - Low selector)
	Front	Planetary, drive/steer type
Axles	Rear	Planetary, drive/steer type
Suspension	Front & Rear	Taper - leaf spring Hydraulic locking device with shock absorber
	Service	Air-over hydraulic disk brake on 4 wheels (front and rear independent circuit)
Brake system	Parking	Spring applied, electrically air released parking brake mounted or front axle, internal expanding type
	Auxiliary	Exhaust brake
Steering	, idvinidit y	Full hydraulic power steering Completely independent front and rear steering (with automatic rear wheel steering lock system)
-	Front	385 / 95 R25 170E ROAD
Tire size	Rear	385 / 95 R25 170E ROAD
Fuel tank capad	city	300 L
Batteries		(12V-120AH) ×2
<ul> <li>Safety dev</li> </ul>	vices	
9		Emergency steering device, Rear wheel steering lock system (automatic), Mis-shifting prevention system, Brake fluid leak warning device, Service brake lock, Suspension lock, Engine overspeed alarm, Radiator coolant level warning device, Air filter service warning device
<ul> <li>Standard</li> </ul>	equipme	nt
		Centralized lubricating system
Optional e	quipmen	ıt
		Yellow rev. light
GENER	AL Din	nensions
Overall length		11,360mm
Overall width		2,620mm
Overall height		3,475mm
Wheel base		3,650mm
	Front	2,170mm
Treads	Rear	2,170mm
Treads		One person
Treads Passenger capa	acity	2
	acity Gross weight	approx. 26,990kg
	Gross	approx. 26,990kg approx. 13,000kg

operate it correctly.
 KATO products and specifications are subject to improvements and changes without notice.

## ■RATED LIFTING CAPACITY -----

					1		9.0	SIII	,	50.0		500								
	(6.6m) (6.0m)							(5.0	))		(3.8m)				(blocked on vartical cylinders)					
Working		ggers fu full rar	illy exte ige)	ended	Outriggers intermediately extended (over side)				Outriggers intermediately extended (over side)			Outriggers intermediately extended (over side)				Outriggers completely retracted (over side)				
radius (m)	9.35m Boom	16.4m Boom	23.45m Boom	30.5m Boom	9.35m Boom	16.4m Boom	23.45m Boom	30.5m Boom	9.35m Boom	16.4m Boom	23.45m Boom	30.5m Boom	9.35m Boom	16.4m Boom	23.45m Boom	30.5m Boom	9.35m Boom	16.4m Boom	23.45m Boom	30.5m Boom
2.5	30.00*	19.00	12.50		30.00*	19.00	12.50		30.00*	19.00	12.50		30.00*	19.00	12.50		12.00	10.35	9.10	
3.0	30.00*	19.00	12.50		30.00*	19.00	12.50		30.00*	19.00	12.50		26.00	18.90	12.50		11.15	8.25	7.50	
3.5	27.20*	19.00	12.50	7.50	27.20*	19.00	12.50	7.50	27.20*	19.00	12.50	7.50	20.20	15.20	12.50	7.50	9.00	6.75	6.30	5.50
4.0	23.00	19.00	12.50	7.50	23.00	19.00	12.50	7.50	23.00	19.00	12.50	7.50	16.35	12.60	11.40	7.50	7.45	5.60	5.35	5.15
4.5 5.0	21.20 19.40	18.65 17.30	12.50 12.50	7.50	21.20 19.40	18.65 17.30	12.50 12.50	7.50 7.50	21.20 18.85	17.30 14.70	12.50 12.50	7.50 7.50	13.65 11.40	10.65 9.10	9.85 8.60	7.50 7.50	6.25 5.30	4.65 3.95	4.60 3.95	4.50 3.95
5.5	17.80	16.15	12.50	7.50	17.80	16.15	12.50	7.50	15.65	12.65	12.50	7.50	9.50	7.90	7.55	7.25	4.50	3.30	3.45	3.45
6.0	16.30	15.15	12.30	7.50	16.30	15.15	12.00	7.50	13.15	11.05	10.45	7.50	8.10	6.90	6.70	6.50	3.85	2.80	3.00	3.05
6.5	15.10	14.25	11.50	7.50	15.10	13.50	11.50	7.50	11.25	9.75	9.35	7.50	7.05	6.05	6.00	5.85	3.30	2.35	2.60	2.70
7.0		13.45	10.80	7.50		12.00	10.80	7.50		8.70	8.40	7.50		5.35	5.40	5.35	0.00	2.00	2.00	2.40
7.5		12.70	10.20	7.50		10.75	10.20	7.50		7.75	7.60	7.40		4.75	4.85	4.85		1.65	1.95	2.15
8.0		11.80	9.65	7.50		9.65	9.35	7.50		7.00	6.95	6.80		4.25	4.40	4.45		1.40	1.70	1.90
9.0		9.70	8.65	6.80		7.95	7.85	6.80		5.75	5.80	5.75		3.40	3.60	3.70		0.90	1.25	1.50
10.0		7.90	7.85	6.15		6.50	6.70	6.15		4.70	4.90	4.95		2.75	3.00	3.15		0.55	0.90	1.15
11.0		6.50	6.90	5.60		5.35	5.75	5.60		3.85	4.20	4.30		2.20	2.50	2.65			0.60	0.85
12.0		5.45	6.00	5.10		4.50	5.00	5.05		3.15	3.60	3.75		1.75	2.10	2.30				0.65
13.0		4.55	5.20	4.70		3.75	4.35	4.50		2.60	3.10	3.30		1.35	1.70	1.95				
13.5		4.20	4.85	4.50		3.45	4.05	4.20		2.40	2.90	3.05		1.20	1.55	1.80				
14.0			4.50	4.35			3.75	4.00			2.70	2.90			1.40	1.65				
15.0			3.90	4.05			3.25	3.55			2.30	2.55			1.15	1.40				
16.0			3.45	3.75			2.85	3.20			2.00	2.25			0.95	1.15				
17.0			3.00	3.35			2.50	2.85			1.70	1.95			0.75	1.00				
18.0			2.65	2.95			2.15	2.50			1.45	1.75			0.60	0.80				
19.0			2.35	2.65			1.90	2.20			1.20	1.55				0.65				
20.0			2.05	2.35			1.65	2.00		_	1.05	1.35				0.50				
20.5			1.95	2.25			1.55	1.85	_	_	0.95	1.25								
21.0				2.10				1.75				1.15								
22.0 24.0				1.90 1.50				1.55 1.20				1.00 0.70								
24.0				1.50				0.95		_		0.70								
20.0				0.95				0.95				0.50								
Standard			L	0.90				0.70								L			I	I
hook			0 ton			for 3					0 ton			for 3					0 ton	
Hook mass Parts of line	0*/7		Okg	4	0*/7	250 6	Jkg 4	4	9*/7	6	Okg		9*/7	250 6	жд 4	4	7	6	0kg	4
Critical	9*/7	6	4	4	9*/7	0	4	4	9//	0	4	4	911	σ		4			4	4
boom angle	_	_	_	_	—	_	_	_	-		_	20°	_	_	28°	41°	_	40°	55°	62°
											6	×						(Un	it : Met	ric ton)

### 9 35m — 30 5m Boom

							30.5	Sm I	Зос	m-I	-7.9	9m .	Jib							
								(6.0m)							(5.0m)					
0	Outriggers fully extended (360° full range) Outriggers intermediately extended (over side) Outriggers intermediately extended (over side)									over side	;)									
Boom	Offs	et 5°	Offse	et 25°	Offse	et 45°	Boom	Offs	et 5°	Offse	et 25°	Offse	et 45°	Boom	Offs	et 5°	Offse	et 25°	Offse	et 45°
angle	Working	Load	Working	Load	Working	Load	angle	Working	Load	Working	Load	Working	Load	angle	Working	Load	Working	Load	Working	Load
( )	radius (m)	(ton)	radius (m)	(ton)	radius (m)	(ton)	(°)	radius (m)	(ton)	radius (m)	(ton)	radius (m)	(ton)	(* )	radius (m)	(ton)	radius (m)	(ton)	radius (m)	(ton)
83.0	4.5	3.50	7.2	2.40	9.1	1.70	83.0	4.5	3.50	7.2	2.40	9.1	1.70	83.0	4.5	3.50	7.2	2.40	9.1	1.70
75.0	10.5	3.50	12.6	2.40	14.1	1.70	75.0	10.5	3.50	12.6	2.40	14.1	1.70	75.0	10.5	3.50	12.6	2.40	14.1	1.70
73.0	11.9	3.35	13.9	2.40	15.3	1.69	73.0	11.9	3.35	13.9	2.40	15.3	1.69	73.0	11.9	3.35	13.9	2.40	15.3	1.69
71.0	13.2	3.11	15.2	2.32	16.5	1.66	71.0	13.2	3.11	15.3	2.32	16.5	1.66	72.0	12.5	3.23	14.6	2.37	15.9	1.68
69.0	14.5	2.89	16.3	2.19	17.6	1.63	69.0	14.5	2.89	16.3	2.19	17.6	1.63	71.0	13.1	2.98	15.3	2.32	16.5	1.66
65.0	16.9	2.45	18.7	1.94	19.8	1.57	65.0	16.9	2.45	18.7	1.94	19.8	1.57	69.0	14.3	2.55	16.3	2.19	17.6	1.63
61.0	19.2	2.12	20.9	1.73	21.8	1.53	64.0	17.5	2.35	19.3	1.88	20.3	1.56	66.0	16.3	1.92	18.0	1.76	19.3	1.58
58.0	20.8	1.92	22.5	1.60	23.3	1.47	63.0	18.1	2.27	19.8	1.83	20.8	1.55	61.0	18.7	1.35	20.6	1.20	21.7	1.15
55.0	22.4	1.68	24.0	1.49	24.6	1.39	61.0	19.1	2.01	20.9	1.73	21.8	1.53	55.0	21.8	0.81	23.4	0.74	24.3	0.71
54.0	22.8	1.60	24.4	1.46	25.0	1.37	59.0	20.2	1.78	21.9	1.62	22.8	1.50	53.0	22.8	0.67	24.4	0.60	25.1	0.59
50.0	24.8	1.26	26.2	1.16	26.6	1.16	55.0	22.2	1.37	23.7	1.29	24.5	1.25	51.0	23.8	0.53	25.3	0.50	26.0	0.47
46.0	26.6	0.99	27.8	0.93	28.0	0.93	46.0	26.4	0.75	27.7	0.71	27.9	0.71	Standard hook			for 4.	0 ton		
40.0	28.9	0.69	29.8	0.68			45.0	26.8	0.70	28.0	0.67			Hook mass			80	kg		
34.0	31.0	0.46	31.7	0.45			40.0	28.8	0.48	29.8	0.46			Parts of line			1	1		
Standard hook			for 4.	0 ton			Standard hook			for 4.	0 ton			Critical boom angle	49	9°	4	9°	4	9°
Hook mass			80	kg			Hook mass			80	kg									
Parts of line				1			Parts of line													
Critical boom angle	3	2°	3	2°	4	4°	Critical boom angle	3	8°	3	3°	44	4°							
30.5	30.5m Boom+7.9m Jib 30.5m Boom+13.0m Jib																			

## 30.5m Boom+7.9m Jib

			-								
Outriggers intermediately extended (over side)											
Boom	Offs	et 5°	Offse	et 25°	Offset 45°						
angle	Working	Load	Working	Load	Working	Load					
(°)	radius (m)	(ton)	radius (m)	(ton)	radius (m)	(ton)					
83.0	4.5	3.50	7.2	2.40	9.1	1.70					
78.0	8.3	3.50	10.6	2.40	12.2	1.70					
76.0	9.6	3.13	11.9	2.40	13.5	1.70					
73.0	11.4	2.31	13.8	1.87	15.3	1.69					
71.0	12.6	1.87	14.9	1.55	16.4	1.41					
67.0	14.9	1.22	17.1	1.03	18.3	0.97					
61.0	18.3	0.56	20.2	0.48	21.3	0.45					
Standard hook			for 4.	0 ton							
Hook mass	80kg										
Parts of line			-	1							
Critical boom angle	59	9°	5	9°	59	9°					
611-751020	00										

				6.6m)					(6	.0m)			
0	Outriggers fully extended (360° full range)								ntermed	iately ext	tended (	over side	e)
Boom	Offse	et 5°	Offse	et 25°	Offse	et 45°	Boom	Offs	et 5°	Offse	et 25°	Offse	et 45°
angle	Working	Load	Working	Load	Working	Load	angle	Working	Load	Working	Load	Working	Load
(°)	radius (m)	(ton)	radius (m)	(ton)	radius (m)	(ton)	(°)	radius (m)	(ton)	radius (m)	(ton)	radius (m)	(ton)
83.0	5.6	2.20	10.0	1.25	13.2	0.85	83.0	5.6	2.20	10.0	1.25	13.2	0.85
77.0	10.8	2.20	14.5	1.25	17.2	0.85	77.0	10.8	2.20	14.5	1.25	17.2	0.85
73.0	14.2	2.18	17.4	1.17	19.8	0.85	73.0	14.2	2.18	17.4	1.17	19.8	0.85
71.0	15.6	2.02	18.8	1.12	21.1	0.84	71.0	15.6	2.02	18.8	1.12	21.1	0.84
65.0	19.6	1.61	22.7	1.01	24.5	0.80	65.0	19.6	1.61	22.7	1.01	24.5	0.80
61.0	22.3	1.42	25.1	0.94	26.7	0.78	61.0	22.3	1.42	25.1	0.94	26.7	0.78
60.0	23.0	1.38	25.7	0.93	27.2	0.78	60.0	23.0	1.38	25.7	0.93	27.2	0.78
53.0	27.2	1.19	29.5	0.87	30.4	0.77	58.0	24.2	1.31	26.8	0.91	28.1	0.78
49.0	29.3	0.94	31.4	0.84	32.0	0.77	54.0	26.5	1.01	28.9	0.88	30.0	0.77
47.0	30.3	0.83	32.3	0.76	32.8	0.77	52.0	27.5	0.89	29.9	0.82	30.9	0.77
46.0	30.7	0.78	32.7	0.72	33.1	0.72	50.0	28.5	0.78	30.8	0.72	31.7	0.70
42.0	32.5	0.61	34.2	0.57	Ť		46.0	30.6	0.58	32.5	0.55	33.0	0.55
39.0	33.8	0.49	35.3	0.47			44.0	31.4	0.51	33.3	0.47		
Standard hook			for 4.	0 ton			Standard hook			for 4.	0 ton		
Hook mass			80	kg			Hook mass			80	kg		
Parts of line			1	I			Parts of line				1		
Critical boom angle	37	7°	3	7°	4	4°	Critical boom angle	4:	2°	4	2°	44	4°

## 30.5m Boom+13.0m Jib

			(5.0r	m)					(3.8m	1)			
Outr	Outriggers intermediately extended (over side)								termedi	ately ext	ended (	over side	)
Boom	Offs	et 5°	Offse	et 25°	Offse	et 45°	Boom	Offs	et 5°	Offse	et 25°	Offse	et 45°
angle (°)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	angle (°)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83.0	5.6	2.20	10.0	1.25	13.2	0.85	83.0	5.6	2.20	10.0	1.25	13.2	0.85
77.0	10.8	2.20	14.5	1.25	17.2	0.85	77.0	10.8	2.20	14.5	1.25	17.2	0.85
73.0	14.2	2.18	17.4	1.17	19.8	0.85	76.0	11.6 2.20 15.2 1.24 17.				17.8	0.85
71.0	15.6	2.02	18.8	1.12	21.1	0.84	71.0	15.0 1.47 18.8 1.12 21.1				21.1	0.84
68.0	17.6	1.79	20.7	1.07	22.8	0.82	69.0	16.4 1.17 20.0 0.93 22.2				22.2	0.82
62.0	21.4	1.15	24.5	0.96	26.1	0.79	67.0	17.7	0.93	21.1	0.75	23.3	0.68
60.0	22.5	0.97	25.5	0.84	27.2	0.78	64.0	19.6	0.64	22.9	0.51	24.8	0.47
58.0	23.7	0.82	26.6	0.71	28.1	0.68	Standard hook			for 4.	0 ton		
54.0	26.0	0.55	28.6	0.49	29.8	0.48	Hook mass			80	kg		
Standard hook			for 4.	0 ton			Parts of line	ne 1					
Hook mass	ss 80kg Critical boom angle 62° 62°								6	2°			
Parts of line			. 1	1									
Critical boom angle	52	2°	5	2°	5	2°							

3

### ■When the outriggers are not used

										Ó	);		
		Sta	ationary	on rub	ber			Pick & c	arrv (le	ss than	2 km/h	)	
Working	9.35m	Boom	-	Boom		1 Boom		Boom		Boom		n Boom	
radius (m)	Over front	360° full range	Working radius (m										
3.0	13.50	8.10	9.00	6.80		<b>J</b>	10.00	6.10	6.60	5.10			3.0
3.5	12.00	6.80	9.00	5.60	6.50	4.50	8.95	5.10	6.60	4.90	5.50	3.20	3.5
4.0	10.75	5.80	9.00	4.65	6.50	4.45	8.00	4.30	6.60	4.10	5.50	3.20	4.0
4.5	9.65	5.00	9.00	3.85	6.50	3.80	7.10	3.65	6.60	3.45	5.50	3.20	4.5
5.0	8.70	4.30	8.20	3.20	6.50	3.25	6.40	3.15	6.00	2.90	5.50	2.95	5.0
5.5	7.80	3.60	7.40	2.70	6.05	2.80	5.75	2.65	5.40	2.40	5.15	2.55	5.5
6.0	7.00	3.00	6.60	2.25	5.65	2.45	5.20	2.25	5.00	1.95	4.80	2.20	6.0
6.5	6.25	2.50	5.90	1.85	5.25	2.10	4.70	1.90	4.45	1.60	4.45	1.90	6.5
7.0			5.20	1.55	4.85	1.80			3.90	1.30	4.15	1.60	7.0
8.0			4.00	1.00	4.10	1.30			3.00	0.80	3.45	1.15	8.0
9.0			3.15	0.60	3.50	0.95			2.40		2.80	0.80	9.0
10.0			2.50		3.00	0.60			1.80		2.30	0.50	10.0
11.0			2.00		2.50				1.30		1.90		11.0
12.0			1.60		2.10				1.00		1.55		12.0
13.0			1.25		1.75				0.75		1.25		13.0
14.0					1.45						1.00		14.0
15.0					1.20						0.75		15.0
16.0					0.95						0.55		16.0
17.0					0.75						7		17.0
18.0					0.55						/		18.0
Standard			for 3	0 ton					for 3	0 ton			Standard
hook Hook mass			250	Okg					25(	Okg			hook Hook mass
Parts of line				лку 1						лку 1			Parts of line
Critical			-		<u></u>	500	_				<b></b>	500	Critical
boom angle	-			45°	29°	59°				51°	38°	58°	boom angle
				1					2				

### ■Notes for the rated lifting capacity chart

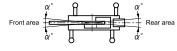
### When the outriggers are used

- 1. The rated lifting capacity charts are based on the jib stowed on the boom side.
- 2. The rated lifting capacity chart indicates the maximum load which can be lifted by this crane provided it is level and standing on firm level ground. The values in the chart include the mass of the main hook and slings for boom operation, and auxiliary hook and slings for jib operation. [30 ton hook (mass: 250kg), 4 ton hook (mass: 80kg)]

Within the chart the figures in the area bordered with a thick line are based on structural limitations while other figures are determined by stability limitations.

- The working radii are the actual values allowing for boom and jib deflection. Therefore you must always operate the crane on the basis of the working radius.
- 4. The jib working radius is based on the jib mounted on the end of the 30.5m boom. When operating at other boom lengths, use the boom angle alone as the criterion.
- 5. Do not operate the jib when the outriggers are completely retracted.
- The lifting capacities for the over sides vary with the outrigger extension width. Therefore for each outrigger extension condition you should work according the rated lifting capacity chart.

Use the rated lifting capacity chart of outriggers full extended for both front and rear areas lifting capacities.



Outrigger	Intermediate	Intermediate	Intermediate	Full retraction
extension status	extension (6.0m)	extension (5.0m)	extension (3.8m)	
Area α∘	35	30	20	3

7. The rated lifting capacity of the rooster sheave is the rated lifting capacity of the boom minus the mass of all attached hook, slings etc. to the boom, with an upper limit of 4,000kg.

[The hook for use with the rooster sheave is the 4 ton hook (mass: 80kg) with one part of line.]

- 8. If the boom length, boom angle and/or working radius exceeds the rated value, use the rated lifting capacity for the rated value or for the next one, whichever gives the smaller rated lifting capacity.
- 9. If you are working with the boom while the jib is rigged, subtract 2.2 ton plus the mass of all attached hook, slings etc. to the boom from the each rated lifting capacity of the boom, with an upper limit of 14 ton.

Do not use the rooster sheave in this situation. And do not operate the boom while the jib is rigged, when the outriggers are retracted.

- 10. In whatever working conditions the corresponding boom critical angel is shown in the chart. The crane can tip over if the boom is lowered below the critical angle even if unloaded. Therefore, never lower the boom below these angles.
- 11. The standard parts of line for each boom length are as indicated in the chart. If you work with a non-standard number of parts of line, do not exceed 37.2kN (3.8tf) per wire rope respectively.
- 12. Crane operation is permissible up to a wind speed of 10m/s. Even in relatively light wind conditions, extra care should be taken when handling loads presenting large wind catching areas.
- 13. Kato bears no liability whatsoever for damage, crane tipping or other accident caused by crane operations which differ from the directions contained in the instruction manual and the warning labels.

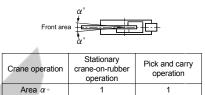
### When the outriggers are not used

- 1. The rated lifting capacity charts are based on the jib stowed on the boom side.
- 2. The rated lifting capacity chart indicates the maximum load the crane can lift when its body is level on firm level ground with all tires inflated to the rated pressure and the suspension cylinder completely retracted. The values in the chart include the mass of the main hook and slings.

Within the chart the figures in the area bordered with a thick line are based on structural limitations while other figures are determined by stability limitations.

[Rated tire pressure: 900kPa (9.0kgf/cm<sup>2</sup>)]

- 3. The working radii are the actual values allowing for boom deflection. Therefore you must always operate the crane on the basis of the working radius.
- 4. The rated lifting capacity differs between the front area capacity and the full range capacity. When slewing from the front to the side, take care that the crane could not be over loaded.

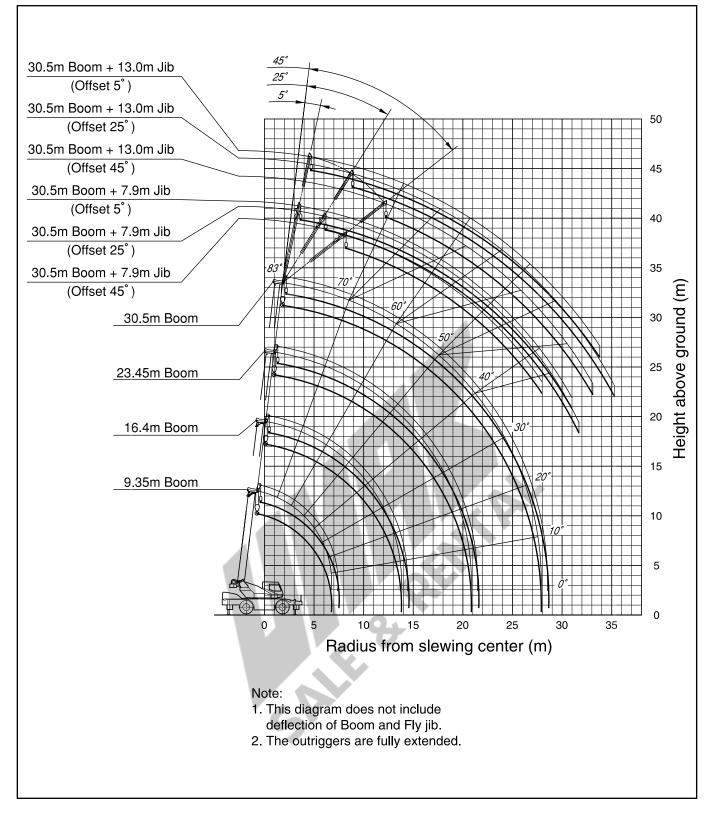


- 5. The rated lifting capacity of the rooster sheave is the rated lifting capacity of the boom minus the mass of all attached hook, slings etc. to the boom, with an upper limit of 4,000kg. [The hook for use with the rooster shave is the 4 ton hook (mass:
- 80kg) with one part of line.] 6. Do not work with the jib or with a boom length of more than
- 23.45m.
- 7. For stationary crane-on-rubber operation, the parking brake and service brake lock device must be engaged.
- 8. For pick and carry operation, the super-slow speed switch must be switched to "ON" and the shift lever set to speed 1.
- 9. For pick and carry operation, lower the load to just above the ground and keep your speed strictly below 2km/h to avoid swinging the load.

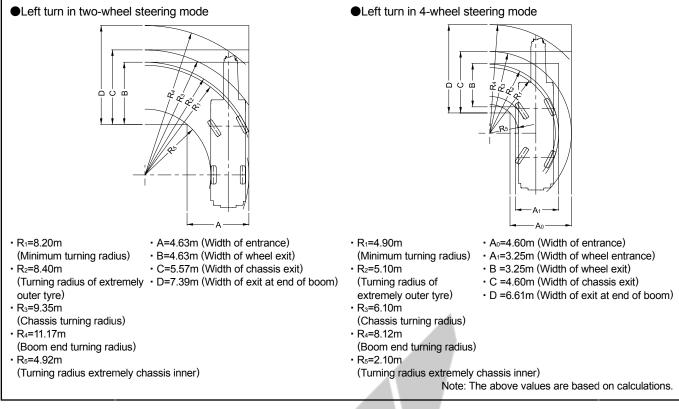
Take particular care to avoid sharp turns, sudden starts and stops.

- 10. Never operate the crane during pick and carry operation. The slewing brake must be applied.
- 11. If the boom length or working radius exceeds the rated value, use the rated lifting capacity for the rated value or for the next one, whichever gives the smaller rated lifting capacity.
- 12. In whatever working conditions the corresponding boom critical angel is shown in the chart. The crane can tip over if the boom is lowered below the critical angle even if unloaded. Therefore, never lower the boom below these angles.
- 13. The standard parts of line for each boom length are as indicated in the chart. If you work with a non-standard number of parts of line, do not exceed 37.2kN (3.8tf) per wire rope respectively.
- 14. Crane operation is permissible up to a wind speed of 10m/s. Even in relatively light wind conditions, extra care should be taken when handling loads presenting large wind catching areas.
- 15. Kato bears no liability whatsoever for damage, crane tipping or other accident caused by crane operations which differ from the directions contained in the instruction manual and the warning labels.

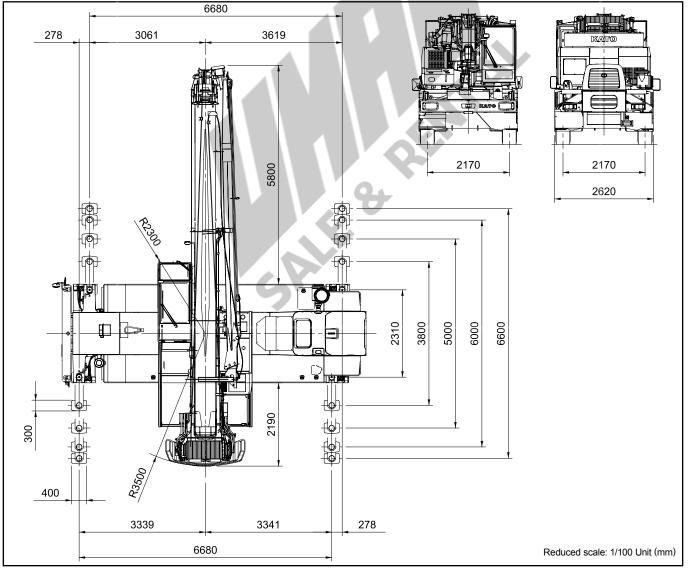
## ■WORKING RANGE



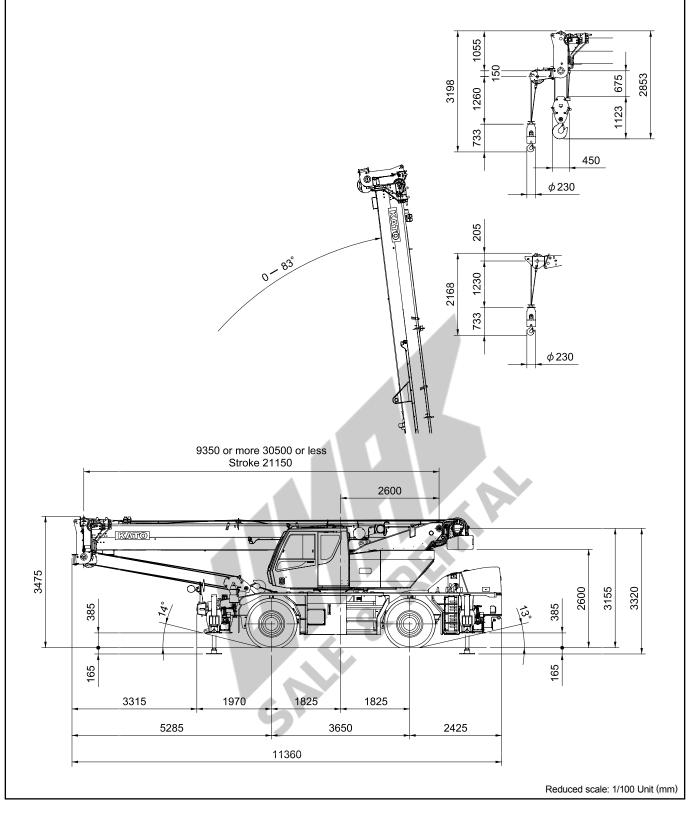
### ■Minimum path width



### Overall view



### ■Overall view



\* KATO products and specifications are subject to improvements and changes without notice.

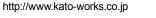
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We acquired the "ISO 9001" certification which is an international standard for quality assurance.