

# SR-300L

# **ROUGH TERRAIN CRANE**

# **[SPECIFICATION]**

■ CRANE		fication								
Maximum rated capacity	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	(Parts of line; 1) : 116m / min. (at 3rd layer)  0° — 83°								
Boom derricking		40s / 0° — 83°								
Boom derricking Boom extending		9.35m — 30.5m / 93s								
Slewing speed	g specu	2.9min <sup>-1</sup>								
Tail slewing rad	ius	3,500mm								
●Equipmen										
Boom type	t and stre	Box-shaped, 4-section hydraulically telescopic type								
Doom type		(Boom section 3 / 4 simultaneously operated)  2 sections (2nd section of draw-out type)								
Jib type	-1	(offset angles 5°,25° and 45°)								
Boom extension retraction equip	ment	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								
Winch system Main & Auxiliary	y winches	Driven by axial plunger type hoisting motor through planetary gear 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		6,000mm (Intermediately extended)								
	Extension width	5,000mm (Intermediately extended)								
		3,800mm (Intermediately extended)								
		2,310mm (Fully retracted)								
Wire rope for hoisting	Main winch	Diameter: 16mm×Length: 175m								
	Auxiliary winch	Diameter: 16mm×Length: 95m								
Hydraulic	equipme									
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	nacih:	Double acting type								
Oil reservoir ca		500L								
●Safety dev	vices	ACS (Automatic Crane System 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 return filter warning device, Hydraulic oil return filter warning device								
●Standard	equipme	,								
		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, Cigarette lighter, Ashtray, Floor ma								
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	ling speed	49km/h							
Grade ability (ta		57% (computed at G.V.W. = 26990kg)							
Minimum turning radius		8.2m (2 wheel steer)							
(center of extreme outer tire)		4.9m (4 wheel steer)							
Engine									
Model		Mitsubishi 6M60-TL							
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>							
		nmendation only							
Equipmen	t and str								
Drive system		4x2 / 4x4							
Torque convert	er	Engine mounted 3 elements 1 stage (with lock up clutch)							
Transmission		Remote mounted full automatic							
Number of spe	eds	4 forward & 1 reverse speed (with HI - Low selector)							
Axles	Front	Planetary, drive/steer type							
	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 of 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							
Rear		385 / 95 R25 170E ROAD							
Fuel tank capa	city	300 L							
Batteries		(12V-120AH) ×2							
Safety de	vices								
		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							
Standard	equipme	nt							
		Centralized lubricating system							
<ul><li>Optional e</li></ul>	quipmen	t							
		Yellow rev. light							
<b>■</b> GENER	AL Dir	nensions							
Overall length		11,360mm							
Overall width		2,620mm							
Overall height		3,475mm							
Wheel base		3,650mm							
Treads	Front	2,170mm							
	Rear	2,170mm							
Passenger capacity Gros		One person approx. 26,990kg							
3	weight								
Gross vehicle	Front								
	weight	approx. 13,000kg							
Gross vehicle		арргох. 13,990kg							

Based on ISO 4305

# 9.35m — 30.5m Boom

											<b>-</b> 1				1		4.1.1		1	\
		(6.6			0.11	(6.0			0.11	(5.0			(3.8m)				(blocked on vartical cylinders)  Outriggers completely			
Working		ggers fu full rar	ılly exte nge)	nded			termedi er side				termed er side				itermed /er side				omplete er 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	DOOIII	30.00*	19.00	12.50	DOOM	30.00*	19.00	12.50	DOUIII	30.00*	19.00	12.50	DUUIII	12.00	10.35	9.10	DOULL
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	21.20	18.65	12.50	7.50	21.20	18.65	12.50	7.50	21.20	17.30	12.50	7.50	13.65	10.65	9.85	7.50	6.25	4.65	4.60	4.50
5.0	19.40	17.30	12.50	7.50	19.40	17.30	12.50	7.50	18.85	14.70	12.50	7.50	11.40	9.10	8.60	7.50	5.30	3.95	3.95	3.95
5.5	17.80	16.15	12.50	7.50	17.80	16.15	12.50	7.50	15.65	12.65	11.80	7.50	9.50	7.90	7.55	7.25	4.50	3.30	3.45	3.45
6.0	16.30	15.15	12.25	7.50	16.30	15.15	12.25	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	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 1.95	2.35 2.25			1.65 1.55	2.00 1.85			1.05 0.95	1.35 1.25				0.50				
21.0			1.95	2.25			1.55	1.75			0.95	1.25								
22.0				1.90				1.75				1.15								
24.0				1.50				1.20				0.70								
26.0				1.20				0.95				0.70								
27.9				0.95				0.70				0.00								
Standard		f ^	0.4	0.00		f ^	0.4	0.70		f ^	0.4			f 0	0.4			f ^	0.4	
hook		tor 3	0 ton		for 30 ton				for 30 ton				for 30 ton				for 30 ton			
Hook mass		250	Okg			250	Okg		250kg			250kg			250kg					
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	_	_	_	_	_	_	_	_	_	_	_	20°	_	_	28°	41°	_	40°	55°	62°

(Unit : Metric ton)

#### 30.5m Boom + 7.9m Jib (5.0m) (6.6m) (6.0m) Outriggers fully extended (360° full range) Outriggers intermediately extended (over side) Outriggers intermediately extended (over side) Boom Offset 5° Offset 25° Offset 45° Boom Offset 5° Offset 25° Offset 45° Boom Offset 5° Offset 25° Offset 45° Working Load angle Working Working Load Working angle Working Working angle Working Working Working radius (m) (ton) radius (m (ton) 83.0 4.5 7.2 9.1 1.70 4.5 9.1 4.5 7.2 1.70 3.50 2.40 83.0 3.50 7.2 2.40 1.70 83.0 3.50 2.40 9.1 12.6 75.0 10.5 3.50 2.40 14.1 1.70 75.0 10.5 3.50 12.6 1.70 75.0 10.5 3.50 12.6 2.40 1.70 2.40 14.1 14.1 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 3.11 3.11 2.37 71.0 13.2 15.2 2.32 16.5 1.66 71.0 13.2 15.3 2.32 16.5 1.66 72.0 12.5 3.23 14.6 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 2.12 2.35 1.76 61.0 19.2 20.9 1.73 21.8 1.53 64.0 17.5 19.3 1.88 20.3 1.56 66.0 16.3 1.92 18.0 19.3 1.58 1.55 1.92 22.5 1.60 1.47 18.1 2.27 19.8 1.83 20.8 61.0 1.15 58.0 20.8 23.3 63.0 18.7 1.35 20.6 1.20 21.7 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 25.1 54.0 22.8 1.60 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 0.59 50.0 1.16 55.0 1.25 51.0 24.8 1.26 26.2 26.6 1.16 22.2 1.37 23.7 1.29 24.5 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 80kg Hook mass 34.0 0.46 31.7 0.45 40.0 28.8 0.48 29.8 31.0 0.46 Parts of line Standard hook for 4.0 ton Standard hook for 4.0 ton Critical boom angle 49° 49° 49° Hook mass Hook mass 80kg 80kg Parts of line Parts of line Critical boom angle 32 32° Critical boom angle 38° 38° 44°

#### 30.5m Boom + 7.9m Jib

	☐ <b>1</b> (3.8m)								
Out	Outriggers intermediately extended (over side)								
Boom	Offs	et 5°	Offse	et 25°	Offse	et 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			80	kg					
Parts of line			1	1					
Critical hoom angle	5	a°	50	a°	5	a°			

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#### 30.5m Boom + 13.0m Jib

				6.6m)			(6.0m)								
0	Outriggers fully extended (360° full range)								Outriggers intermediately extended (over side)						
Boom	Offs	et 5°	Offse	et 25°	Offse	t 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	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			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	Standard hook for 4.0 ton									for 4.	0 ton				
Hook mass			80	kg			Hook mass			80	kg				
Parts of line				l			Parts of line	1							
Critical boom angle	3	7°	3	7°	4	4°	Critical boom angle	42° 42° 44°				4°			

#### 30.5m Boom + 13.0m Jib

	(5.0m)									(3.8m	1)			
Outi	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	k for 4.0 ton						
54.0	26.0	0.55	28.6	0.49	29.8	0.48	Hook mass			80	kg			
Standard hook	Standard hook for 4.0 ton										1			
Hook mass	ass 80kg						Critical boom angle	62° 62° 62°				2°		
Parts of line			1	I										
Critical boom angle	5:	2°	5	2°	5	2°	1							

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#### ■When the outriggers are not used

(Unit : Metric ton)

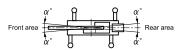
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		1								00	<b>5</b>		
		Sta	ationary	on rub	ber								
Working	9.35m	Boom	16.4m	Boom	23.45n	n Boom	9.35m	Boom	16.4m	Boom	23.45n	n Boom	Working
radius (m)	Over front	360° full range	radius (m)										
3.0	13.50	8.10	9.00	6.80			10.00	6.10	6.60	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								17.0
18.0					0.55								18.0
Standard hook	for 30 ton						for 30 ton						Standard hook
Hook mass	mass 250kg						250kg						Hook mass
Parts of line			4	1			4						Parts of line
Critical boom angle	_	_	_	45°	29°	59°	_	_	_	51°	38°	58°	Critical boom angle

#### ■Notes for the rated lifting capacity chart

#### ■When the outriggers are used

- 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.
- 3. 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.
- 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.

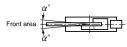


Outrigger extension status	Intermediate extension (6.0m)	Intermediate extension (5.0m)	Intermediate extension (3.8m)	Full retraction
Area α∘	35	30	20	3

- 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.]
- 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.

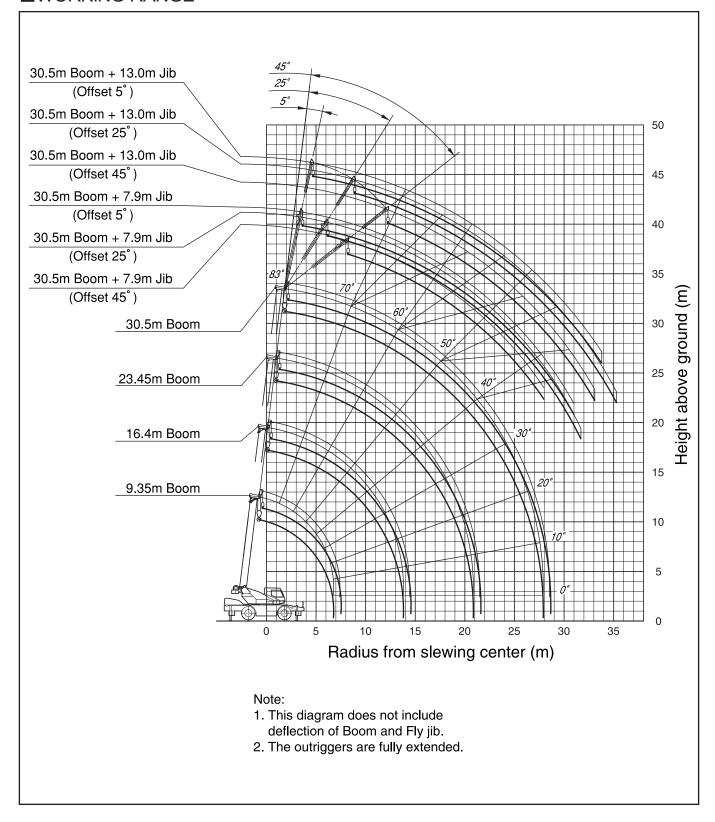
#### ■When the outriggers are not used

- 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/cm²)]
- 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.



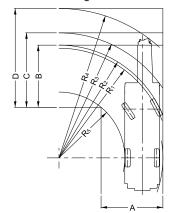
Crane operation	Stationary crane-on-rubber operation	Pick and carry operation
Area α∘	1	1

- 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
- 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.
- 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.
- 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.



# ■Minimum path width

#### ●Left turn in two-wheel steering mode



• A=4.63m (Width of entrance)

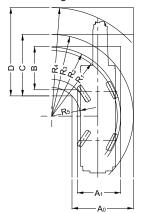
- B=4.63m (Width of wheel exit)

- C=5.57m (Width of chassis exit)

- R₁=8.20m
- (Minimum turning radius)
- R<sub>2</sub>=8.40m (Turning radius of extremely • D=7.39m (Width of exit at end of boom) outer tyre)
- R₃=9.35m
- (Chassis turning radius)
- R<sub>4</sub>=11.17m
- (Boom end turning radius)

(Turning radius extremely chassis inner)

#### ●Left turn in 4-wheel steering mode



- R₁=4.90m
- (Minimum turning radius)
- R<sub>2</sub>=5.10m (Turning radius of extremely outer tyre)
- R<sub>3</sub>=6.10m
- (Chassis turning radius)
- R<sub>4</sub>=8.12m
- (Boom end turning radius)
- R₅=2.10m

(Turning radius extremely chassis inner)

Note: The above values are based on calculations.

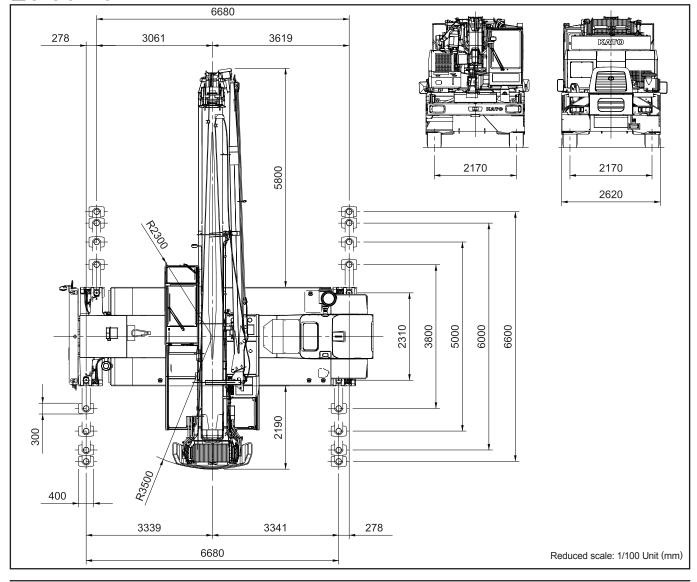
- B =3.25m (Width of wheel exit)
  - C =4.60m (Width of chassis exit)

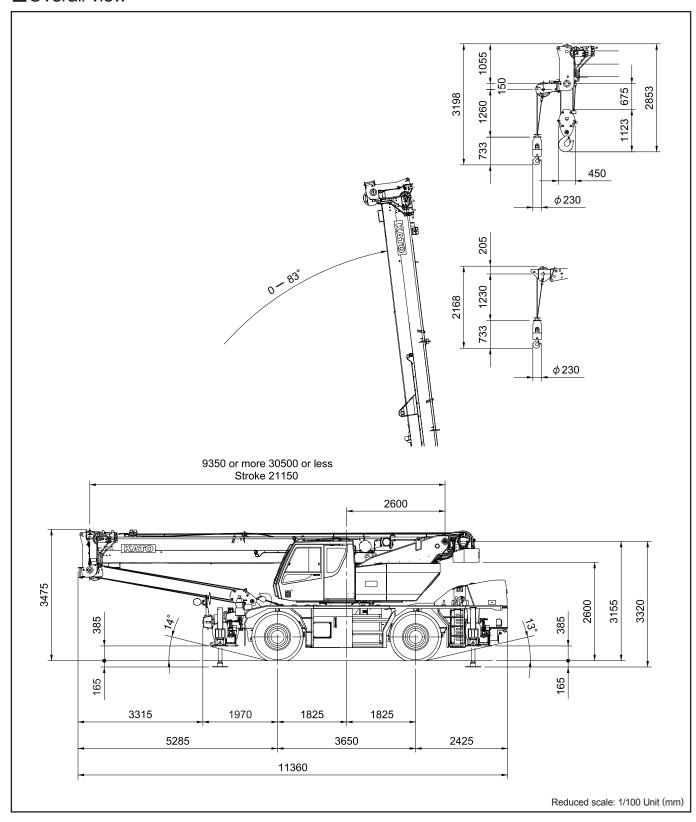
- A<sub>1</sub>=3.25m (Width of wheel entrance)

- A<sub>0</sub>=4.60m (Width of entrance)

- D =6.61m (Width of exit at end of boom)

### ■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.