

KATO

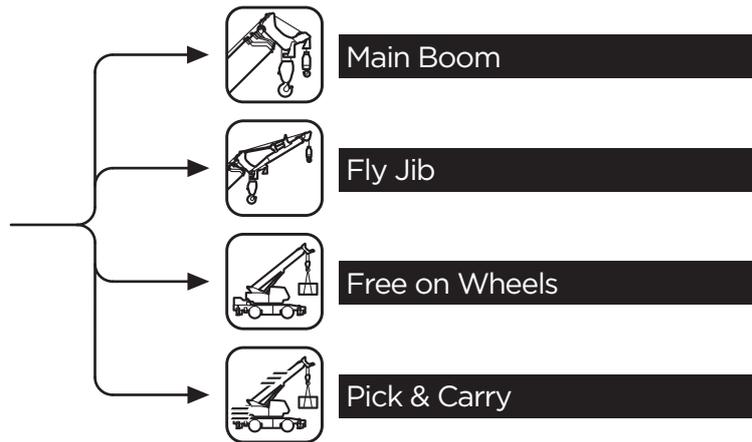
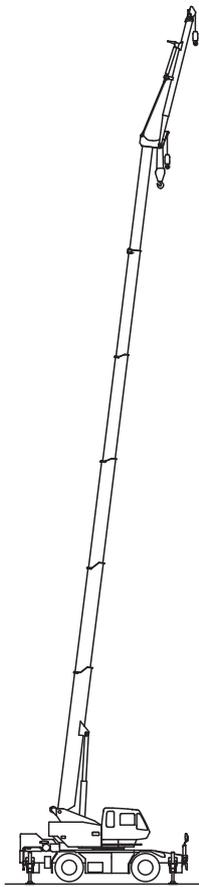
SUPERBOOM.

MR-350Ri

PREMIUM.
Roughter

KRM-35H-III

ROUGH TERRAIN CRANE



Main Boom

Fly Jib

Free on Wheels

Pick & Carry

KATO**CITYRANGE[®]**
SUPERBOOM[®]**MR-350Ri****PREMIUM[®]**
*Roughter***KRM-35H-III ROUGH TERRAIN CRANE (Technical Specifications)****KATO MR350RI (KRM-35H-III) SUPERBOOM****CRANE SPECIFICATIONS**

TYPE	35 Ton Lifting Capacity Rough Terrain Crane
MODEL	KRM-35H-III
CRANE CAPACITY	35,000kg
MAX. TOTAL RATED LOAD	
7.50M	35,000kg x 2.60M radius (10 Parts-Line)
12.5M	19,000kg x 5.00M radius (6 Parts-Line)
17.5M	17,000kg x 5.00M radius (6 Parts-Line)
22.5M	12,000kg x 6.50M radius (4 Parts-Line)
27.5M	9,000kg x 7.00M radius (4 Parts-Line)
32.5M	7,000kg x 8.00M radius (4 Parts-Line)
6.5M	3,200kg x 76 Degrees (1 Parts-Line)
10.25M	2,000kg x 71 Degrees (1 Parts-Line)
14.0M	1,350kg x 76 Degrees (1 Parts-Line)
Boom Length	7.50 Metres to 32.5 Metres
Jib Length	6.50 Metres to 14.0 Metres
Max. Lifting Height	33.40M (Main Boom) 47.3 (Jib)
Main Winch Single Winding Speed	125m / min (4th layer)
Auxiliary Winch Winding Speed	125m / min (4th layer)
Hook Speed	Main: 12.5m / min (4 part line) Aux: 125m / min (4 part line)
Boom Elevation Range	-10 degrees - 83 degrees
Boom Elevation Speed	-10 degrees - 83 degrees / 44 secs
Boom Extension Speed	7.50m - 32.50m / 85 secs
Swing Speed	2.6mins - 1
Swing Rear Radius	2.850m

CRANE DEVICE & MECHANISM

Boom Type	6 section telescoping boom of hexagonal construction (Stage 2,3 synchronized & 4,5,6 synchronized)
Jib	3 Stage type (with 2nd & 3rd being pull out)
Boom Extension	2 Double acting hydraulic cylinders
Boom Elevation	Hydraulic Cylinder Type
Hoist	2 single winch driven by hydraulic motor and via spur reducer With Free Fall device Automatic Brake with foot brake With flow regulation valve with pressure compensation
Swing	Hydraulic motor driven planetary gear reducer (with built in negative break) Swing free/lock changeover type
Swing Circle	Full bearing type
Outriggers	Type Fully Hydraulic H Type (floats mounted integrally, Vertical Cylinder) Extended Width Fully Extended Width (6,800mm) Middle Extended Width (6,300mm) Middle Extended Width (5,200mm) Middle Extended Width (4,200mm) Minimum Extended Width (2,310mm)
Wire Rope	Main Winch 16mm x 185m Aux Winch 16mm x 105m

HYDRAULIC DEVICE

Hydraulic Pump	2 Variable Plunger Type, 2 gear pump
Hydraulic Motor	Winch Axial plunger type Swing Axial plunger type
Control Valve	Multiple automatic stablization type (with pressure compensation flow control valve)
Cylinder	Double Acting Type
Hydraulic Oil Tank Capacity	500 Litres
Safety Devices	ACS Automatic moment limiter (with Alarm) Swing automatic stop device Working Area Control device Outrigger extension width detector Free Fall interlock device Over winding cutout device Winch drum lock Drum hold safety device Outrigger lock device

Safety Devices (Continued)	Angle meter Swing warning lamp Hydraulic Oil over heating alarm Hydraulic Oil element clogging alarm
Standard Equipment	Automatic brake device Hydraulic Safety valve Air Conditioner with dehumidifier AM/FM Radio with clock Visual Type winch drum rotation indicator Intermittent roof wiper with washer
Optional Equipment	Winch Camera TV Rear View Camera ACS External indication device Electric remote control side mirror Door visor

CHASSIS SPECIFICATIONS Travelling Performance

Max Travelling Speed	49km/h
Gradeability	0.55 (tan θ)
Minimum Turning Radius	8.2m (2 wheel drive) 4.90m (4 wheel drive)

DIMENSIONS AND WEIGHT

Overall Length	9,765mm
Overall Height	3,595mm
Wheel Base	3,650mm
Tread	Front 2,170mm Rear 2,170mm
Seating Capacity	1 (one)
Gross Vehicle Weight	28,055kg
	Front 14,040kg Rear 14,015kg

ENGINE (Complying with Ministry of Construction Emission Regulation)

Model	Mitsubishi 6M60-TLE3BA (With Turbo Charge)
Type	Water Cooled 4 cycle in-line 6 cylinder direct injection diesel engine
Engine Displacement	7,545L
Max Output	200kW/ 2,600min -1
Max Torque	775N.m / 1,600min -1

CHASSIS DEVICE AND MECHANISM

Drive	2 - Wheel Drive (4x2) / 4 - Wheel Drive (4x4)
Torque Converter	3 Elements, 1 Stage unit (with automatic lock up mechanism)
Transmission	Automatic & Manual Transmission 4 Forward and 1 Reverse Speeds (Hi / Low setting)
Axle - Front and Rear	Full Floating Type with 2 stage reduction device+
Main Brake	2 line hydro-pneumatic disc brake (4 wheels)
Parking Brake	Mechanically Operated, internal expanding shoe type

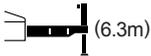
CHASSIS SPECIFICATIONS Chassis Device and Mechanism

Auxiliary Brake	Electro-pneumatic operated exhaust brake
Suspension	Front Coil Spring, 4 - link type (with hydraulic lock cylinder) Rear Coil Spring, 4 - link type (with hydraulic lock cylinder)
Steering	Fully hydraulic power steering with reverse steering correction mechanism
Tyres	Front 385/95/R25 170E Road Rear 385/95/R25 170E Road
Fuel Tank Capacity	300 Litres
Batteries	(12V-120AH) x 2
Safety Devices	Electric retractable side view mirror Emergency steering device Rear wheel steering lock device Overshift pervention device Brake Oil leakage alarm Suspension lock device Engine over run alarm Radiator low water level alarm Air filter clogging alarm



17.5m Boom + 6.5m Fly Jib

		 (6.8m)							
		Outriggers Fully Extended							
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	
83	2.7	3.20	4.5	3.20	6.2	2.20	7.0	1.60	
80	3.8	3.20	5.7	3.20	7.2	2.20	8.1	1.60	
75	5.8	3.20	7.7	3.18	9.1	2.20	9.6	1.60	
70	7.8	3.20	9.6	2.97	10.8	2.13	11.1	1.60	
66	9.4	3.20	11.0	2.82	12.1	2.09	12.3	1.59	
63	10.4	3.20	12.0	2.72	13.0	2.06	13.2	1.58	
60	11.6	3.20	13.1	2.63	13.8	2.04			
55	13.3	3.15	14.6	2.53	15.3	2.03			
50	14.7	2.95	16.0	2.45	16.4	2.03			
46	16.0	2.79	16.9	2.40	17.2	2.02			
40	17.4	2.26	18.2	1.99					
35	18.5	1.88	19.2	1.68					
30	19.5	1.52	20.1	1.36					
26	20.1	1.32	20.8	1.12					
20	20.7	1.14							
15	21.3	0.96							
8	21.8	0.77							
Critical Boom Angle	7°		25°		45°		62°		
Hook Block	4t Hook Block								
Hook Block Weight	60kg								
Parts of Line	1								

		 (6.3m)							
		Outriggers Intermediately Extended							
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	
83	2.7	3.20	4.5	3.20	6.2	2.20	7.0	1.60	
80	3.8	3.20	5.7	3.20	7.2	2.20	8.1	1.60	
75	5.8	3.20	7.7	3.18	9.1	2.20	9.6	1.60	
70	7.8	3.20	9.6	2.97	10.8	2.13	11.1	1.60	
66	9.4	3.20	11.0	2.82	12.1	2.09	12.3	1.59	
63	10.4	3.20	12.0	2.72	13.0	2.06	13.2	1.58	
60	11.6	3.20	13.1	2.63	13.8	2.04			
55	13.3	3.15	14.6	2.53	15.3	2.03			
50	14.7	2.95	16.0	2.45	16.4	2.03			
46	16.0	2.50	16.9	2.09	17.2	2.02			
40	17.4	1.90	18.2	1.63					
35	18.5	1.52	19.2	1.29					
30	19.5	1.15	20.0	1.05					
26	20.1	0.97	20.7	0.80					
20	20.7	0.80							
15	21.3	0.60							
8	21.8	0.41							
Critical Boom Angle	7°		25°		45°		62°		
Hook Block	4t Hook Block								
Hook Block Weight	60kg								
Parts of Line	1								

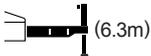
17.5m Boom + 10.25m Fly Jib

		 (6.8m)							
		Outriggers Fully Extended							
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	
83	3.1	2.00	6.5	1.90	9.1	1.20	10.4	0.90	
80	4.5	2.00	8.0	1.90	10.4	1.20	11.5	0.90	
75	7.0	2.00	10.2	1.67	12.3	1.17	13.2	0.90	
70	9.2	2.00	12.3	1.50	14.1	1.12	15.0	0.89	
66	11.0	2.00	13.8	1.39	15.5	1.08	16.1	0.88	
63	12.3	2.00	14.9	1.33	16.5	1.06	16.8	0.87	
60	13.6	1.92	16.0	1.27	17.4	1.04			
55	15.5	1.69	17.5	1.20	18.8	1.02			
50	17.4	1.50	19.2	1.13	20.0	1.01			
46	18.7	1.40	20.3	1.10	20.9	1.01			
40	20.4	1.28	21.8	1.06					
35	21.7	1.21	22.9	1.04					
30	22.7	1.16	23.7	1.03					
26	23.4	1.07	24.2	1.03					
20	24.5	0.85							
15	25.2	0.72							
6	25.6	0.60							
Critical Boom Angle	5°		25°		45°		62°		
Hook Block	4t Hook Block								
Hook Block Weight	60kg								
Parts of Line	1								

		 (6.3m)							
		Outriggers Intermediately Extended							
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	
83	3.1	2.00	6.5	1.90	9.1	1.20	10.4	0.90	
80	4.5	2.00	8.0	1.90	10.4	1.20	11.5	0.90	
75	7.0	2.00	10.2	1.67	12.3	1.17	13.2	0.90	
70	9.2	2.00	12.3	1.50	14.1	1.12	15.0	0.89	
66	11.0	2.00	13.8	1.39	15.5	1.08	16.1	0.88	
63	12.3	2.00	14.9	1.33	16.5	1.06	16.8	0.87	
60	13.6	1.92	16.0	1.27	17.4	1.04			
55	15.5	1.69	17.5	1.20	18.8	1.02			
50	17.4	1.50	19.2	1.13	20.0	1.01			
46	18.7	1.40	20.3	1.10	20.9	1.01			
40	20.4	1.28	21.8	1.06					
35	21.7	1.07	22.9	0.87					
30	22.7	0.86	23.7	0.71					
26	23.4	0.72	24.2	0.61					
20	24.5	0.53							
15	25.2	0.40							
6	25.6	0.32							
Critical Boom Angle	5°		25°		45°		62°		
Hook Block	4t Hook Block								
Hook Block Weight	60kg								
Parts of Line	1								

17.5m Boom + 14.0m Fly Jib

		 (6.8m)							
		Outriggers Fully Extended							
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	
83	4.0	1.35	8.7	0.80	12.1	0.50	14.0	0.40	
80	6.8	1.35	10.2	0.80	13.5	0.50	15.3	0.40	
75	8.5	1.35	12.7	0.71	15.6	0.48	17.1	0.40	
70	11.1	1.22	15.0	0.63	17.6	0.45	18.5	0.40	
66	13.0	1.03	16.7	0.59	19.0	0.44	19.7	0.40	
63	14.5	0.92	18.0	0.55	20.1	0.43	20.0	0.40	
60	15.8	0.83	19.1	0.53	20.9	0.42			
55	18.0	0.72	21.0	0.49	22.3	0.42			
50	20.0	0.64	22.7	0.46	23.8	0.41			
46	21.5	0.59	24.0	0.45	25.0	0.41			
40	23.4	0.54	25.5	0.43					
35	25.1	0.50	26.5	0.42					
30	26.3	0.47	27.4	0.42					
26	27.2	0.46	28.0	0.42					
20	28.1	0.44							
15	28.9	0.43							
6	29.3	0.43							
Critical Boom Angle	5°		25°		45°		62°		
Hook Block	4t Hook Block								
Hook Block Weight	60kg								
Parts of Line	1								

		 (6.3m)							
		Outriggers Intermediately Extended							
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	
83	4.0	1.35	8.7	0.80	12.1	0.50	14.0	0.40	
80	6.8	1.35	10.2	0.80	13.5	0.50	15.3	0.40	
75	8.5	1.35	12.7	0.71	15.6	0.48	17.1	0.40	
70	11.1	1.22	15.0	0.63	17.6	0.45	18.5	0.40	
66	13.0	1.03	16.7	0.59	19.0	0.44	19.7	0.40	
63	14.5	0.92	18.0	0.55	20.1	0.43	20.0	0.40	
60	15.8	0.83	19.1	0.53	20.9	0.42			
55	18.0	0.72	21.0	0.49	22.3	0.42			
50	20.0	0.64	22.7	0.46	23.8	0.41			
46	21.5	0.59	24.0	0.45	25.0	0.41			
40	23.4	0.54	25.5	0.43					
35	25.1	0.50	26.5	0.42					
30	26.3	0.47	27.4	0.42					
26	27.2	0.46	28.0	0.42					
20	28.1	0.40							
15	28.9	0.30							
Critical Boom Angle	14°		25°		45°		62°		
Hook Block	4t Hook Block								
Hook Block Weight	60kg								
Parts of Line	1								

17.5m Boom + 6.5m Fly Jib

(5.2m)								
Outriggers Fully Extended (5.2m)								
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)
83	2.7	3.20	4.5	3.20	6.2	2.20	7.0	1.60
80	3.8	3.20	5.7	3.20	7.2	2.20	8.1	1.60
75	5.8	3.20	7.7	3.18	9.1	2.20	9.6	1.60
70	7.8	3.20	9.6	2.97	10.8	2.13	11.1	1.60
66	9.4	3.20	11.0	2.82	12.1	2.09	12.3	1.59
63	10.4	3.20	12.0	2.72	13.0	2.06	13.2	1.58
60	11.6	3.20	13.1	2.63	13.8	2.04		
55	13.3	2.61	14.6	2.29	15.3	1.87		
50	14.7	1.98	16.0	1.65	16.4	1.36		
46	16.0	1.42	16.9	1.29	17.2	1.08		
40	17.4	0.92	18.2	0.84				
35	18.5	0.57	19.2	0.54				
30	19.5	0.33	20.0	0.30				
Critical Boom Angle	29°		29°		45°		62°	
Hook Block	4t Hook Block							
Hook Block Weight	60kg							
Parts of Line	1							

(4.2m)								
Outriggers Intermediately Extended (4.2m)								
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)
83	2.7	3.20	4.5	3.20	6.2	2.20	7.0	1.60
80	3.8	3.20	5.7	3.20	7.2	2.20	8.1	1.60
75	5.8	3.20	7.7	3.18	9.1	2.20	9.6	1.60
70	7.8	3.20	9.6	2.97	10.8	2.13	11.1	1.60
66	9.4	3.20	11.0	2.82	12.1	2.09	12.3	1.59
63	10.4	2.98	12.0	2.35	13.0	2.06	13.2	1.58
60	11.6	2.35	13.1	1.91	13.8	1.73		
55	13.3	1.51	14.6	1.31	15.2	1.17		
50	14.7	0.92	16.0	0.75	16.3	0.73		
46	16.0	0.45	16.9	0.39	17.1	0.38		
Critical Boom Angle	45°		45°		45°		62°	
Hook Block	4t Hook Block							
Hook Block Weight	60kg							
Parts of Line	1							

17.5m Boom + 10.25m Fly Jib

(5.2m)								
Outriggers Fully Extended (5.2m)								
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)
83	3.1	2.00	6.5	1.90	9.1	1.20	10.4	0.90
80	4.5	2.00	8.0	1.90	10.4	1.20	11.5	0.90
75	7.0	2.00	10.2	1.67	12.3	1.17	13.2	0.90
70	9.2	2.00	12.3	1.50	14.1	1.12	15.0	0.89
66	11.0	2.00	13.8	1.39	15.5	1.08	16.1	0.88
63	12.3	2.00	14.9	1.33	16.5	1.06	16.8	0.87
60	13.6	1.92	16.0	1.27	17.4	1.04		
55	15.5	1.69	17.5	1.20	18.8	1.02		
50	17.4	1.42	19.2	1.09	20.0	1.01		
46	18.7	1.08	20.3	0.81	20.9	0.73		
40	20.4	0.65	21.8	0.49				
35	21.7	0.36						
Critical Boom Angle	34°		39°		45°		62°	
Hook Block	4t Hook Block							
Hook Block Weight	60kg							
Parts of Line	1							

(4.2m)								
Outriggers Intermediately Extended (4.2m)								
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)
83	3.1	2.00	6.5	1.90	9.1	1.20	10.4	0.90
80	4.5	2.00	8.0	1.90	10.4	1.20	11.5	0.90
75	7.0	2.00	10.2	1.67	12.3	1.17	13.2	0.90
70	9.2	2.00	12.3	1.50	14.1	1.12	15.0	0.89
66	11.0	2.00	13.8	1.39	15.5	1.08	16.1	0.88
63	12.3	2.00	14.9	1.33	16.5	1.06	16.8	0.87
60	13.6	1.79	16.0	1.27	17.4	1.04		
55	15.5	1.15	17.5	0.85	18.8	0.73		
50	17.4	0.60	19.2	0.42	20.0	0.35		
46	18.5	0.33						
Critical Boom Angle	45°		49°		49°		62°	
Hook Block	4t Hook Block							
Hook Block Weight	60kg							
Parts of Line	1							

17.5m Boom + 14.0m Fly Jib

(5.2m)								
Outriggers Fully Extended (5.2m)								
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)
83	4.0	1.35	8.7	0.80	12.1	0.50	14.0	0.40
80	6.8	1.35	10.2	0.80	13.5	0.50	15.3	0.40
75	8.5	1.35	12.7	0.71	15.6	0.48	17.1	0.40
70	11.1	1.22	15.0	0.63	17.6	0.45	18.5	0.40
66	13.0	1.03	16.7	0.59	19.0	0.44	19.7	0.40
63	14.5	0.92	18.0	0.55	20.1	0.43	20.0	0.40
60	15.8	0.83	19.1	0.53	20.9	0.42		
55	18.0	0.72	21.0	0.49	22.3	0.42		
50	20.0	0.64	22.7	0.46	23.8	0.41		
46	21.5	0.59	24.0	0.45	25.0	0.41		
40	23.4	0.49	25.5	0.37				
Critical Boom Angle	39°		39°		45°		62°	
Hook Block	4t Hook Block							
Hook Block Weight	60kg							
Parts of Line	1							

(4.2m)								
Outriggers Intermediately Extended (4.2m)								
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)
83	4.0	1.35	8.7	0.80	12.1	0.50	14.0	0.40
80	6.8	1.35	10.2	0.80	13.5	0.50	15.3	0.40
75	8.5	1.35	12.7	0.71	15.6	0.48	17.1	0.40
70	11.1	1.22	15.0	0.63	17.6	0.45	18.5	0.40
66	13.0	1.03	16.7	0.59	19.0	0.44	19.7	0.40
63	14.5	0.92	18.0	0.55	20.1	0.43	20.0	0.40
60	15.8	0.83	19.1	0.53	20.9	0.42		
55	18.0	0.72	21.0	0.49	22.3	0.42		
50	20.0	0.48	22.7	0.35				
Critical Boom Angle	49°		49°		54°		62°	
Hook Block	4t Hook Block							
Hook Block Weight	60kg							
Parts of Line	1							



32.5m Boom + 6.5m Fly Jib

(6.8m)									
Outriggers Fully Extended (5.2m)									
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	
83	5.4	3.20	7.7	3.20	9.2	2.20	9.8	1.60	
81	6.8	3.20	8.8	3.20	10.3	2.20	10.8	1.60	
76	10.6	3.20	12.2	2.64	13.5	2.07	14.0	1.60	
70	14.6	2.52	16.0	2.02	17.0	1.74	17.5	1.58	
65	17.7	1.98	18.9	1.65	19.8	1.46	20.1	1.41	
63	18.8	1.83	20.1	1.53	20.9	1.36	21.0	1.34	
58	21.6	1.49	22.7	1.29	23.4	1.18			
56	22.7	1.26	23.7	1.20	24.3	1.11			
50	25.5	0.68	26.3	0.66	26.9	0.63			
45	27.7	0.32	28.4	0.32					
Critical Boom Angle	44°		44°		47°		62°		
Hook Block	4t Hook Block								
Hook Block Weight	60kg								
Parts of Line	1								

(6.3m)									
Outriggers Intermediately Extended (4.2m)									
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	
83	5.4	3.20	7.7	3.20	9.2	2.20	9.8	1.60	
81	6.8	3.20	8.8	3.20	10.3	2.20	10.8	1.60	
76	10.6	3.20	12.2	2.64	13.5	2.07	14.0	1.60	
70	14.6	2.52	16.0	2.02	17.0	1.74	17.5	1.58	
65	17.7	1.98	18.9	1.65	19.8	1.46	20.1	1.41	
63	18.8	1.83	20.1	1.53	20.9	1.36	21.0	1.34	
62	19.4	1.75	20.6	1.48	21.4	1.32			
60	20.5	1.52	21.7	1.36	22.4	1.25			
59	21.0	1.38	22.2	1.27	22.8	1.21			
55	23.0	0.91	24.1	0.84	24.6	0.84			
51	24.9	0.54	25.8	0.52	26.3	0.50			
48	26.2	0.31	27.1	0.31	27.4	0.30			
Critical Boom Angle	47°		47°		47°		62°		
Hook Block	4t Hook Block								
Hook Block Weight	60kg								
Parts of Line	1								

32.5m Boom + 10.25m Fly Jib

(6.8m)									
Outriggers Fully Extended (5.2m)									
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	
83	6.0	2.00	9.8	1.90	12.2	1.20	13.3	0.90	
80	8.4	2.00	12.0	1.81	14.1	1.20	15.1	0.90	
75	12.6	2.00	15.6	1.58	17.5	1.13	18.2	0.88	
71	15.7	2.00	18.4	1.45	20.0	1.09	20.6	0.87	
69	17.1	1.89	19.7	1.38	21.2	1.07	21.7	0.86	
65	19.7	1.57	22.2	1.19	23.6	1.02	23.7	0.86	
63	21.0	1.43	23.4	1.10	24.7	0.97	24.7	0.86	
57	24.6	1.11	26.8	0.90	27.6	0.82			
56	25.3	1.02	27.3	0.87	28.1	0.79			
55	25.8	0.93	27.8	0.82	28.5	0.78			
50	28.4	0.52	30.1	0.47	30.6	0.47			
48	29.3	0.39	30.9	0.36					
Critical Boom Angle	47°		47°		49°		62°		
Hook Block	4t Hook Block								
Hook Block Weight	60kg								
Parts of Line	1								

(6.3m)									
Outriggers Intermediately Extended (4.2m)									
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	
83	6.0	2.00	9.8	1.90	12.2	1.20	13.3	0.90	
80	8.4	2.00	12.0	1.81	14.1	1.20	15.1	0.90	
75	12.6	2.00	15.6	1.58	17.5	1.13	18.2	0.88	
71	15.7	2.00	18.4	1.45	20.0	1.09	20.6	0.87	
69	17.1	1.89	19.7	1.38	21.2	1.07	21.7	0.86	
65	19.7	1.57	22.2	1.19	23.6	1.02	23.7	0.86	
63	21.0	1.43	23.4	1.10	24.7	0.97	24.7	0.86	
61	22.3	1.30	24.5	1.03	25.7	0.91			
59	23.4	1.13	25.6	0.96	26.7	0.86			
58	24.0	1.01	26.1	0.89	27.2	0.84			
53	26.7	0.54	28.6	0.48	29.4	0.46			
51	27.7	0.40	29.4	0.36	30.2	0.34			
Critical Boom Angle	50°		50°		50°		62°		
Hook Block	4t Hook Block								
Hook Block Weight	60kg								
Parts of Line	1								

32.5m Boom + 14.0m Fly Jib

(6.8m)									
Outriggers Fully Extended (5.2m)									
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	
83	7.2	1.35	12.0	0.80	15.1	0.50	16.7	0.40	
80	9.9	1.35	14.2	0.77	17.2	0.48	18.4	0.40	
76	13.5	1.35	17.3	0.69	20.0	0.46	21.1	0.39	
72	16.7	1.20	20.2	0.62	22.7	0.44	23.6	0.39	
70	18.2	1.09	21.7	0.59	24.0	0.43	24.8	0.39	
64	22.6	0.86	25.6	0.52	27.5	0.41	27.8	0.39	
60	25.3	0.76	28.3	0.49	29.8	0.40			
54	29.2	0.64	31.7	0.46	32.7	0.40			
52	30.3	0.52	32.7	0.45	33.6	0.40			
51	30.8	0.46	33.1	0.42	34.0	0.40			
50	31.4	0.40	33.7	0.35	34.4	0.35			
49	31.9	0.34	34.1	0.31					
Critical Boom Angle	48°		48°		49°		63°		
Hook Block	4t Hook Block								
Hook Block Weight	60kg								
Parts of Line	1								

(6.3m)									
Outriggers Intermediately Extended (4.2m)									
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	
83	7.2	1.35	12.0	0.80	15.1	0.50	16.7	0.40	
80	9.9	1.35	14.2	0.77	17.2	0.48	18.4	0.40	
76	13.5	1.35	17.3	0.69	20.0	0.46	21.1	0.39	
72	16.7	1.20	20.2	0.62	22.7	0.44	23.6	0.39	
70	18.2	1.09	21.7	0.59	24.0	0.43	24.8	0.39	
64	22.6	0.86	25.6	0.52	27.5	0.41	27.8	0.39	
60	25.3	0.76	28.3	0.49	29.8	0.40			
57	27.2	0.70	30.0	0.48	31.3	0.40			
55	28.4	0.56	31.1	0.47	32.1	0.40			
54	29.0	0.48	31.7	0.40	32.6	0.40			
53	29.6	0.40	32.2	0.34	33.1	0.34			
Critical Boom Angle	52°		52°		52°		63°		
Hook Block	4t Hook Block								
Hook Block Weight	60kg								
Parts of Line	1								

32.5m Boom + 6.5m Fly Jib

(5.2m)								
Outriggers Fully Extended (5.2m)								
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)
83	5.4	3.20	7.7	3.20	9.2	2.20	9.8	1.60
81	6.8	3.20	8.8	3.20	10.3	2.20	10.8	1.60
76	10.6	3.20	12.2	2.64	13.5	2.07	14.0	1.60
70	14.6	2.52	16.0	2.02	17.0	1.74	17.5	1.58
67	16.3	1.96	17.8	1.73	18.7	1.57	19.1	1.47
63	18.5	1.26	19.9	1.11	20.7	1.06	20.9	1.05
61	19.6	0.96	20.9	0.86	21.7	0.82		
59	20.6	0.72	21.8	0.66	22.8	0.57		
Critical Boom Angle	58°		58°		58°		62°	
Hook Block	4t Hook Block							
Hook Block Weight	60kg							
Parts of Line	1							

(4.2m)								
Outriggers Fully Extended (4.2m)								
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)
83	5.4	3.20	7.7	3.20	9.2	2.20	9.8	1.60
81	6.8	3.20	8.8	3.20	10.3	2.20	10.8	1.60
76	10.6	3.20	12.2	2.64	13.5	2.07	14.0	1.60
73	12.4	2.47	14.0	2.09	15.3	1.85	15.7	1.59
72	13.0	2.20	14.6	1.87	15.9	1.66	16.3	1.58
70	14.1	1.78	15.7	1.52	17.0	1.34	17.4	1.31
67	15.8	1.24	17.4	1.04	18.8	0.85	18.8	0.85
Critical Boom Angle	66°		66°		66°		66°	
Hook Block	4t Hook Block							
Hook Block Weight	60kg							
Parts of Line	1							

32.5m Boom + 10.25m Fly Jib

(5.2m)								
Outriggers Fully Extended (5.2m)								
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)
83	6.0	2.00	9.8	1.90	12.2	1.20	13.3	0.90
80	8.4	2.00	12.0	1.81	14.1	1.20	15.1	0.90
75	12.6	2.00	15.6	1.58	17.5	1.13	18.2	0.88
71	15.7	2.00	18.4	1.45	20.0	1.09	20.6	0.87
69	17.1	1.89	19.7	1.38	21.2	1.06	21.7	0.86
67	18.3	1.62	21.0	1.28	22.4	1.04	22.7	0.86
66	18.9	1.45	21.5	1.18	23.0	1.03	23.2	0.86
64	20.1	1.14	22.7	0.92	24.0	0.87	24.3	0.86
60	22.4	0.65	24.8	0.52	25.8	0.52		
Critical Boom Angle	59°		59°		59°		63°	
Hook Block	4t Hook Block							
Hook Block Weight	60kg							
Parts of Line	1							

(4.2m)								
Outriggers Fully Extended (4.2m)								
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)
83	6.0	2.00	9.8	1.90	12.2	1.20	13.3	0.90
80	8.4	2.00	12.0	1.81	14.1	1.20	15.1	0.90
75	12.6	2.00	15.6	1.58	17.5	1.13	18.2	0.88
73	14.2	1.98	17.1	1.50	18.8	1.11	19.4	0.87
71	15.3	1.63	18.2	1.26	20.0	1.09	20.6	0.87
68	17.0	1.18	19.9	0.88	21.8	0.73	22.2	0.73
Critical Boom Angle	67°		67°		67°		67°	
Hook Block	4t Hook Block							
Hook Block Weight	60kg							
Parts of Line	1							

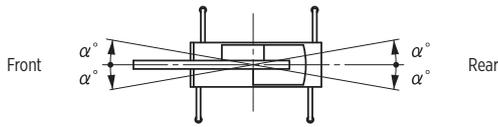
32.5m Boom + 14.0m Fly Jib

(5.2m)								
Outriggers Fully Extended (5.2m)								
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)
83	7.2	1.35	12.0	0.80	15.1	0.50	16.7	0.40
80	9.9	1.35	14.2	0.77	17.2	0.48	18.4	0.40
76	13.5	1.35	17.3	0.69	20.0	0.46	21.1	0.39
72	16.7	1.20	20.2	0.62	22.7	0.44	23.6	0.39
70	18.2	1.09	21.7	0.59	24.0	0.43	24.8	0.39
64	22.5	0.86	25.6	0.52	27.5	0.41	27.8	0.39
61	24.3	0.59	27.6	0.45	29.3	0.40		
Critical Boom Angle	60°		60°		60°		63°	
Hook Block	4t Hook Block							
Hook Block Weight	60kg							
Parts of Line	1							

(4.2m)								
Outriggers Fully Extended (4.2m)								
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)
83	7.2	1.35	12.0	0.80	15.1	0.50	16.7	0.40
80	9.9	1.35	14.2	0.77	17.2	0.48	18.4	0.40
76	13.5	1.35	17.3	0.69	20.0	0.46	21.1	0.39
72	16.7	1.20	20.2	0.62	22.7	0.44	23.6	0.39
69	18.9	0.97	22.3	0.58	24.5	0.43	25.3	0.39
Critical Boom Angle	68°		68°		68°		68°	
Hook Block	4t Hook Block							
Hook Block Weight	60kg							
Parts of Line	1							

Rated lifting capacity chart when Outriggers are used

- 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. It includes the mass of the hook and all other lifting equipment (slings, chains etc) The area of the rated lifting capacity chart surrounded by a bold line is the area in which capacity determined by the structural strength of the crane. Elsewhere the crane's stability is the deciding factor.
- The working radius is based on the actual radius including boom deflection. Always use the actual working radius as the standard criterion for crane operation.
- The jib working radius is based on the jib mounted on the end of the 32.0M Boom. If the Boom is at any other length (17.5m) use the Boom Angle as the standard criterion for



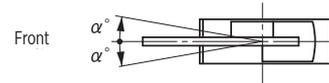
O/R Extent. Status	Outrigger (6.3m)	Outrigger (3.7m)	Outrigger (2.7m)	Fully Retracted
Range	30	30	15	3

crane operation. (The jib is optional).

- Never operate the jib when the outriggers are fully retracted. (The jib is optional).
- The rated lifting capacity of the Rooster Sheave is the rated capacity of the boom minus the mass of all attached lifting equipment (slings, chains etc) to the boom with an upper limit of 4,000kg. (The hook for use with the Rooster sheave is the 4Ton Hook (mass 60 kg) with one part of line.
- If the boom length exceeds the rated length use the rated lifting capacity for the rated length or for the next highest boom length step, whichever gives the smaller lifting capacity.
- If you are working with the boom while the jib is rigged subtract 1,000kg from the rated lifting capacity as well as subtracting the mass of the slings etc. Do not use the rooster sheave in this situation. (The jib is optional).
- In whatever working conditions the corresponding boom critical angle is shown in the table. Lowering the boom below the critical angle could cause the machine to tip over even if the crane is not carrying any added load.
- The standard parts of line for each boom length are as shown in the table. If you work with a non standard number of parts of line take 4,000kg as the maximum load on any part of the wire rope.
- The rated lifting capacity does not take the effects of wind into account. Stop immediately if the wind speed reaches 10m/s even briefly.
- KATO bears no responsibility whatsoever for damage, crane tipping or other accidents caused by crane operators which differ from the directions contained in the instructional manual and the warning labels.
- The parts of standard hook line required for each boom length is as stated in the chart. When the standard number of parts of line is not used each wire rope is limited to 36.3kN (3.7tf).

Rated lifting capacity chart when outriggers are not used.

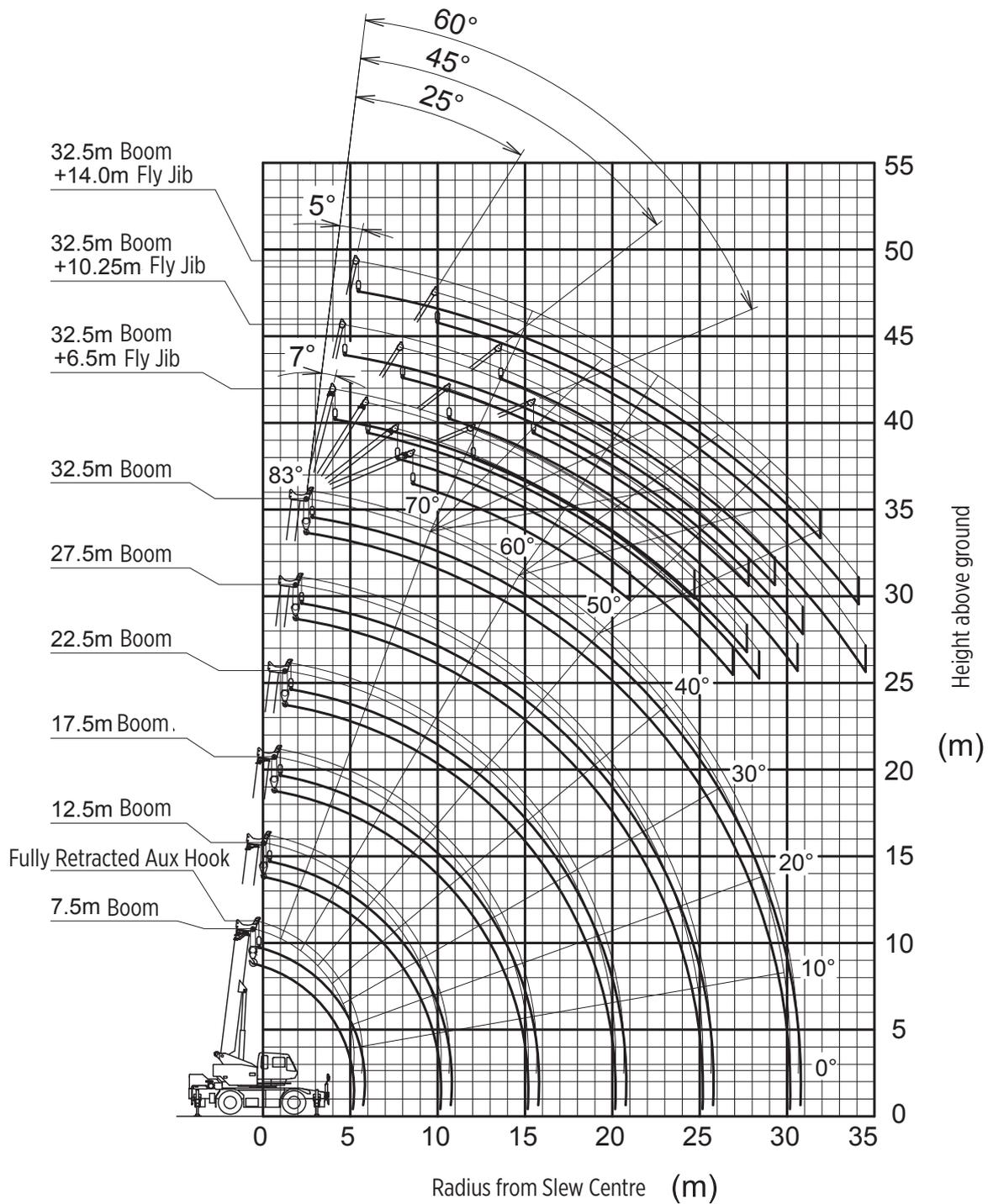
- The rated lifting capacity chart indicates the maximum load which can be lifted by this crane provided it is standing on firm level ground with all tyres inflated to the rated pressure and with the suspension lock cylinders fully retracted. It includes the mass of the hook and all other lifting equipment. The area of the rated lifting capacity chart surrounded by bold line is the area in which capacity is determined by structural strength of the crane. Elsewhere the crane stability is the deciding factor (Rated tyre pressure 9.0bar/900kPa / 9.00kgf/cm²).



Crane Operation	Stationary on Rubber	Pick & Carry
Area	1	1

- 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 overloaded.
- Do not work with the jib or with a boom length of more than 22.5m. (The jib is optional).
- Always engage the parking brake before you start stationary on rubber operations.
- For pick and carry operation the high/low speed switch must be switched to "ON" (low range) and the shift lever set to speed 1.
- For pick and carry operations lower the load to just above ground level and keep your speed strictly less than 2 km/h to avoid swinging the load. Take particular care to avoid sharp cornering and sudden start and stops.
- Never operate the crane during pick and carry operation. The slewing brake must always be engaged.
- Other than the above precautions observe points 2,5,6,8,9,10 and 11 of section "precautions on outrigger use".
- The parts of standard hook line required for each boom length is as stated in the chart. When the standard number of parts of line is not used each wire rope is limited to 36.3kN (3.7tf).

Working Range Diagram

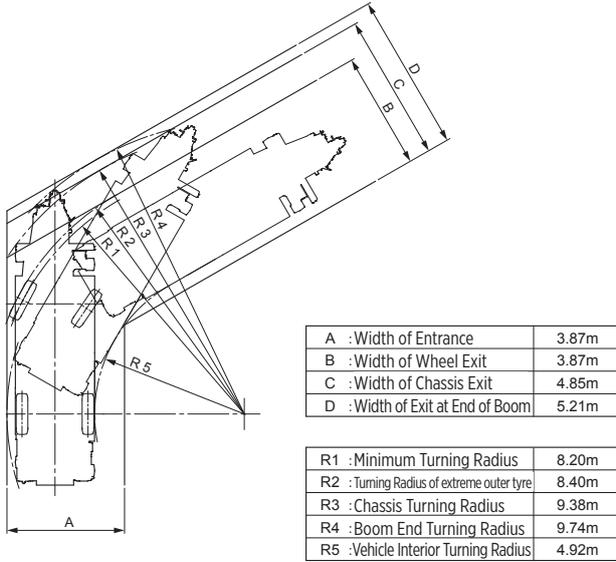


Notes:

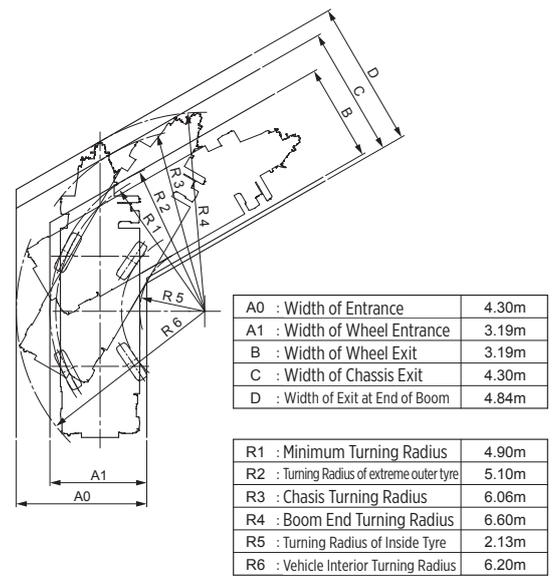
1. This diagram does not reflect deflection of Boom and Fly Jib
2. Chart based on operation with all outriggers at full extension

Minimum Road Width for a Right-Angle Turn

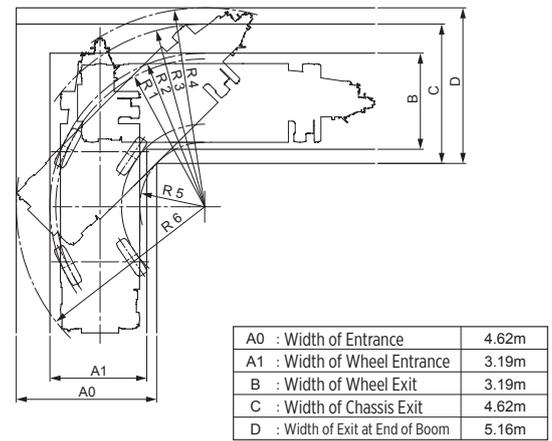
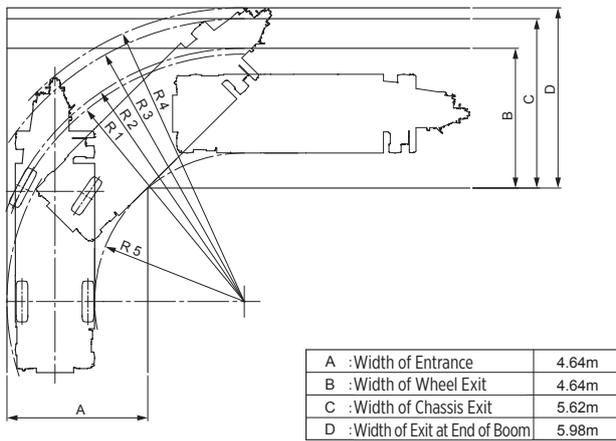
● 60° Right Turn in 2-Wheel Steering Mode



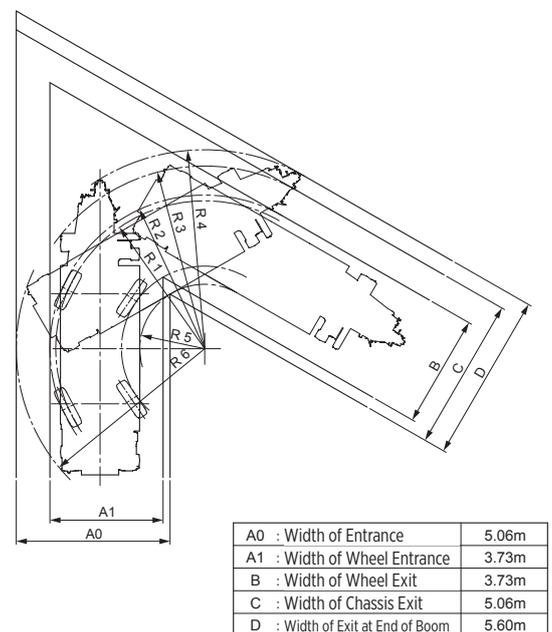
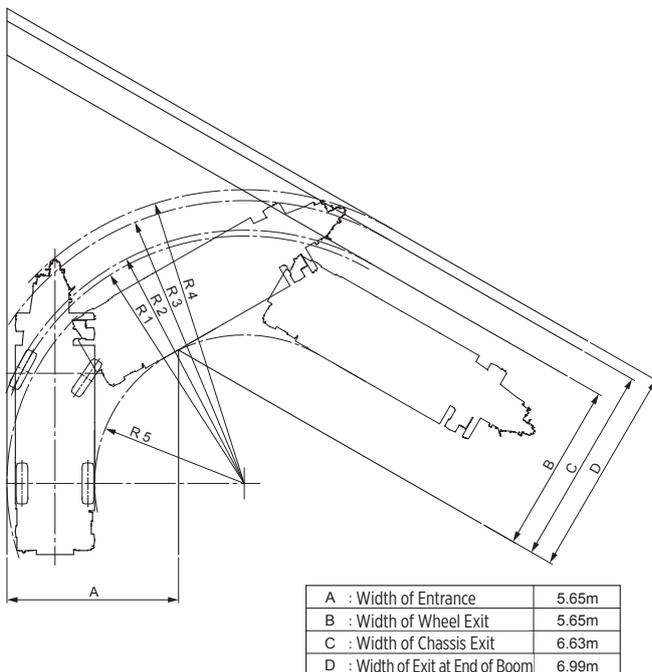
Right Turn in 4-Wheel Steering Mode



● 90°

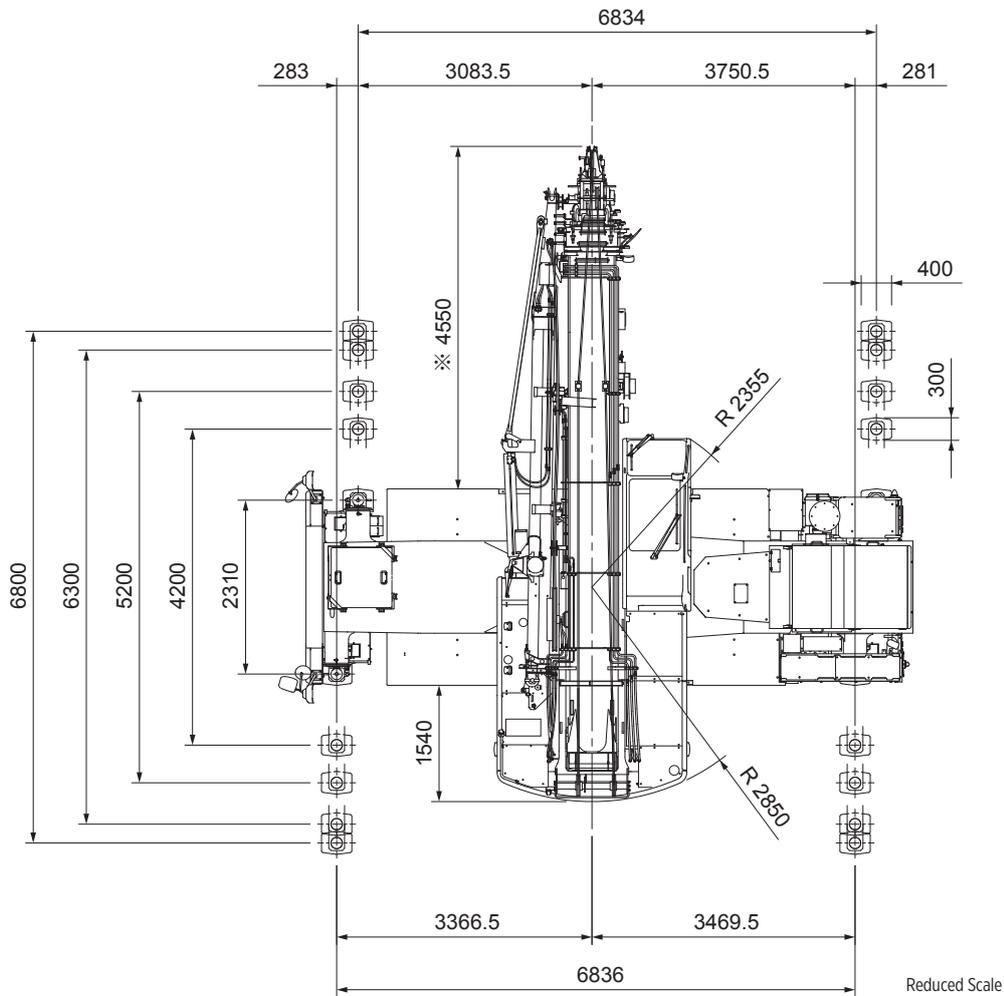
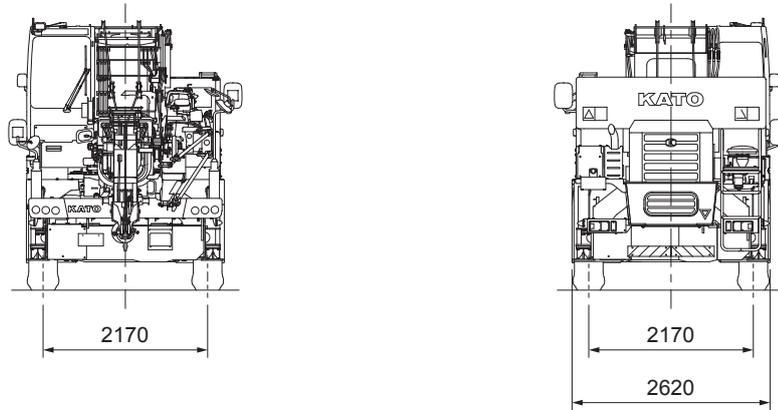


● 120°

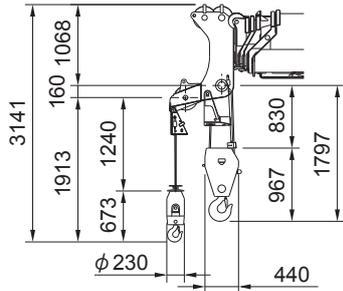


Note: The above figures are calculated values.

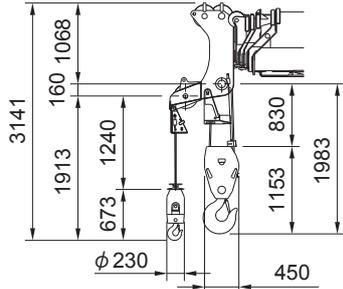
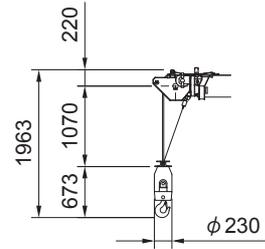
Overall View



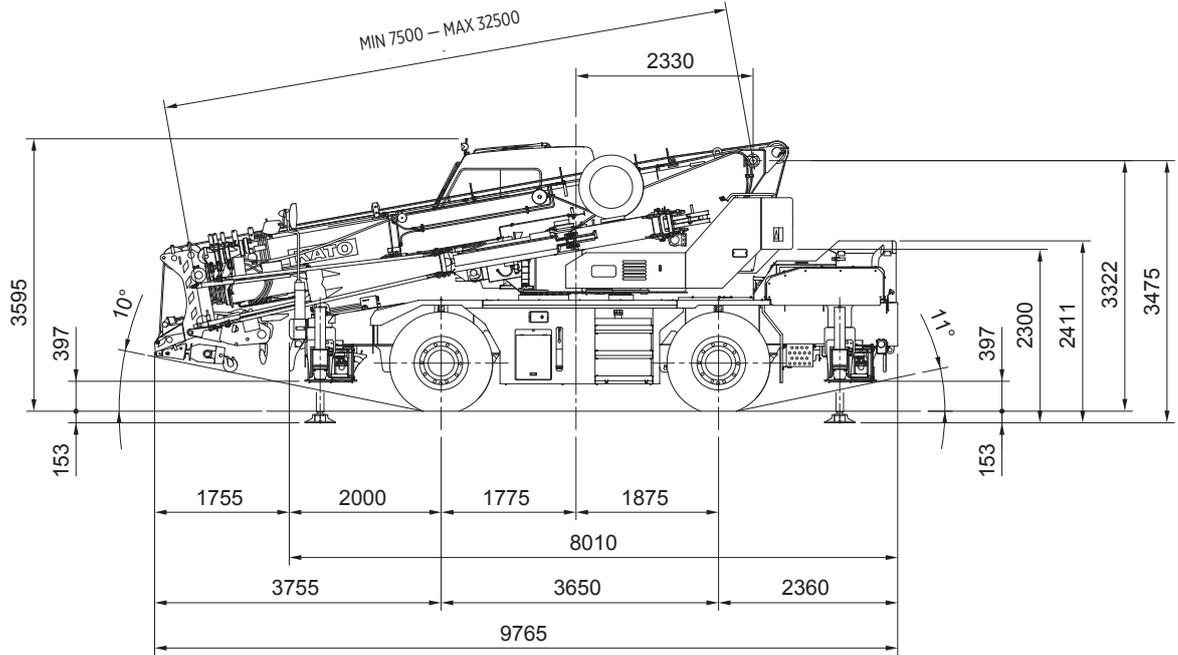
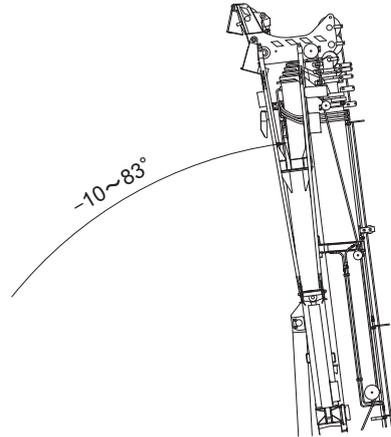
Overall View



Hook



Hook



Products and Specifications are subject to improvements without notice

Measurement (mm)