

Kato MR-250R City Ace (KRM-25H-II) Mobile Crane

SPECIFICATION

Crane Specification

Crane Performance

Rated Lifting Capacity	6.70m Boom	25 Tonne @ 2.8m	(7 Parts of Line)
	10.96m Boom	12 Tonne @ 6.0m	(4 Parts of Line)
	15.22m Boom	12 Tonne @ 5.5m	(4 Parts of Line)
	21.61m Boom	8 Tonne @ 7.0m	(4 Parts of Line)
	28.0m Boom	7 Tonne @ 6.0m	(4 Parts of Line)
	5.4m Jib	3 Tonne @ 74°	(1 Part of Line)
	8.2m Jib	2 Tonne @ 77°	(1 Part of Line)
Boom Length	6.7m - 28.0m		
Jib Length	5.4m - 8.2m		
Maximum Lifting Height Above Ground	29.0m (Boom) 37.3m (Jib)		
Line Speed (Main)	115m/min (4th layer)		
Line Speed (Auxiliary)	115m/min (4th layer)		
Hook Speed (Main)	(Parts of Line 7): 16.4m/min (4th layer)		
Hook Speed (Auxiliary)	(Parts of Line 1): 115m/min (4th layer)		
High Speed			
Lowering Rope Speed			
Main	180m/min (5th layer)		
Auxiliary	155m/min (3rd layer)		
Boom Derricking Range	-10° ~ 83°		
Boom Raising Speed	-10° ~ 83°/38 sec		
Boom Extension Speed	6.7m ~ 28.0m/67 sec		
Slewing Speed	2.6min ⁻¹		
Rear Slewing Radius	1,600 mm		

Crane Equipment and Structure

Boom Type	Closed 6 Stage Hydraulic Telescopic Type (Simultaneous 2 • 3 Stage, Simultaneous 4 • 5 • 6 Stage)	
Jib Type	2 Stage Type 5.4 – 8.2M Hydraulically Telescopic & Retractable Hydraulic Luffing from (Offset 7°~ 60°)	
Boom Extension Equipment	Hydraulic Cylinder (2) with Wire Rope	
Boom Derricking Equipment	Direct Press Hydraulic Cylinder Type, Flow Regulator with Pressure Compensator	
Hoist Equipment	Group 2 Single Winch, Hydraulic Motor Drive · Differential Gear Speed Reduction Type, High/Low Speed Changer Type with Automatic Brakes, Flow Regulator with Pressure Compensator	
Slewing Equipment	Hydraulic Motor Drive with Planet Gear Speed Reducer (Built-in Negative Brake)	
Slew Circle	Ball Bearing Type	
Outrigger Equipment	Type	Fully Hydraulic H Type (Float, Vertical Cylinder Model)
	Extension Range	6,000 mm (Full Extension)
		5,200 mm (Intermediate Extension)
		4,400 mm (Intermediate Extension) 2,090 mm (Full Retraction)
Wire Rope	Main	Non Flammable Wire Rope ø 16mm × 160m
	Auxiliary	Non Flammable Wire Rope ø 16mm × 80m

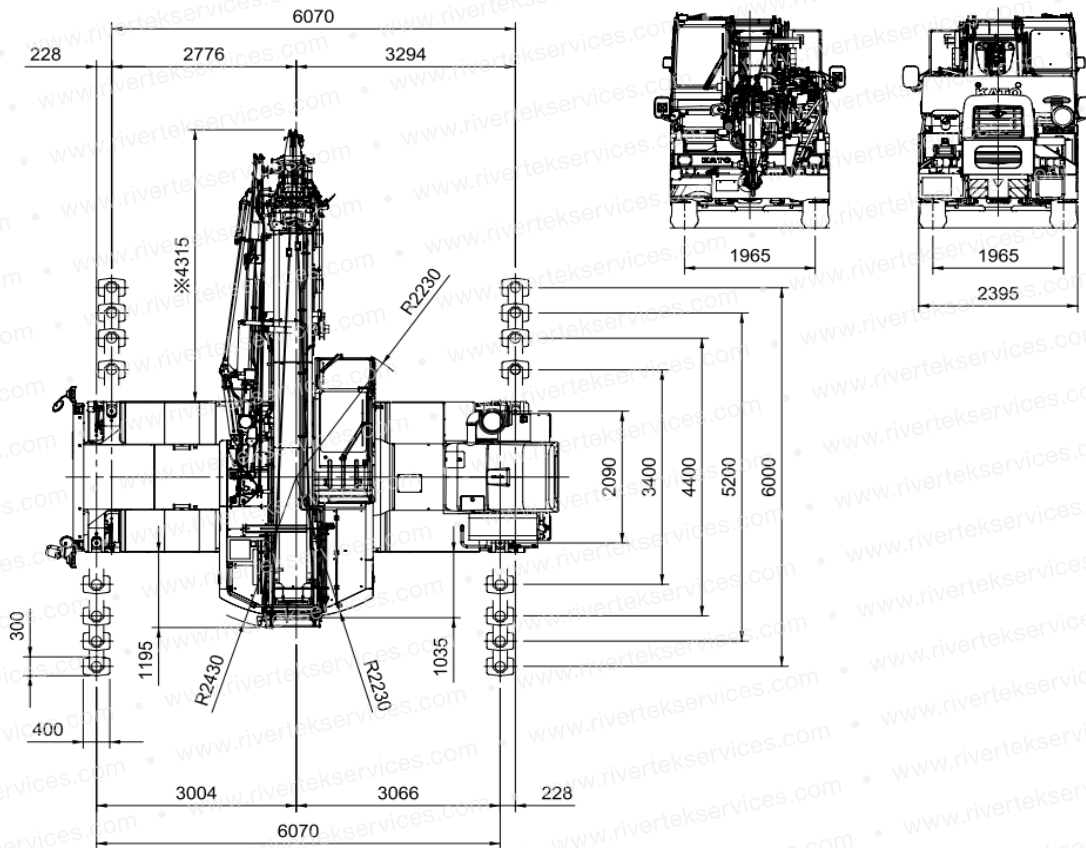
Hydraulic Equipment

Hydraulic Pump	Double Variable Plunger Type, Variable Plunger + Gear Type
Hydraulic Motor	Hoisting and Slewing: Axial Plunger Type
Control Valve	Multiple Auto Recovery Type (with Pressure Compensator, Flow Regulator)
Cylinder	Double Acting Type

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SPECIFICATION Crane Specification

(measurement: mm)



Safety Equipment

- ACS (with Overload Prevention/Voice Alarm Device)
- Boom Freefall Prevention Device
- Overhoist Prevention Device
- Automatic Brake Device
- Hydraulic Safety Valve
- Outrigger Lock Device

Standard Equipment

- Drum Revolution Indicator Device

Cab Components

- Dehumidifying Air Conditioner,
- Tilt/Telescopic Handle,
- Fully Adjustable Suspension Seat (with Headrest and Armrest),
- Power Windows (with Open Window Prevention Switch),
- Hot and Cool Box, Intermittent Front and Roof Wipers (with Washers),
- Lunch Table, AM/FM Clock Radio, Cigarette Lighter, Step Light,
- Fire Extinguisher, Floor Mat

Optional Components

- Fly Jib, Hook for 25 Ton, Amplifier

Driving Performance

Uphill Ability	0.60 (tan θ)
Minimum Turning Radius	8.3m (2 Wheel Steering)
	5.0m (4 Wheel Steering)

Weight and Dimensions

Overall Length	9,175 mm approx.	
Overall Width	2,395 mm approx.	
Overall Height	3,400 mm approx.	
Distance Between Axles	3,540 mm approx.	
Treads	Front	1,965 mm
	Rear	1,965 mm
Seats	1	
Gross Vehicle Weight	24,545 kg approx.	
Front Axle Weight	12,270 kg approx.	
Rear Axle Weight	12,275 kg approx.	

Engine

Engine Model	Mitsubishi 6M60-TLE3A
Engine Type	Water Cooled, 4 Cycle, In-Line 6 Cylinder, Direct Injection Type Diesel Engine
Total Emission	7.545L
Maximum Power	200kW @ 2,600min ⁻¹
Maximum Torque	785N·m @ 1,400min ⁻¹

Carrier Components and Structure

Drive System	2 Wheel Drive (4×2), 4 Wheel Drive (4×4) Switching System	
Torque Converter	3 Components, 1 Stage (with Automatic Lock Up Mechanism)	
Transmission Type	Complete Automatic and Manual Gear Transmission Type	
Number of Gears	4 Forward Gears, 2 Reverse Gears	
Axle Type	Front	Full Floating Type, 2 Stage Reducer Type
	Rear	Full Floating Type, 2 Stage Reducer Type
Suspension Components	Front	Taper Leaf Spring Type (Hydraulic Lock Cylinder Type)
	Rear	Taper Leaf Spring Type (Hydraulic Lock Cylinder Type)
Brake Components	Main Brake	Dual System Combined Hydraulic Pneumatic Type, 4 Wheel Disc Brakes
	Park Brake	Pneumatic Type, Transmission Braking Internal Expansion Type
	Auxiliary Brake	Torque Converter Lock Up Interlocking Exhaust Retarder, Auxiliary Braking Device for Operation
Steering Device	Type	Complete Hydraulic Type Power Steering
	Mode	Front 2 Wheels, Rear 2 Wheels, Front/Back Wheels Independent (with Rear Steering Lock Mechanism)
Tyre Size	Front	385 / 95 R25 170E ROAD
	Rear	385 / 95 R25 170E ROAD
Fuel Tank Capacity	300L	
Battery	(12V-120AH) ×2	

Safety Components

	Emergency Steering Device, Rear Wheel Steering Lock Device, Brake Fluid Leakage Alarm Device, Auxiliary Braking, Suspension Lock Device, Radiator Fluid Level Alarm Device
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RATED LIFTING CAPACITY CHART (1)

Unit (Ton)

BS 1757:1986
Based on DIN 15019-2
75% of tipping loads

Working Radius (meters)	Outriggers Fully Extended(6.0m) - 360° Full Range					Outriggers Partly Extended (5.2m) - 360° Full Range					Outriggers Partly Extended (4.4m) - 360° Full Range					Outriggers Partly Extended (3.4m) - 360° Full Range				
	6.7M Boom	10.96M Boom	15.22M Boom	21.61M Boom	28.0M Boom	6.7M Boom	10.96M Boom	15.22M Boom	21.61M Boom	28.0M Boom	6.7M Boom	10.960M Boom	15.22M Boom	21.61M Boom	28.0M Boom	6.7M Boom	10.96M Boom	15.22M Boom	21.61M Boom	28.0M Boom
2.8	25.00*	12.00	12.00	8.00		25.00*	12.00	12.00	8.00		25.00*	12.00	12.00	8.00		25.00*	12.00	12.00	8.00	
3.0	22.00	12.00	12.00	8.00		22.00	12.00	12.00	8.00		22.00	12.00	12.00	8.00		21.50	12.00	12.00	8.00	
3.5	20.00	12.00	12.00	8.00		20.00	12.00	12.00	8.00		20.00	12.00	12.00	8.00		15.20	12.00	12.00	8.00	
4.0	17.00	12.00	12.00	8.00	7.00	17.00	12.00	12.00	8.00	7.00	17.00	12.00	12.00	8.00	7.00	11.40	11.40	11.40	8.00	7.00
4.5	15.00	12.00	12.00	8.00	7.00	15.00	12.00	12.00	8.00	7.00	15.00	12.00	12.00	8.00	7.00	9.00	9.00	9.00	8.00	7.00
5.0		12.00	12.00	8.00	7.00		12.00	12.00	8.00	7.00		12.00	12.00	8.00	7.00		7.30	7.30	8.00	7.00
5.5		12.00	12.00	8.00	7.00		12.00	12.00	8.00	7.00		9.85	9.80	8.00	7.00		6.00	6.00	6.70	6.50
6.0		12.00	11.50	8.00	7.00		11.55	11.50	8.00	7.00		8.30	8.25	8.00	7.00		5.05	5.05	5.70	5.80
6.5		11.30	10.60	8.00	6.75		9.75	9.70	8.00	6.75		7.05	7.00	7.40	6.75		4.30	4.30	4.90	5.20
7.0		10.70	9.90	8.00	6.50		8.40	8.35	8.00	6.50		6.05	6.05	6.70	6.50		3.70	3.70	4.30	4.60
8.0		8.40	8.40	7.10	5.90		6.40	6.35	7.10	5.90		4.60	4.55	5.25	5.60		2.75	2.75	3.35	3.65
9.0		6.60	6.60	6.35	5.35		5.00	5.00	5.65	5.35		3.60	3.55	4.20	4.50		2.05	2.05	2.60	2.90
10.0			5.30	5.70	4.80			4.00	4.65	4.80			2.80	3.40	3.70			1.45	2.05	2.35
11.0			4.35	5.00	4.30			3.20	3.85	4.15			2.15	2.80	3.10			0.90	1.65	1.90
12.0			3.58	4.20	3.85			2.60	3.20	3.55			1.60	2.30	2.60			0.50	1.25	1.55
13.0			2.95	3.58	3.50			2.05	2.70	3.00			1.15	1.90	2.20				0.90	1.25
14.0				3.05	3.20				2.30	2.60				1.50	1.85				0.60	0.95
15.0				2.65	2.90				1.90	2.25				1.20	1.55					0.70
16.0				2.25	2.58				1.55	1.90				0.90	1.25					
17.0				1.90	2.26				1.25	1.60				0.65	1.00					
18.0				1.60	1.95				1.00	1.35				0.45	0.80					
19.0				1.35	1.68				0.80	1.14				0.60						
20.0			[19.7M]	1.19	1.45			[19.7M]	0.68	0.94				0.45						
21.0					1.24					0.75										
22.0					1.05					0.60										
23.0					0.88					0.46										
24.0					0.74															
25.0					0.61															
26.0					0.50															
Critical Boom Angle	/	/	/	/	/	/	/	/	/	27°	/	/	/	22°	39°	/	/	22°	43°	54°
Standard Hook (ton)	25t					25t					25t					25t				
Hook Block Weight	220kg					220kg					220kg					220kg				
Parts of Line	7*/6	4				7*/6	4				7*/6	4				7*/6	4			

Working Radius (meters)	Outriggers Fully Retracted(2.09m) - 360° Full Range				
	6.7M Boom	10.96M Boom	15.22M Boom	21.61M Boom	28.0M Boom
2.8	9.00	9.00	9.00	8.00	
3.0	8.50	8.50	8.00	7.70	
3.5	6.40	6.35	6.30	6.30	
4.0	5.00	4.95	4.85	5.20	4.30
4.5	3.95	3.90	3.85	4.35	3.70
5.0		3.15	3.10	3.65	3.20
5.5		2.55	2.50	3.10	2.80
6.0		2.05	2.00	2.60	2.40
6.5		1.70	1.65	2.15	2.10
7.0		1.35	1.30	0.70	1.70
Critical Boom Angle	/	35°	55°	67°	73°
Standard Hook (ton)	25t				
Hook Block Weight	220kg				
Parts of Line	6	4			



RATED LIFTING CAPACITY CHART (2)

28.0 Metre Boom + 5.4 Metre Jib (Standard Hook for 4Ton. Hook Mass 60kg)

Unit (Ton)

Outriggers Fully Extended 6.0 Metres - 360° full range									Outriggers Partly Extended 5.2 Metres - 360° full range								Outriggers Partly Extended 4.4 Metres - 360° full range									
Boom Angle (degrees)	Offset 7°		Offset 25°		Offset 45°		Offset 60°		Boom Angle (degrees)	Offset 7°		Offset 25°		Offset 45°		Offset 60°		Boom Angle (degrees)	Offset 7°		Offset 25°		Offset 45°		Offset 60°	
	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)		Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)		Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)
83	4.00	3.00	5.60	2.50	6.90	1.60	7.40	0.80	83	4.00	3.00	5.60	2.50	6.90	1.60	7.40	0.80	83	4.00	3.00	5.60	2.50	6.90	1.60	7.40	0.80
78	7.10	3.00	8.60	2.50	9.70	1.60	10.10	0.80	78	7.10	3.00	8.60	2.50	9.70	1.60	10.10	0.80	78	7.10	3.00	8.60	2.50	9.70	1.60	10.10	0.80
76	8.30	3.00	9.80	2.50	10.80	1.57	11.10	0.80	76	8.30	3.00	9.80	2.50	10.80	1.57	11.10	0.80	76	8.30	3.00	9.80	2.50	10.80	1.57	11.10	0.80
74	9.50	3.00	10.90	2.38	11.80	1.53	12.10	0.79	74	9.50	3.00	10.90	2.38	11.80	1.53	12.10	0.79	74	9.50	3.00	10.90	2.38	11.80	1.53	12.10	0.79
73	10.10	2.97	11.40	2.30	12.40	1.51	12.60	0.79	73	10.10	2.97	11.40	2.30	12.40	1.51	12.60	0.79	73	10.10	2.97	11.40	2.30	12.40	1.51	12.60	0.79
70	11.80	2.55	13.00	2.06	13.90	1.46	14.10	0.78	70	11.80	2.55	13.00	2.06	13.90	1.46	14.10	0.78	70	11.80	2.55	13.00	2.06	13.90	1.46	14.10	0.78
65	14.40	2.02	15.60	1.69	16.30	1.39	16.40	0.76	65	14.40	2.02	15.60	1.69	16.30	1.39	16.40	0.76	65	14.40	2.02	15.60	1.69	16.30	1.39	16.40	0.76
62	15.90	1.80	17.00	1.53	17.70	1.36	17.70	0.76	62	15.90	1.80	17.00	1.53	17.70	1.36	17.70	0.76	62	15.90	1.80	17.00	1.53	17.70	1.36	17.70	0.76
61	16.40	1.73	17.50	1.48	18.20	1.35	18.10	0.75	61	16.40	1.70	17.50	1.48	18.20	1.35	18.10	0.75	61	16.20	1.12	17.40	1.02	18.10	0.96	18.10	0.75
55	19.20	1.40	20.20	1.24	20.70	1.15			59	17.40	1.44	18.40	1.32	19.00	1.28			56	18.40	0.63	19.50	0.55	20.10	0.53		
54	19.70	1.36	20.70	1.21	21.20	1.12			53	20.00	0.82	21.00	0.77	21.40	0.75			55	18.90	0.54	19.90	0.48				
52	20.50	1.20	21.50	1.10	21.90	1.06			46	22.80	0.35	23.60	0.33	23.90	0.33											
46	22.90	0.73	23.80	0.69	24.00	0.67			45	23.20	0.30	23.90	0.28													
42	24.40	0.51	25.10	0.48																						
37	26.1	0.27	26.6	0.26																						
Critical Boom Angle	36°		36°		45°		60°		Critical Boom Angle	44°		44°		45°		60°		Critical Boom Angle	54°		54°		55°		60°	
Standard Hook (ton)	4 ton								Standard Hook (ton)	4 ton								Standard Hook (ton)	4 ton							
Hook Block Weight	60kgs								Hook Block Weight	60kgs								Hook Block Weight	60kgs							
Parts of Line	1								Parts of Line	1								Parts of Line	1							

Based on

BS 1757:1986
DIN 15019-2
75% of tipping loads

Outriggers Fully Retracted 3.4 Metres - 360° full range								
Boom Angle (degrees)	Offset 7°		Offset 25°		Offset 45°		Offset 60°	
	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)
83	4.00	3.00	5.60	2.50	6.90	1.60	7.40	0.80
78	7.10	3.00	8.60	2.50	9.70	1.60	10.10	0.80
76	8.30	2.98	9.80	2.50	10.80	1.57	11.10	0.80
72	10.50	2.13	11.90	1.82	12.90	1.49	13.10	0.78
69	12.00	1.53	13.40	1.33	14.30	1.22	14.50	0.77
65	14.10	0.89	15.30	0.77	16.10	0.71		
Critical Boom Angle	64°		64°		64°		68°	
Standard Hook (ton)	4 ton							
Hook Block Weight	60kgs							
Parts of Line	1							



RATED LIFTING CAPACITY CHART (3)

Unit (Ton)

28.0 Metre Boom + 8.2 Metre Jib (Standard Hook for 4Ton. Hook Mass 60kg)

Outriggers Fully Extended 6.0 Metres - 360° full range								Outriggers Partly Extended 5.2 Metres - 360° full range								Outriggers Partly Extended 4.4 Metres - 360° full range										
Boom Angle (degrees)	Offset 7°		Offset 25°		Offset 45°		Offset 60°		Boom Angle (degrees)	Offset 7°		Offset 25°		Offset 45°		Offset 60°		Boom Angle (degrees)	Offset 7°		Offset 25°		Offset 45°		Offset 60°	
	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)		Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)		Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)
83	4.60	2.00	6.90	1.30	9.00	0.80	9.90	0.45	83	4.60	2.00	6.90	1.30	9.00	0.80	9.90	0.45	83	4.60	2.00	6.90	1.30	9.00	0.80	9.90	0.45
81	5.90	2.00	8.20	1.30	10.20	0.80	11.00	0.45	81	5.90	2.00	8.20	1.30	10.20	0.80	11.00	0.45	81	5.90	2.00	8.20	1.30	10.20	0.80	11.00	0.45
77	8.60	2.00	10.80	1.30	12.50	0.80	13.20	0.41	77	8.60	2.00	10.80	1.30	12.50	0.80	13.20	0.41	77	8.60	2.00	10.80	1.30	12.50	0.80	13.20	0.41
74	10.60	1.90	12.60	1.21	14.20	0.80	14.80	0.41	74	10.60	1.90	12.60	1.21	14.20	0.80	14.80	0.41	74	10.60	1.90	12.60	1.21	14.20	0.80	14.80	0.41
71	12.40	1.78	14.30	1.13	15.80	0.80	16.20	0.40	71	12.40	1.78	14.30	1.13	15.80	0.80	16.20	0.40	71	12.40	1.78	14.30	1.13	15.80	0.80	16.20	0.40
67	14.80	1.66	16.60	1.05	17.90	0.77	18.20	0.40	67	14.80	1.66	16.60	1.05	17.90	0.77	18.20	0.40	67	14.80	1.66	16.60	1.05	17.90	0.77	18.20	0.40
65	16.00	1.58	17.60	1.02	18.80	0.75	19.10	0.39	65	16.00	1.58	17.60	1.02	18.80	0.75	19.10	0.39	65	16.00	1.45	17.60	1.02	18.80	0.75	19.10	0.39
62	17.70	1.43	19.30	0.97	20.30	0.74	20.50	0.38	62	17.70	1.43	19.30	0.97	20.30	0.74	20.50	0.38	62	16.90	1.21	18.70	0.98	19.80	0.74	20.00	0.39
61	18.20	1.38	19.80	0.95	20.80	0.73	20.80	0.38	61	18.20	1.38	19.80	0.95	20.80	0.73	20.80	0.38	61	17.90	0.98	19.70	0.85	20.80	0.73	20.80	0.38
54	21.70	1.08	23.10	0.88	23.80	0.71			57	20.10	1.05	21.70	0.90	22.60	0.72			57	19.90	0.61	21.50	0.52	22.50	0.49		
53	22.20	1.04	23.60	0.87	24.20	0.71			54	21.60	0.79	23.10	0.71	23.80	0.67			Critical Boom Angle	56°	56°	56°	56°	60°			
50	23.50	0.88	24.80	0.80	25.40	0.69			50	23.30	0.51	24.70	0.46	25.30	0.45			Standard Hook (ton)	4t							
46	25.20	0.62	26.40	0.59	26.80	0.56			46	25.00	0.29	26.20	0.26	26.70	0.26			Hook Block Weight	60kg							
42	26.70	0.42	27.80	0.40														Parts of Line	1							
38	28.70	0.25	29.10	0.24																						
Critical Boom Angle	37°		37°		45°		60°		Critical Boom Angle	45°		45°		45°		60°		Critical Boom Angle	56°		56°		60°			
Standard Hook (ton)	4t								Standard Hook (ton)	4t								Standard Hook (ton)	4t							
Hook Block Weight	60kg								Hook Block Weight	60kg								Hook Block Weight	60kg							
Parts of Line	1								Parts of Line	1								Parts of Line	1							

Based on
BS 1757:1986
DIN 15019-2
75% of tipping loads

Outriggers Fully Retracted 3.4 Metres - 360° full range								
Boom Angle (degrees)	Offset 7°		Offset 25°		Offset 45°		Offset 60°	
	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)	Working Radius (M)	Load (Ton)
83	4.60	2.00	6.90	1.30	9.00	0.80	9.90	0.45
81	5.90	2.00	8.20	1.30	10.20	0.80	11.00	0.45
77	8.60	2.00	10.80	1.30	12.50	0.80	13.20	0.41
74	10.60	1.90	12.60	1.21	14.20	0.80	14.80	0.41
71	12.30	1.65	14.30	1.13	15.80	0.80	16.20	0.40
70	12.90	1.48	14.90	1.11	16.30	0.79	16.70	0.40
69	13.40	1.33	15.40	1.04	16.80	0.78		
68	14.00	1.16	15.90	0.96				
66	15.10	0.88	17.00	0.73				
Critical Boom Angle	65°		65°		68°		68°	
Standard Hook (ton)	4t							
Hook Block Weight	60kg							
Parts of Line	1							

KATO

RATED LIFTING CAPACITY CHART (4) Unit (Ton)

Working Radius (Metres)	Stationary on Rubber						Pick and Carry (Less than 2km/h without outriggers)						Working Radius (Metres)
	6.7m Boom		10.96m Boom		15.22m Boom		6.7m Boom		10.96m Boom		15.22m Boom		
	Over Front	360° Full Range	Over Front	360° Full Range	Over Front	360° Full Range	Over Front	360° Full Range	Over Front	360° Full Range	Over Front	360° Full Range	
3.0	8.50	6.00	8.50	5.50	7.50	5.20	6.80	4.80	6.40	4.40	5.90	4.00	3.0
3.5	8.50	4.50	8.50	4.10	7.50	3.80	6.80	3.60	6.40	3.30	5.90	3.00	3.5
4.0	8.50	3.30	8.50	3.20	7.50	3.00	6.80	2.65	6.40	2.55	5.90	2.40	4.0
4.5	7.50	2.55	7.20	2.55	6.50	2.40	6.00	2.05	5.50	2.05	5.00	1.90	4.5
5.0			6.10	2.00	5.40	1.90			4.75	1.50	4.30	1.40	5.0
5.5			5.10	1.55	4.55	1.50			4.10	1.05	3.65	1.00	5.5
6.0			4.25	1.20	3.85	1.15			3.40	0.65	3.10	0.60	6.0
6.5			3.55	0.90	3.30	0.85			2.85		2.65		6.5
7.0			3.00	0.65	2.80				2.40		2.25		7.0
8.0			2.15		2.05				1.65		1.60		8.0
9.0			1.55		1.50				1.00		1.00		9.0
10.0					1.00						0.50		10.0
11.0					0.60								11.0
Critical Boom Angle	--	--	--	32°	32°	58°	--	--	--	45°	39°	60°	Critical Boom Angle
Standard Hook	25 Ton						25 Ton						Standard Hook
Hook Mass	220 kg						200kg						Hook Mass
Parts of Line	4						4						Parts of Line

BS 1757:1986
Based on DIN 15019-2
75% of tipping loads

