

KATO MR130RI (KRM-13H-III) SUPERBOOM

CRANE SPECIFICATIONS

TYPE	13 Ton Lifting Capacity Rough Terrain Crane
MODEL	KRM-13H-III
CRANE CAPACITY	13,000kg
MAX. TOTAL RATED LOAD	
5.30M	13,000kg x 1.70M radius (8 Parts-Line)
9.04M	6,000kg x 4.00M radius (4 Parts-Line)
12.78M	6,000kg x 4.00M radius (4 Parts-Line)
16.52M	5,000kg x 4.50M radius (4 Parts-Line)
20.26M	4,700kg x 4.00M radius (4 Parts-Line)
24.0M	3,200kg x 5.50M radius (4 Parts-Line)
3.6M	1,600kg x 75 Degrees (1 Parts-Line)
5.5M	1,000kg x 70 Degrees (1 Parts-Line)
Boom Length	5.30 Metres to 24.0 Metres
Jib Length	3.6 Metres to 5.5 Metres
Max. Lifting Height	24.80M (Main Boom) 30.3M (Jib)
Main Winch Single Winding Speed	115m / min (5th layer)
Auxiliary Winch Winding Speed	102m / min (3th layer)
Hook Speed	Main: 14.37m / min (5 part line) Aux: 102m / min (3 part line)
Boom Elevation Range	-7.5 degrees - 82 degrees
Boom Elevation Speed	-7.5 degrees - 82 degrees / 30 secs
Boom Extension Speed	18.70m / 65 secs
Swing Speed	2.4mins - 1
Swing Rear Radius	1,600m

CRANE DEVICE & MECHANISM

Boom Type		6 section telescoping boom of hexagonal construction (Stage 2,3 synchronized & 4,5,6 synchronized)
Jib		2 Stage type
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 (4,750mm) Middle Extended Width (4,300mm) Middle Extended Width (3,700mm) Middle Extended Width (2,700mm) Minimum Extended Width (1,640mm)
Wire Rope	Main Winch	11.2mm x 132m
	Aux Winch	11.2mm x 65m

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		150 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 Automatic brake device Hydraulic Safety valve

Safety Devices (Continued)		Outrigger lock device Angle meter Swing warning lamp Hydraulic Oil over heating alarm Hydraulic Oil element clogging alarm
Standard Equipment		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 / Side 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 (tanθ)
Minimum Turning Radius	6.5m (2 wheel drive) 3.92m (4 wheel drive)

DIMENSIONS AND WEIGHT

Overall Length	7,440mm
Overall Height	1,995mm
Wheel Base	2,845mm
Tread	Front 1,680mm Rear 1,680mm
Seating Capacity	1 (one)
Gross Vehicle Weight	13,815kg
	Front 6,860kg Rear 6,955kg

ENGINE (Complying with Ministry of Construction Emission Regulation)

Model	MITSUBISHI 4M50-TLE3BA (With Turbo Charge)
Type	Water Cooled 4 cycle in-line 4 cylinder direct injection diesel engine
Engine Displacement	4.899L
Max Output	129kW/ 2,700min -1
Max Torque	530N.m / 1,600min -1

CHASSIS DEVICE AND MECHANISM



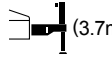
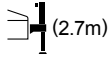
Drive	2 - Wheel Drive (4x2) / 4 - Wheel Drive (4x4)
Torque Converter	3 Elements, 1 Stage unit (with automatic lock up mechanism)
Transmission	Automatic & Manual Transmission 4 Forward and 1 Reverse Speeds (Hi / Low setting)
Axle - Front and Rear	Full Floating Type with 2 stage reduction device
Main Brake	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	275/80/R22.5 151E Road
	Rear	275/80/R22.5 151E Road
Fuel Tank Capacity		250 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


Rated Lifting Capacity

5.3m — 24.0m Boom

	 (4.75m)						 (4.3m)						 (3.7m)						 (2.7m)					
Working Radius (m)	Outriggers Fully Extended (4.75m) 360° Full Range						Outriggers Partially Extended (4.3m) Over Side						Outriggers Partially Extended (3.7m) Over Side						Outriggers Partially Extended (2.7m) Over Side					
	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom
1.5	13.00	6.00	6.00				13.00	6.00	6.00				12.00	6.00	6.00				12.00	6.00	6.00			
1.7	13.00	6.00	6.00				13.00	6.00	6.00				12.00	6.00	6.00				12.00	6.00	6.00			
2.0	12.00	6.00	6.00	5.00			12.00	6.00	6.00	5.00			12.00	6.00	6.00	5.00			12.00	6.00	6.00	5.00		
2.5	10.00	6.00	6.00	5.00			10.00	6.00	6.00	5.00			10.00	6.00	6.00	5.00			8.50	6.00	6.00	5.00		
3.0	8.20	6.00	6.00	5.00	4.70		8.20	6.00	6.00	5.00	4.70		8.20	6.00	6.00	5.00	4.70		6.00	6.00	6.00	5.00	4.70	
3.5	7.00	6.00	6.00	5.00	4.70	3.20	7.00	6.00	6.00	5.00	4.70	3.20	7.00	6.00	6.00	5.00	4.70	3.20	4.70	4.70	4.60	4.50	4.40	3.20
4.0	6.10	6.00	6.00	5.00	4.70	3.20	6.10	6.00	6.00	5.00	4.70	3.20	6.10	6.00	6.00	5.00	4.70	3.20	3.70	3.70	3.70	3.70	3.70	3.20
4.5		5.50	5.40	5.00	4.50	3.20		5.50	5.40	5.00	4.50	3.20		5.10	5.10	5.00	4.50	3.20		3.00	3.00	3.10	3.10	3.00
5.0		5.00	4.90	4.60	4.05	3.20		5.00	4.90	4.60	4.05	3.20		4.40	4.40	4.50	4.05	3.20		2.40	2.40	2.60	2.70	2.70
5.5		4.50	4.40	4.20	3.70	3.20		4.50	4.40	4.20	3.70	3.20		3.80	3.70	3.90	3.70	3.20		2.00	2.00	2.20	2.30	2.30
6.0		4.10	4.00	3.80	3.40	3.00		4.10	4.00	3.80	3.40	3.00		3.20	3.20	3.40	3.40	3.00		1.70	1.70	1.85	2.00	2.05
6.5		3.70	3.65	3.50	3.15	2.80		3.70	3.65	3.50	3.15	2.80		2.80	2.75	2.95	3.05	2.75		1.40	1.40	1.60	1.70	1.75
7.0		3.35	3.30	3.20	2.90	2.60		3.30	3.30	3.20	2.90	2.60		2.40	2.35	2.55	2.70	2.50		1.20	1.20	1.40	1.50	1.55
8.0		2.70 (7.7m)	2.90	2.70	2.50	2.25		2.70 (7.7m)	2.50	2.70	2.50	2.25		1.95 (7.7m)	1.80	2.00	2.10	2.15		0.90 (7.7m)	0.85	1.05	1.15	1.20
9.0			2.30	2.30	2.20	1.95			1.95	2.15	2.20	1.95			1.40	1.60	1.70	1.75			0.60	0.80	0.90	0.95
10.0			1.85	2.05	1.95	1.75			1.60	1.75	1.85	1.75			1.10	1.30	1.35	1.45			0.35	0.55	0.65	0.75
11.0			1.50	1.70	1.75	1.55			1.30	1.45	1.55	1.55			0.85	1.05	1.15	1.20				0.40	0.50	0.60
12.0			1.40 (11.4m)	1.45	1.55	1.40			1.20 (11.4m)	1.20	1.30	1.35			0.70 (11.4m)	0.85	0.95	1.00				0.25	0.35	0.45
13.0				1.25	1.30	1.25				1.00	1.10	1.15				0.65	0.80	0.85					0.20	0.30
14.0				1.05	1.15	1.15				0.80	0.95	1.00				0.50	0.65	0.70						0.20
15.0				0.90	1.00	1.05				0.70	0.80	0.85				0.40	0.50	0.60						
16.0					0.85	0.92					0.65	0.75					0.40	0.50						
17.0					0.72	0.82					0.55	0.65					0.30	0.40						
18.0					0.62	0.70					0.45	0.55						0.30						
19.0					0.55 (18.8m)	0.60					0.35 (18.8m)	0.45												
20.0						0.52						0.35												
21.0						0.44						0.30												
22.0						0.37						0.25												
22.5						0.34																		
Critical Boom Angle	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23°	36°	—	—	19°	32°	44°	50°
Hook Block	13t Hook Block						13t Hook Block						13t Hook Block						13t Hook Block					
Hook Block Weight	90kg						90kg						90kg						90kg					
Parts of Line	8	4	4	4	4	4	8	4	4	4	4	4	8	4	4	4	4	4	8	4	4	4	4	4



Unit: ton

5.3m — 24.0m Main Boom

	 (1.64m)					
Working Radius (m)	Outriggers Fully Retracted (1.64m) Over Side					
	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom
1.5	8.00	6.00	6.00			
1.7	7.00	6.00	6.00			
2.0	5.60	5.40	5.00	4.70		
2.5	3.80	3.80	3.60	3.50		
3.0	2.80	2.80	2.70	2.70	2.60	
3.5	2.10	2.10	2.00	2.10	2.10	2.10
4.0	1.60	1.60	1.55	1.70	1.70	1.75
4.5		1.25	1.20	1.40	1.40	1.45
5.0		0.95	0.95	1.10	1.20	1.25
5.5		0.75	0.75	0.90	1.00	1.05
6.0		0.60	0.55	0.75	0.80	0.90
6.5		0.40	0.35	0.60	0.65	0.75
7.0		0.25		0.45	0.55	0.60
Critical Boom Angle	—	20°	54°	61°	66°	70°
Hook Block	13t Hook Block					
Hook Block Weight	90kg					
Parts of Line	8	4	4	4	4	4



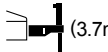
Unit: ton

When Outriggers are not used

													
Working Radius (m)	Free on Rubber						Pick and Carry (less than 2km/h)						Working Radius (m)
	5.3m Boom	9.04m Boom	12.78m Boom	5.3m Boom	9.04m Boom	12.78m Boom	5.3m Boom	9.04m Boom	12.78m Boom	5.3m Boom	9.04m Boom	12.78m 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	
1.5	3.60	2.80	3.60	2.80	3.60	2.80	3.20	2.00	3.20	2.00	3.20	2.00	1.5
2.0	3.40	2.80	3.40	2.80	3.40	2.80	3.00	2.00	3.00	2.00	3.00	2.00	2.0
2.5	3.10	2.15	3.10	2.10	3.10	2.05	2.80	1.55	2.75	1.50	2.65	1.45	2.5
3.0	2.65	1.60	2.60	1.55	2.55	1.50	2.40	1.10	2.30	1.05	2.20	1.00	3.0
3.5	2.30	1.25	2.20	1.20	2.10	1.10	2.00	0.85	1.90	0.75	1.80	0.65	3.5
4.0	2.00	0.90	1.90	0.80	1.70	0.70	1.70	0.60	1.65	0.50	1.50	0.40	4.0
4.5			1.60	0.50	1.40	0.40			1.40	0.30	1.25		4.5
5.0			1.30		1.10				1.15		1.00		5.0
5.5			1.10		0.95				0.95		0.85		5.5
6.0			0.90		0.80				0.80		0.70		6.0
7.0			0.50		0.50				0.45		0.45		7.0
Critical Boom Angle	—	—	26°	54°	52°	66°	—	—	26°	54°	52°	68°	Critical Boom Angle
Hook Block	13t Hook Block (4.9t Hook Block)						13t Hook Block (4.9t Hook Block)						Hook Block
Hook Block Weight	90kg						90kg						Hook Block Weight
Parts of Line	4						4						Parts of Line

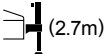
Unit: ton


24.0m + 3.6m Fly Jib

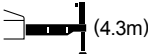
 (4.75m)										 (4.3m)										 (3.7m)									
Outriggers Fully Extended (4.75m)										Outriggers Partially Extended (4.3m)										Outriggers Partially Extended (3.7m)									
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		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)		Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)		Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)			
82	4.4	1.60	5.8	1.50	6.5	1.00	6.8	0.65	82	4.4	1.60	5.8	1.50	6.5	1.00	6.8	0.65	82	4.4	1.60	5.8	1.50	6.5	1.00	6.8	0.65			
80	5.2	1.60	6.4	1.50	7.2	1.00	7.4	0.65	80	5.2	1.60	6.4	1.50	7.2	1.00	7.4	0.65	80	5.2	1.60	6.4	1.50	7.2	1.00	7.4	0.65			
75	7.8	1.60	8.7	1.17	9.5	0.93	9.6	0.65	75	7.8	1.60	8.7	1.17	9.5	0.93	9.6	0.65	75	7.8	1.60	8.7	1.17	9.5	0.93	9.6	0.65			
70	10.1	1.25	11.1	0.98	11.6	0.85	11.8	0.65	70	10.1	1.25	11.1	0.98	11.6	0.85	11.8	0.65	70	10.1	1.25	11.1	0.98	11.6	0.85	11.8	0.65			
65	12.3	1.05	13.1	0.88	13.6	0.77	13.8	0.65	65	12.3	1.05	13.1	0.88	13.6	0.77	13.8	0.65	65	12.2	0.90	13.1	0.77	13.6	0.77	13.8	0.65			
60	14.3	0.90	15.1	0.76	15.6	0.70	15.6	0.65	60	14.3	0.90	15.1	0.76	15.6	0.70	15.6	0.65	60	14.2	0.59	15.0	0.54	15.5	0.54	15.5	0.54			
55	16.3	0.72	17.0	0.64	17.4	0.64			55	16.2	0.60	16.9	0.55	17.3	0.53			55	16.0	0.37	16.8	0.33	17.2	0.33					
50	18.1	0.60	18.7	0.53	18.9	0.53			50	18.0	0.44	18.6	0.41	18.8	0.40			50	17.8	0.20	18.5	0.18	18.7	0.18					
45	19.7	0.42	20.4	0.40	20.3	0.40			45	19.6	0.30	20.2	0.27	20.3	0.27			Critical Boom Angle	49°		49°		49°		59°				
40	21.1	0.30	21.6	0.29					40	21.0	0.19	21.5	0.18					Hook Block	1.8t Hook Block										
35	22.3	0.22	22.7	0.20					Critical Boom Angle	39°		39°		44°		59°		Hook Block Weight	25kg										
Critical Boom Angle	34°		34°		44°		59°		Hook Block	1.8t Hook Block								Parts of Line	1										
Hook Block	1.8 Hook Block								Hook Block Weight	25kg																			
Hook Block Weight	25kg								Parts of Line	1																			
Parts of Line	1																												

24.0m + 3.6m Fly Jib

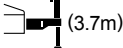
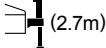
24.0m Boom + 5.5m Fly Jib

 (2.7m)									
Outriggers Partially Extended (2.7m)									
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)	
82	4.4	1.60	5.8	1.50	6.5	1.00	6.8	0.65	
80	5.2	1.60	6.4	1.50	7.2	1.00	7.4	0.65	
75	7.8	1.20	8.7	1.05	9.5	0.93	9.6	0.65	
70	10.0	0.72	10.9	0.65	11.5	0.62	11.7	0.56	
65	11.9	0.41	12.9	0.35	13.4	0.34	13.6	0.33	
Critical Boom Angle	64°		64°		64°		64°		
Hook Block	1.8t Hook Block								
Hook Block Weight	25kg								
Parts of Line	1								

 (4.75m)									
Outriggers Fully Extended (4.75m)									
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)	
82	4.8	1.00	6.9	1.00	8.2	0.65	8.6	0.40	
80	5.6	1.00	7.6	1.00	8.9	0.65	9.2	0.40	
75	8.4	1.00	10.1	0.85	11.2	0.63	11.5	0.40	
70	11.1	1.00	12.4	0.72	13.4	0.58	13.6	0.40	
65	13.4	0.81	14.7	0.61	15.6	0.52	15.6	0.40	
60	15.6	0.69	16.8	0.55	17.5	0.48	17.4	0.40	
55	17.7	0.58	18.8	0.49	19.3	0.45			
50	19.6	0.49	20.5	0.44	20.8	0.41			
45	21.2	0.38	22.0	0.36	22.3	0.36			
40	22.9	0.26	23.4	0.26					
Critical Boom Angle	39°		39°		44°		59°		
Hook Block	1.8t Hook Block								
Hook Block Weight	25kg								
Parts of Line	1								

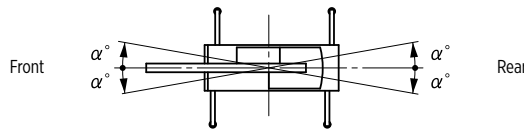
 (4.3m)									
Outriggers Partially Extended (4.3m)									
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		
	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	
82	4.8	1.00	6.9	1.00	8.2	0.65	8.6	0.40	
80	5.6	1.00	7.6	1.00	8.9	0.65	9.2	0.40	
75	8.4	1.00	10.1	0.85	11.2	0.63	11.5	0.40	
70	11.1	1.00	12.4	0.72	13.4	0.58	13.6	0.40	
65	13.4	0.81	14.7	0.61	15.6	0.52	15.6	0.40	
60	15.5	0.69	16.8	0.55	17.5	0.48	17.4	0.40	
55	17.6	0.58	18.7	0.49	19.2	0.45			
50	19.5	0.39	20.4	0.36	20.7	0.35			
45	21.0	0.27	21.8	0.25	22.1	0.25			
Critical Boom Angle	44°		44°		44°		59°		
Hook Block	1.8t Hook Block								
Hook Block Weight	25kg								
Parts of Line	1								

24.0m Boom + 5.5m Fly Jib

 (3.7m)									 (2.7m)								
Outriggers Fully Extended (3.7m)									Outriggers Partially Extended (2.7m)								
Boom Angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		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)		Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)	Radius (m)	Load (ton)
82	4.8	1.00	6.9	1.00	8.2	0.65	8.6	0.40	82	4.8	1.00	6.9	1.00	8.2	0.65	8.6	0.40
80	5.6	1.00	7.6	1.00	8.9	0.65	9.2	0.40	80	5.6	1.00	7.6	1.00	8.9	0.65	9.2	0.40
75	8.4	1.00	10.1	0.85	11.2	0.63	11.5	0.40	75	8.4	1.00	10.1	0.85	11.2	0.63	11.5	0.40
70	11.1	1.00	12.4	0.72	13.4	0.58	13.6	0.40	70	10.8	0.66	12.3	0.55	13.3	0.48	13.6	0.40
65	13.4	0.75	14.7	0.61	15.6	0.52	15.6	0.40	65	12.9	0.36	14.4	0.30	15.3	0.26		
60	15.4	0.52	16.7	0.45	17.5	0.42	17.4	0.40	Critical Boom Angle	64°		64°		64°		69°	
55	17.4	0.31	18.6	0.28	19.1	0.28			Hook Block	1.8t Hook Block							
52	18.5	0.22	19.5	0.21	20.0	0.20			Hook Block Weight	25kg							
Critical Boom Angle	51°		51°		51°		59°		Parts of Line	1							
Hook Block	1.8 Hook Block								Parts of Line								
Hook Block Weight	25kg																
Parts of Line	1																

Rated lifting capacity chart when Outriggers are used

1. 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.
2. 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.
3. The jib working radius is based on the jib mounted on the end of the 24.0M Boom. If the Boom is at any other length use the Boom Angle as the standard criterion for crane operation. (The jib is optional).



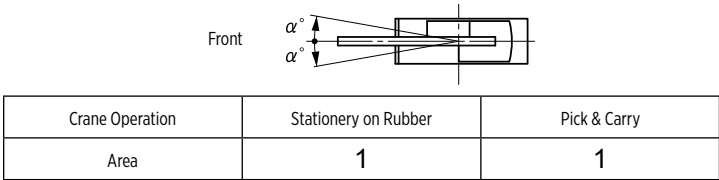
Outrigger Extension Status	Outrigger (4.3m)	Outrigger (3.7m)	Outrigger (2.7m)	Fully Retracted
Range	25	25	15	3

4. Never operate the jib when the outriggers are fully retracted. (The jib is optional).
5. 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 1,800kg.
(The hook for use with the Rooster sheave is the 1.8Ton Hook (mass 25 kg) with one part of line.
6. 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.
7. If you are working with the boom while the jib is rigged subtract 600kg 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).
8. 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.
9. 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 1,800kg as the maximum load on any part of the wire rope.
10. The rated lifting capacity does not take the effects of wind into account.
Stop immediately if the wind speed reaches 10m/s even briefly.
11. 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.
12. 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 15.7kN (1.6tf).

Rated lifting capacity chart when outriggers are not used.

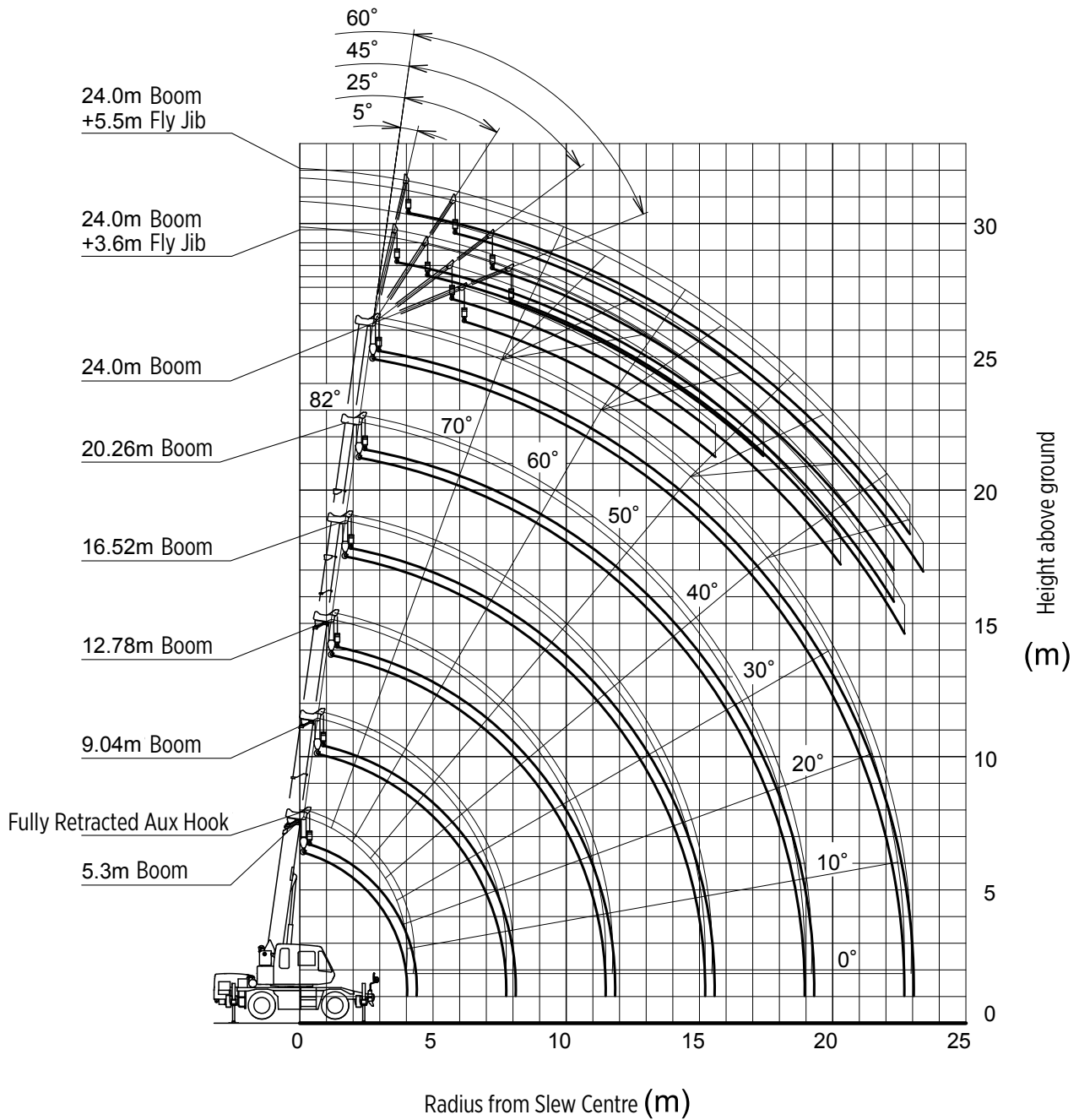
1. The rated lifting capacity chart indicates the maximum load which can be lifted by this crane provided it is standing on firm level ground with all tyres inflated to the rated pressure and with the suspension lock cylinders fully retracted. It includes the mass of the hook and all other lifting equipment.

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 8.75bar/875kPa / 8.75kgf/cm2).



- 2. 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.
- 3. Do not work with the jib or with a boom length of more than 12.78m. (The jib is optional).
- 4. Always engage the parking brake before you start stationery on rubber operations.
- 5. 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.
- 6. 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.
- 7. Never operate the crane during pick and carry operation. The slewing brake must always be engaged.
- 8. Other than the above precautions observe points 2,5,6,8,9,10 and 11 of section “precautions on outrigger use”.
- 9. 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 15.7kN (1.6tf).

Working range Diagram

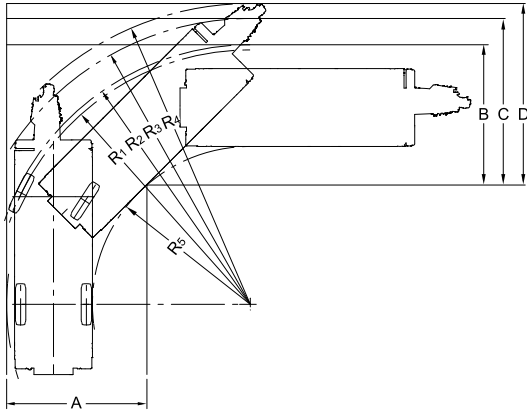


Notes:

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

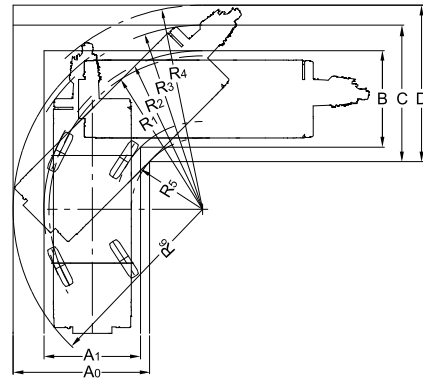
Minimum road width for right angle turn

Right turn in 2 wheel steering mode



- $R_1=6.50\text{m}$
Minimum Turning Radius
- $R_2=6.64\text{m}$
Turning Radius of extreme outer tyre
- $R_3=7.31\text{m}$
Chassis Turning Radius
- $R_4=7.69\text{m}$
Boom End Turning Radius
- $R_5=4.03\text{m}$
Vehicle Interior Turning Radius
- $A=3.59\text{m}$ Width of Entrance
- $B=3.59\text{m}$ Width of Wheel Exit
- $C=4.26\text{m}$ Width of Chassis Exit
- $D=4.65\text{m}$ Width of Exit at End of Boom

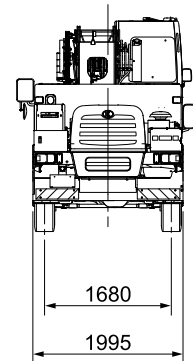
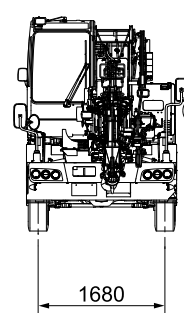
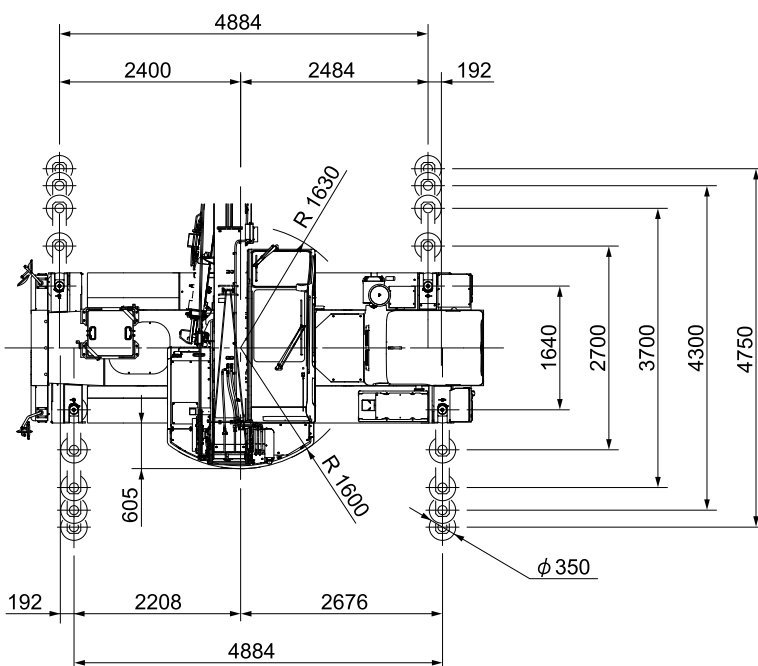
Right turn in 4 wheel steering mode



- $R_1=3.92\text{m}$
Minimum Turning Radius
- $R_2=4.06\text{m}$
Turning Radius of extreme outer tyre
- $R_3=4.71\text{m}$
Chassis Turning Radius
- $R_4=5.22\text{m}$
Boom End Turning Radius
- $R_5=1.82\text{m}$
Turning Radius of Inside Tyre
- $R_6=4.85\text{m}$
Vehicle Interior Turning Radius
- $A_0=3.49\text{m}$ Width of Entrance
- $A_1=2.47\text{m}$ Width of Wheel Entrance
- $B=2.47\text{m}$ Width of Wheel Exit
- $C=3.49\text{m}$ Width of Chassis Exit
- $D=4.00\text{m}$ Width of Exit at End of Boom

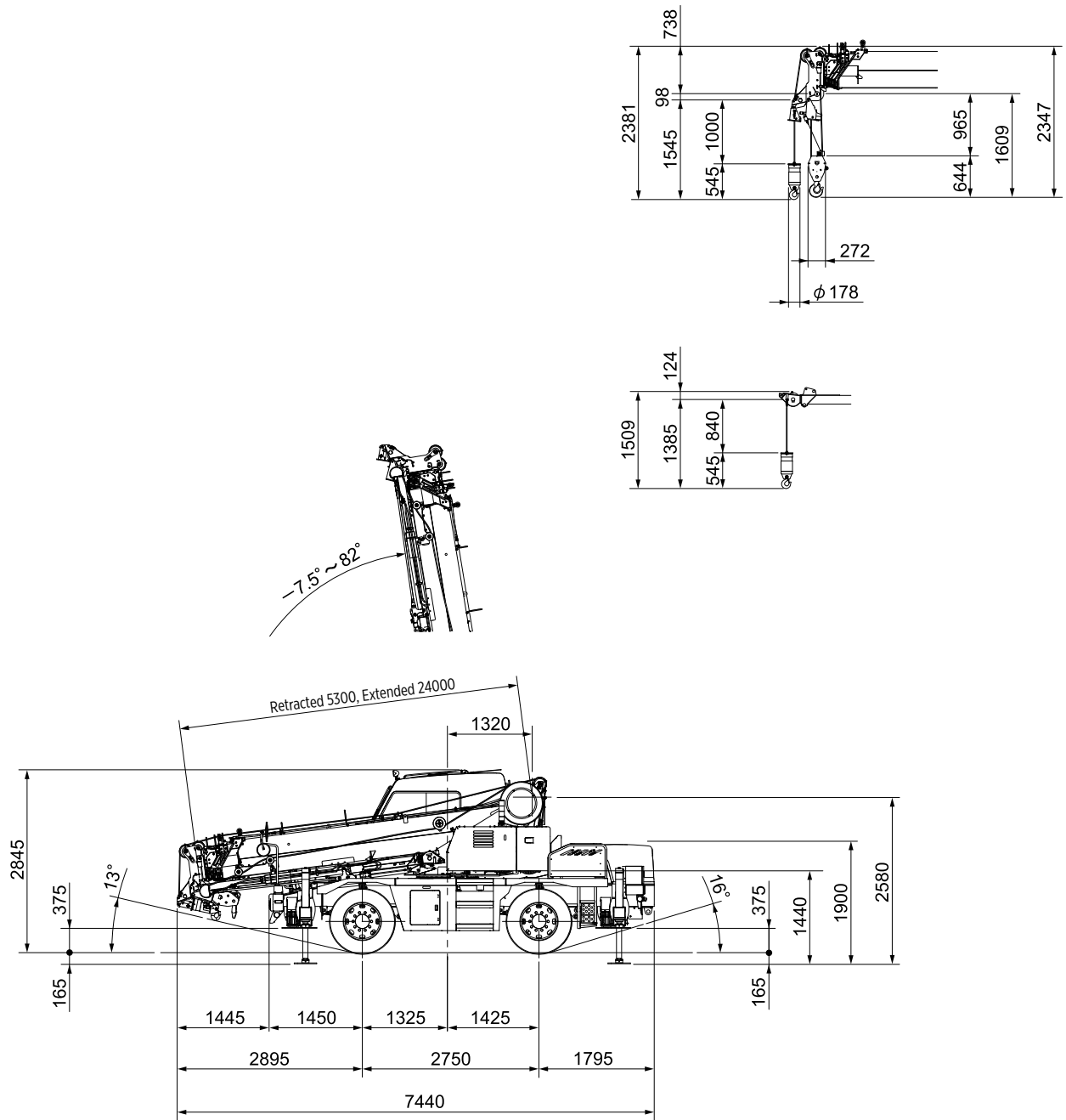
The above values are based on calculations

Overall View



Measurement (mm)

Overall View



Products and Specifications are subject to improvements without notice

Measurement (mm)