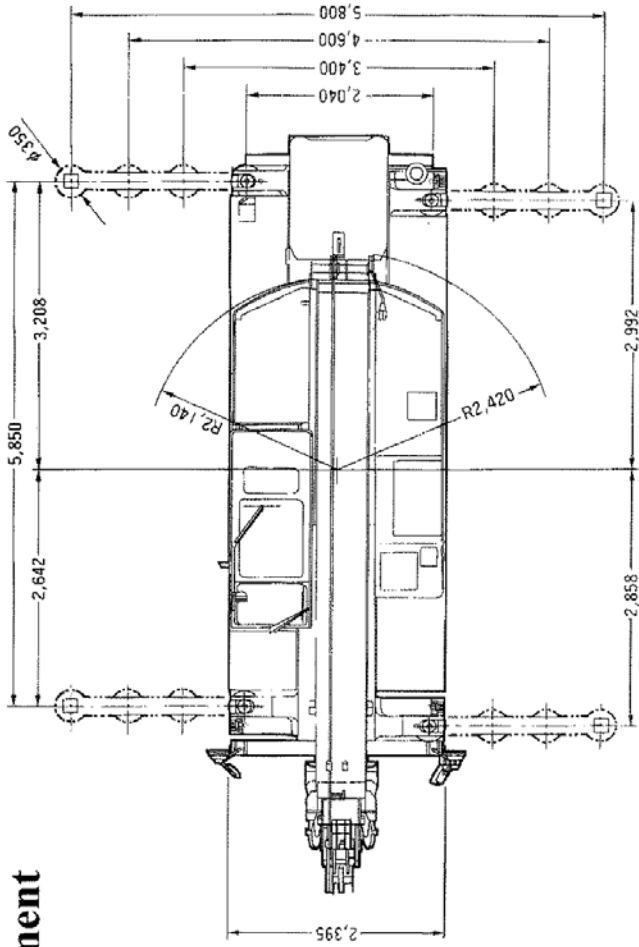
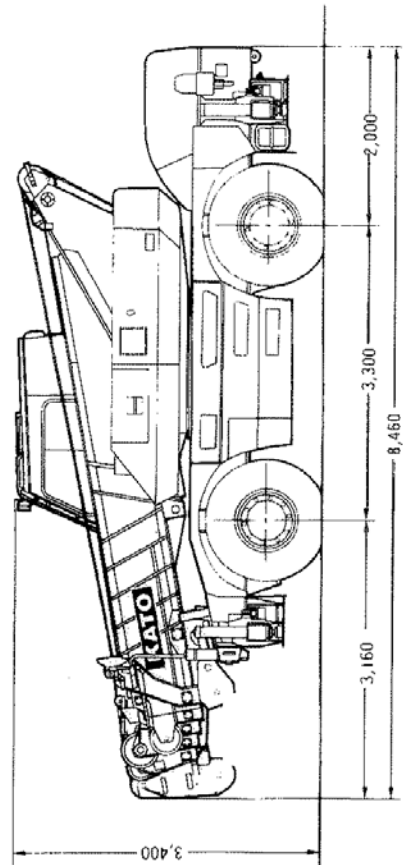


KATO WORKS CO., LTD.
 Kato MR-220 (KR-22H)
 Serial Number 3310167

General Arrangement




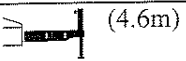
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100 (mm)



Rated Lifting Capacity Chart (1,2)

6.7m ~ 28.0m Boom										
Working Radius (m)	 (5.8m)					 (4.6m)				
	Outriggers Fully Extended - 360° Full Range					Outriggers Intermediately Extended - Over Side				
	6.7m Boom	11.0m Boom	15.2m Boom	21.6m Boom	28.0m Boom	6.7m Boom	11.0m Boom	15.2m Boom	21.6m Boom	28.0m Boom
3.0	22.00	12.00	12.00	8.00		22.00	12.00	12.00	8.00	
3.5	20.00	12.00	12.00	8.00		20.00	12.00	12.00	8.00	
4.0	17.00	12.00	12.00	8.00	6.00	17.00	12.00	12.00	8.00	6.00
4.5	15.00	12.00	12.00	8.00	6.00	15.00	12.00	12.00	8.00	6.00
5.0		12.00	12.00	8.00	6.00		12.00	12.00	8.00	6.00
5.5		12.00	12.00	8.00	6.00		10.00	10.00	8.00	6.00
6.0		12.00	11.50	8.00	6.00		8.50	8.40	8.00	6.00
6.5		11.30	10.60	8.00	6.00		7.20	7.10	7.90	6.00
7.0		9.70	9.40	7.85	6.00		6.20	6.10	6.85	6.00
8.0		7.35	7.20	7.10	5.90		4.65	4.55	5.30	5.65
9.0		5.70	5.60	6.35	5.35		3.60	3.50	4.20	4.50
10.0			4.50	5.25	4.80			2.70	3.40	3.70
11.0			3.60	4.35	4.30			2.05	2.75	3.05
12.0			2.90	3.65	3.85			1.50	2.25	2.55
13.0			2.30	3.05	3.40			1.05	1.85	2.10
14.0				2.60	2.90				1.45	1.75
15.0				2.20	2.50				1.10	1.45
16.0				1.80	2.10				0.85	1.15
17.0				1.50	1.80				0.60	0.90
18.0				1.20	1.55				0.40	0.70
19.0				1.00	1.30					0.50
20.0				0.85 (19.6m)	1.10					0.35
21.0					0.95					
22.0					0.80					
23.0					0.65					
24.0					0.50					
25.0					0.35					
Critical Boom Angle	-	-	-	-	-	-	-	-	18°	38°

(unit: metric ton)


*The capacities enclosed with bold lines are based on the structural strength of machine and the others are based on the stability of machine.

We confirm this KATO MR-220 Rough Terrain Crane Serial No. 3310167 is built to Japanese "Construction Codes for Mobile Crane" and its rated lifting capacities are based on "ISO 4305".

KATO WORKS CO., LTD.

M. Ojiro

Masahiro Ojiro
Deputy General Manager
First Design Dept.
1st October 2009

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Rated Lifting Capacity Chart (3,4)

6.7m ~ 28.0m Boom										
Working Radius (m)	(3.4m)					(2.04m)				
	Outriggers Intermediately Extended - Over Side					Outriggers Intermediately Extended - Over Side				
	6.7m Boom	11.0m Boom	15.2m Boom	21.6m Boom	28.0m Boom	6.7m Boom	11.0m Boom	15.2m Boom	21.6m Boom	28.0m Boom
3.0	22.00	12.00	12.00	8.00		7.80	7.50	7.00	7.00	
3.5	15.20	12.00	12.00	8.00		6.10	5.80	5.40	5.60	
4.0	11.40	11.00	10.00	8.00	6.00	4.80	4.50	4.30	4.55	3.80
4.5	8.95	8.60	8.40	8.00	6.00	3.80	3.50	3.40	3.80	3.80
5.0		6.95	6.85	7.00	6.00		2.80	2.70	3.20	3.25
5.5		5.75	5.65	6.20	6.00		2.20	2.10	2.65	2.75
6.0		4.80	4.70	5.40	5.30		1.70	1.60	2.25	2.35
6.5		4.05	3.95	4.65	4.70		1.30	1.20	1.85	2.00
7.0		3.45	3.35	4.00	4.15		0.90	0.80	1.55	1.70
8.0		2.50	2.40	3.05	3.30				1.00	1.20
9.0		1.80	1.70	2.35	2.65					
10.0			1.10	1.85	2.10					
11.0			0.60	1.40	1.65					
12.0				1.00	1.30					
13.0				0.65	0.95					
14.0				0.50 (13.5m)	0.70					
15.0					0.45					
Critical Boom Angle	-	-	30°	42°	53°	-	30°	55°	62°	69°

(unit: metric ton)

*The capacities enclosed with bold lines are based on the structural strength of machine and the others are based on the stability of machine.

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KATO WORKS CO., LTD.

M. Ojiro

Masahiro Ojiro
Deputy General Manager
First Design Dept.
1st October 2009

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Rated Lifting Capacity Chart (5)

28.0m Boom + 5.0m Jib						
Boom Angle (°)	Outriggers (5.8m)		Outriggers (4.6m)		Outriggers (3.4m)	
	Working Radius (m)	Load (t)	Working Radius (m)	Load (t)	Working Radius (m)	Load (t)
81.0	4.0	3.10	4.0	3.10	4.0	3.10
73.0	8.5	3.10	8.5	3.10	8.5	3.10
68.8	11.0	3.10	11.0	3.10	10.8	1.90
65.0	13.0	2.65	13.0	2.30	12.7	1.25
60.0	15.5	2.20	15.4	1.55	15.0	0.65
57.0	17.0	2.00	16.8	1.20	16.5	0.35
56.0	17.4	1.85	17.2	1.10	16.9	0.30
50.0	20.1	1.25	19.9	0.60		
45.0	22.1	0.90	22.0	0.30		
40.0	23.9	0.65				
35.0	25.6	0.45				
30.0	27.1	0.30				
Critical Boom Angle (°)	25°		42°		54°	

(unit: metric ton)

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KATO WORKS CO., LTD.

M. Ojiro

Masahiro Ojiro
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1st October 2009

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Rated Lifting Capacity Chart (6,7)

Stationary on Rubber (Without Outriggers)						
Working Radius (m)	6.7m Boom		11.0m Boom		15.2m Boom	
	Over Front	360° Full Range	Over Front	360° Full Range	Over Front	360° Full Range
3.0		6.00		5.50		5.20
3.5	8.50	4.50	8.50	4.10	8.00	3.80
4.0	8.50	3.30	8.50	3.20	8.00	3.00
4.5	7.50	2.55	7.20	2.55	6.50	2.40
5.0			6.10	2.00	5.40	1.90
5.5			5.10	1.55	4.55	1.50
6.0			4.25	1.20	3.85	1.15
6.5			3.55	0.90	3.30	0.85
7.0			3.00	0.65	2.80	
8.0			2.15		2.05	
9.0			1.55		1.50	
10.0					1.00	
11.0					0.60	
Critical Boom Angle	-	-	-	30°	30°	56°

(unit: metric ton)

Pick & Carry (Less than 2 km/hr) (Without Outriggers)						
Working Radius (m)	6.7m Boom		11.0m Boom		15.2m Boom	
	Over Front	360° Full Range	Over Front	360° Full Range	Over Front	360° Full Range
3.0		4.80		4.40		4.00
3.5	6.80	3.60	6.40	3.30	5.90	3.00
4.0	6.80	2.65	6.40	2.55	5.90	2.40
4.5	6.00	2.05	5.50	2.05	5.00	1.90
5.0			4.75	1.50	4.30	1.40
5.5			4.10	1.05	3.65	1.00
6.0			3.40	0.65	3.10	0.60
6.5			2.85		2.65	
7.0			2.40		2.25	
8.0			1.65		1.60	
9.0			1.00		1.00	
10.0					0.50	
Critical Boom Angle	-	-	-	42°	35°	60°

(unit: metric ton)

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M. Ojiro

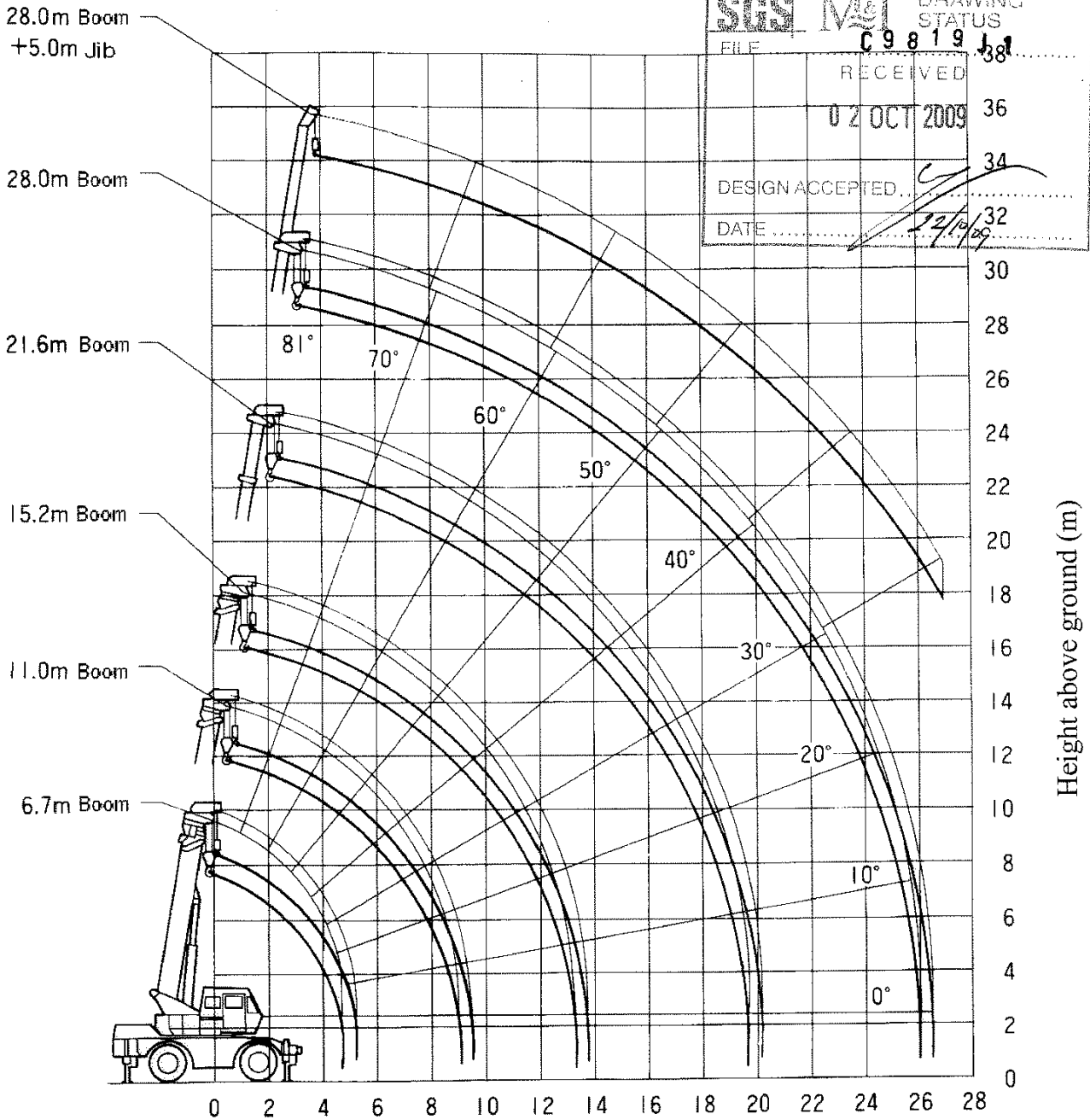
Masahiro Ojiro
Deputy General Manager
First Design Dept.
1st October 2009

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 Kato MR-220 (KR-22H)
 Serial Number 3310167

Working Range Diagram



Radius from slewing centre (m)

Note: This diagram does not include deflection of Boom and Job

