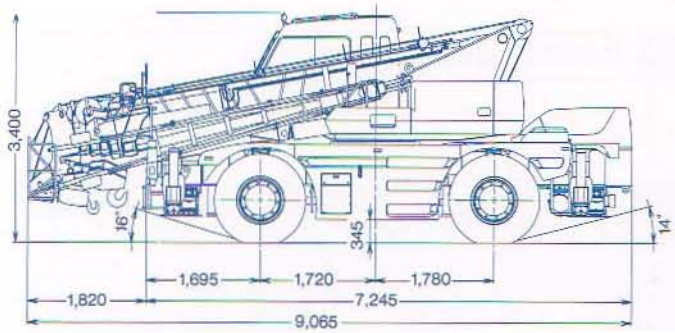
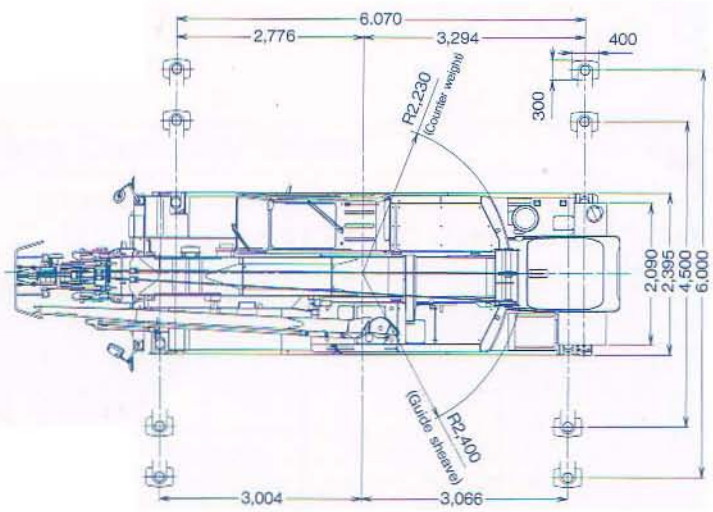
TERRANOVA GROUP

CRANES

KATO CR250

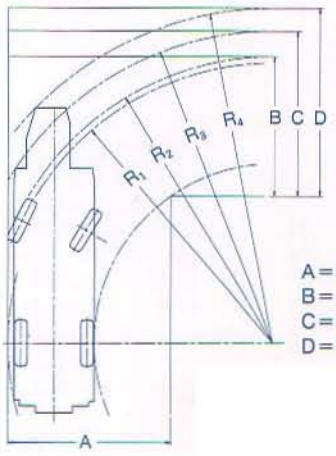
A True City Class With 28 Metres Main Boom, Twin Hoist And Under-slung Fly jib Also Slews Within Half Rig Duties





■Minimum Road Width for Right-Angle Turn

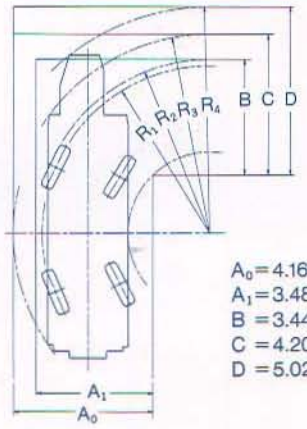
● Right turn in two-wheel steering mode



R_1=8.30m
(Minimum turning radius)
R_2=8.49m
(Turning radius of extremely outer tire)
R_3=9.25m
(Chassis turning radius)
R_4=9.93m
(Boom end turning radius)

A=4.85m (Width of entrance)
B=4.13m (Width of wheel exit)
C=4.89m (Width of chassis exit)
D=5.56m (Width of exit at end of boom)

● Right turn in 4-wheel steering mode



R_1=5.00m
(Minimum turning radius)
R_2=5.19m
(Turning radius of extremely outer tire)
R_3=5.95m
(Chassis turning radius)
R_4=6.77m
(Boom end turning radius)

A_0=4.16m (Width of entrance)
A_1=3.48m (Width of wheel entrance)
B =3.44m (Width of wheel exit)
C =4.20m (Width of chassis exit)
D =5.02m (Width of exit at end of boom)

Note:The above values are based on calculations.

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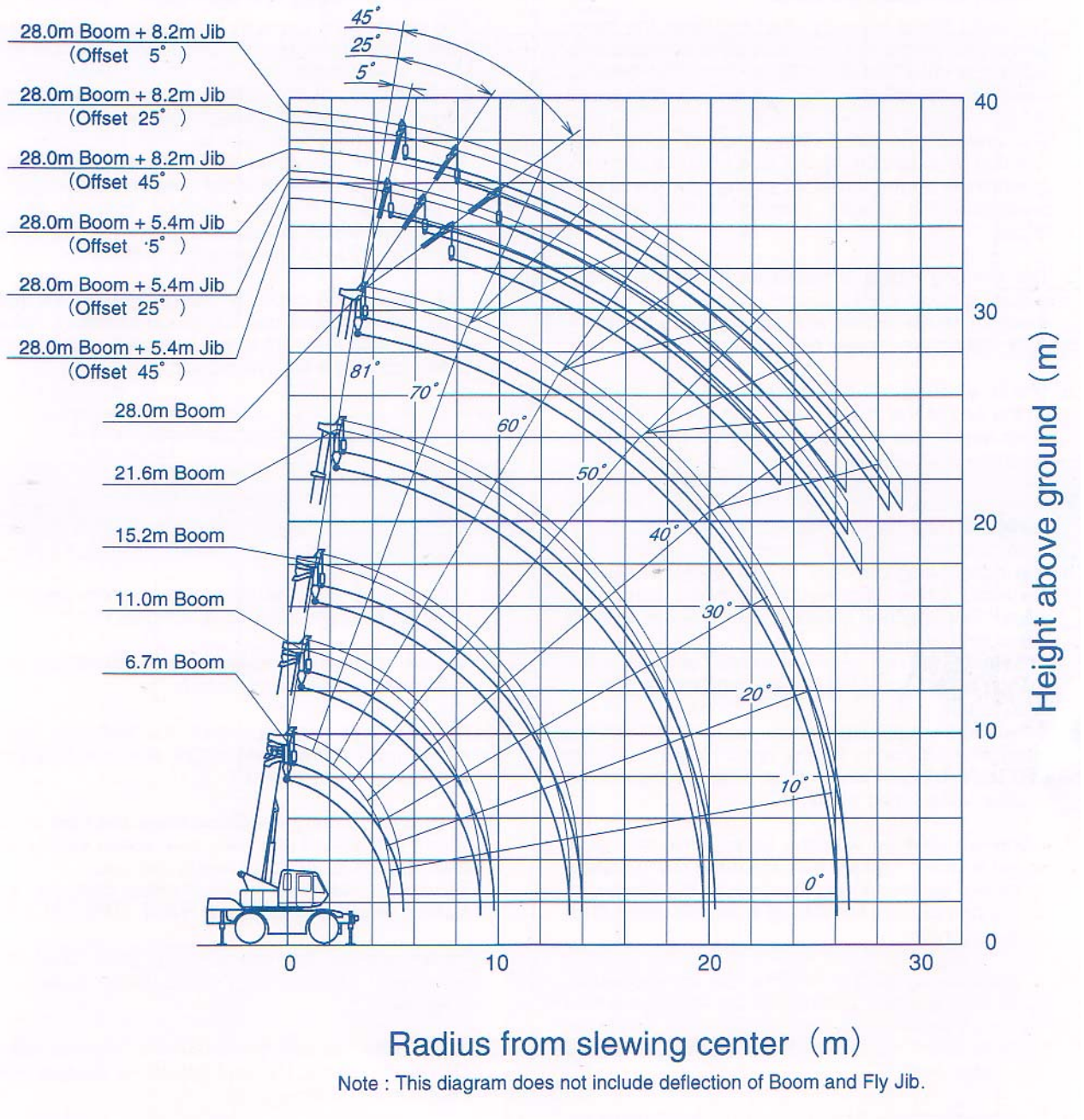
WORKING RANGE



Note : This diagram does not include deflection of Boom and Fly Jib.

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■RATED LIFTING CAPACITY (1)

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

Working radius (m)	Outriggers fully extended (6.0m) - 360° full range					Outriggers intermediately extended (4.5m) - 360° full range					Outriggers completely retracted (blocked on vertical cylinders) - 360° full range				
	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	6.7m Boom	11.0m Boom	15.2m Boom	21.6m Boom	28.0m Boom
2.8	25.00	12.00	12.00			25.00	12.00	12.00			10.00	9.50	7.90		
3.0	22.00	12.00	12.00	8.00		22.00	12.00	12.00	8.00		8.75	8.45	7.15	6.50	
3.5	20.00	12.00	12.00	8.00		20.00	12.00	12.00	8.00		6.60	6.30	5.65	5.45	
4.0	17.00	12.00	12.00	8.00	6.50	17.00	12.00	12.00	8.00	6.50	5.10	4.85	4.55	4.55	4.25
4.5	15.00	12.00	12.00	8.00	6.50	15.00	12.00	12.00	8.00	6.50	4.10	3.85	3.70	3.80	3.65
5.0		12.00	12.00	8.00	6.50		12.00	12.00	8.00	6.50		3.10	3.00	3.20	3.15
5.5		12.00	12.00	8.00	6.50		9.80	9.70	8.00	6.50		2.50	2.40	2.70	2.70
6.0		12.00	11.50	8.00	6.50		8.20	8.10	8.00	6.50		2.05	1.95	2.30	2.35
6.5		11.30	10.60	8.00	6.50		7.00	6.85	7.25	6.50		1.60	1.55	1.95	2.00
7.0		10.15	9.90	7.85	6.50		6.00	5.90	6.55	6.50		1.25	1.20	1.65	1.75
8.0		7.90	7.80	7.10	5.90		4.60	4.50	5.10	5.40		0.70	0.60	1.15	1.30
9.0		6.20	6.10	6.35	5.35		3.60	3.45	4.05	4.40					
10.0			4.90	5.45	4.80			2.65	3.30	3.60					
11.0			4.00	4.60	4.30			2.05	2.65	3.00					
12.0			3.25	3.85	3.85			1.55	2.15	2.50					
13.0			2.65	3.30	3.50			1.15	1.75	2.10					
14.0				2.80	3.10				1.40	1.75					
15.0				2.35	2.70				1.15	1.45					
16.0				2.00	2.35				0.90	1.20					
17.0				1.70	2.00				0.70	0.95					
18.0				1.45	1.75				0.50	0.80					
19.0				1.20	1.50				0.35	0.60					
20.0			[19.7m]	1.05	1.30					0.45					
21.0					1.15					0.35					
22.0					0.95										
23.0					0.80										
24.0					0.70										
25.0					0.60										
26.0					0.50										
Standard hook	for 25 ton (optional)	for 22 ton				for 25 ton (optional)	for 22 ton				for 25 ton (optional)	for 22 ton			
Hook mass	200 kg	200 kg				200 kg	200 kg				200 kg	200 kg			
Parts of line	7	4				7	4				7	4			
Critical boom angle	—	—	—	—	—	—	—	—	—	35°	—	20°	51°	62°	69°

(Unit : Metric ton)

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■RATED LIFTING CAPACITY (2)

28.0m Boom + 5.4m Jib (Standard hook for 4.0ton. Hook mass 60kg)

Outriggers fully extended (6.0m) - 360° full range

Boom angle (°)	Offset 5° Working radius (m)	Offset 5° Load (t)	Offset 25° Working radius (m)	Offset 25° Load (t)	Offset 45° Working radius (m)	Offset 45° Load (t)
81.0	5.2	3.00	7.0	2.50	8.3	1.55
77.7	7.2	3.00	8.9	2.50	10.0	1.55
75.0	8.9	3.00	10.4	2.30	11.4	1.50
73.0	10.0	3.00	11.5	2.14	12.4	1.46
70.0	11.7	2.60	13.1	1.94	13.9	1.42
65.0	14.3	2.15	15.7	1.69	16.3	1.35
60.0	16.8	1.83	18.1	1.49	18.7	1.30
55.0	19.2	1.55	20.3	1.35	20.8	1.25
54.0	19.6	1.45	20.7	1.32	21.2	1.22
52.0	20.4	1.29	21.5	1.19	22.0	1.18
50.0	21.2	1.14	22.3	1.05	22.7	1.08
48.0	22.0	1.01	23.0	0.94	23.3	0.99
45.0	23.2	0.82	24.1	0.77		
40.0	25.0	0.58	25.8	0.54		
35.0	26.6	0.40	27.2	0.38		
Critical boom angle	33°		33°		46°	

Outriggers intermediately extended (4.5m) - 360° full range

Boom angle (°)	Offset 5° Working radius (m)	Offset 5° Load (t)	Offset 25° Working radius (m)	Offset 25° Load (t)	Offset 45° Working radius (m)	Offset 45° Load (t)
81.0	5.2	3.00	7.0	2.50	8.3	1.55
77.7	7.2	3.00	8.9	2.50	10.0	1.55
75.0	8.9	3.00	10.4	2.30	11.4	1.50
73.0	10.0	3.00	11.5	2.14	12.4	1.46
70.0	11.7	2.60	13.1	1.94	13.9	1.42
69.0	12.2	2.50	13.6	1.88	14.4	1.40
67.0	13.2	2.14	14.7	1.77	15.3	1.37
64.0	14.7	1.63	16.0	1.46	16.8	1.33
60.0	16.6	1.14	17.9	1.02	18.5	1.00
55.0	18.9	0.70	19.9	0.67	20.7	0.60
50.0	21.0	0.39	21.9	0.37		
Critical boom angle	48°		48°		53°	

(Unit : Metric ton)

28.0m Boom + 8.2m Jib (Standard hook for 4.0ton. Hook mass 60kg)

Outriggers fully extended (6.0m) - 360° full range

Boom angle (°)	Offset 5° Working radius (m)	Offset 5° Load (t)	Offset 25° Working radius (m)	Offset 25° Load (t)	Offset 45° Working radius (m)	Offset 45° Load (t)
81.0	6.0	2.00	8.7	1.20	10.5	0.80
77.0	8.7	2.00	11.1	1.20	12.7	0.80
75.0	10.0	2.00	12.2	1.20	13.7	0.78
72.0	11.9	1.81	14.0	1.20	15.3	0.75
70.0	13.0	1.71	15.1	1.18	16.4	0.74
65.0	15.9	1.49	17.8	1.12	18.9	0.72
60.0	18.6	1.33	20.3	1.05	21.3	0.69
55.0	21.2	1.20	22.7	0.98	23.5	0.67
53.0	22.1	1.14	23.6	0.95	24.3	0.66
50.0	23.5	0.96	24.9	0.77	25.4	0.65
47.0	24.7	0.80	26.1	0.63	26.5	0.64
45.0	25.6	0.69	26.8	0.56		
40.0	27.5	0.49	28.5	0.39		
35.0	29.1	0.33				
Critical boom angle	33°		38°		45°	

Outriggers intermediately extended (4.5m) - 360° full range

Boom angle (°)	Offset 5° Working radius (m)	Offset 5° Load (t)	Offset 25° Working radius (m)	Offset 25° Load (t)	Offset 45° Working radius (m)	Offset 45° Load (t)
81.0	6.0	2.00	8.7	1.20	10.5	0.80
77.0	8.7	2.00	11.1	1.20	12.7	0.80
75.0	10.0	2.00	12.2	1.20	13.7	0.78
72.0	11.9	1.81	14.0	1.20	15.3	0.75
70.0	13.0	1.71	15.1	1.18	16.4	0.74
65.0	15.9	1.49	17.8	1.12	18.9	0.72
63.0	16.9	1.26	18.8	1.09	19.8	0.70
60.0	18.4	0.98	20.2	0.87	21.3	0.69
58.0	19.4	0.81	21.2	0.72	22.2	0.68
55.0	20.8	0.60	22.5	0.54	23.3	0.53
50.0	23.1	0.31				
Critical boom angle	48°		53°		53°	

(Unit : Metric ton)

■RATED LIFTING CAPACITY (3)

Stationary on rubber (without outriggers)

Working radius (m)	6.7m Boom Over front	6.7m Boom 360° full range	11.0m Boom Over front	11.0m Boom 360° full range	15.2m Boom Over front	15.2m Boom 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	
Standard hook	for 22 ton					
Hook mass	200 kg					
Parts of line	6		4			
Critical boom angle	—	—	—	30°	33°	57°

(Unit : Metric ton)

Pick & Carry (less than 2km/h) (without outriggers)

Working radius (m)	6.7m Boom Over front	6.7m Boom 360° full range	11.0m Boom Over front	11.0m Boom 360° full range	15.2m Boom Over front	15.2m Boom 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	
11.0						
Standard hook	for 22 ton					
Hook mass	200 kg					
Parts of line	6		4			
Critical boom angle	—	—	—	42°	35°	60°

(Unit : Metric ton)

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