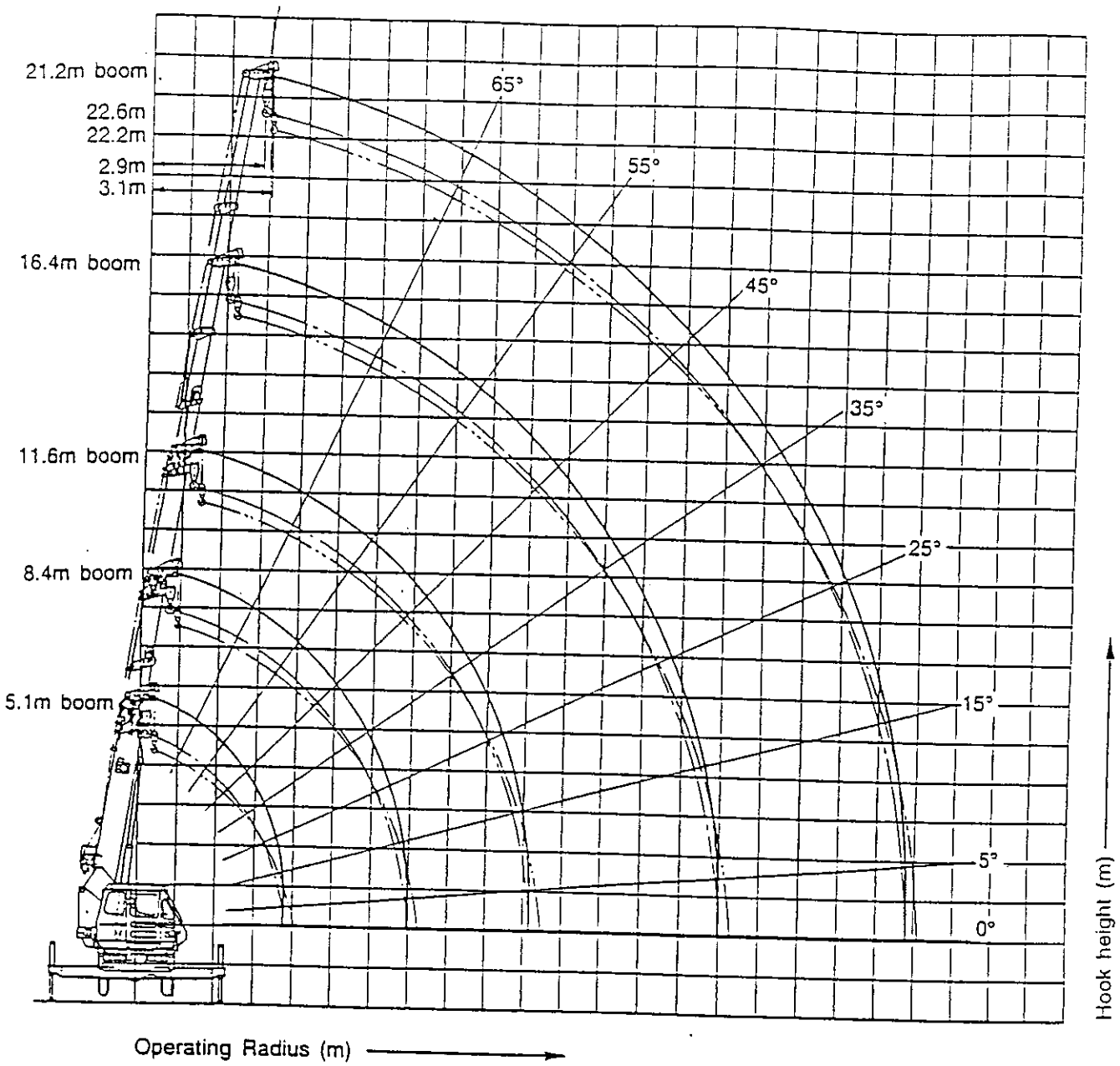
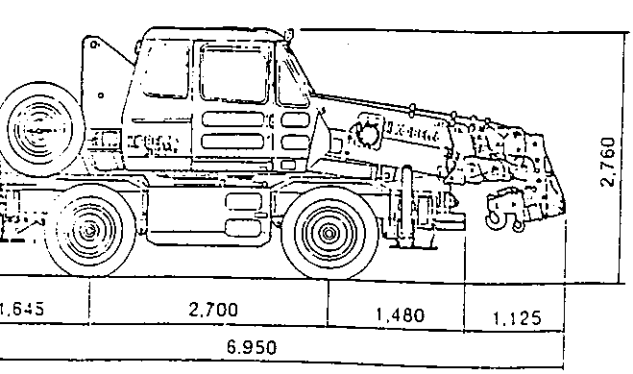
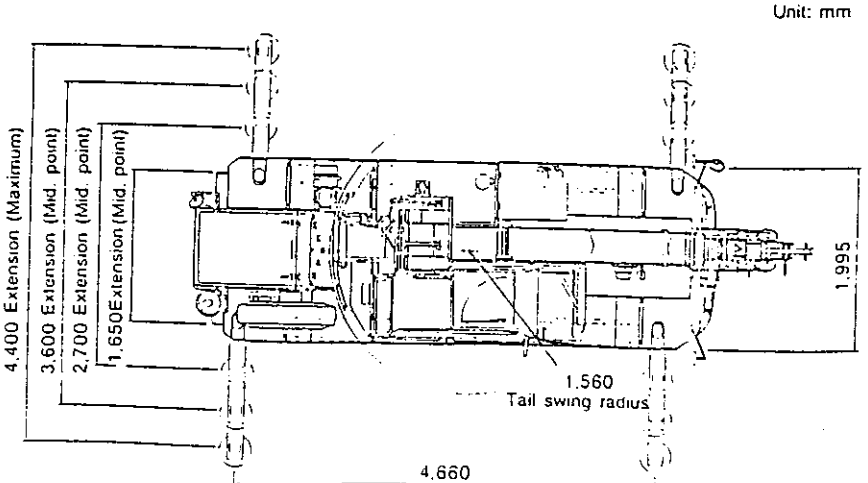
Working Ranges



Dimensions

Unit: mm





Lifting Capacities

NOTES FOR LIFTING CAPACITIES

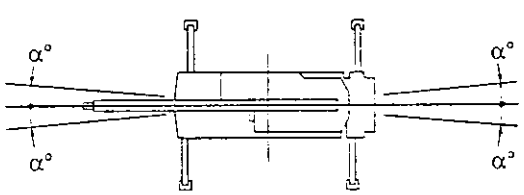
GENERAL NOTES

1. Lifting cpaacities listed apply only to the machine as originally manufactured and designed by KOBE STEEL, LTD. modifications to this machine or use of equipment other than that specified can reduce operating capacity.
2. Construction equipment can be dangerous if improperly operated or maintained. Operation and maintenance of this machjine must be in compliance with the information in the operation, safety and maintenance manual supplied with machine. If this manul is missing, order repiacement.

OPERATION WITH OUTRIGGERS

1. For outrigger operaiton, outriggers shall be fully extended with tires free of supporting surface before operating crane.
2. Total rated loads shown on the chart are the maximum allowable crane capacities and are based on the machine standing level onfirm supporting surface under ideal job conditions. Depending on the nature of the supporting surface, it may be necessary to have structual supports under the outrigger floats to spread the load to larger bearing surface.
3. Capacities do not exceed 78% of the tipping loads: Capacities factors other than machine stability such as structural competence are shown by bold lines.
4. Weight of hooks, hook blocks, slings adn other lifting devices are a part of the total load. Their total weight must be subtracted load to obtain the weight that can be lifted.
   7.0-ton hook block weight 76kg
   1.4-ton hook block weight 25kg
5. The workign radius given in the charts allow for loaded boom deflection. Always operate the machine on the basis of actual operating radius.
6. Total rated loads are based on freely suspended load and mark no allowance for such factors as the effect of wind, sudden stopping of loads, supporting surface conditions, side loads, etc. Side pull on boom or jib is extremely dangerous.
7. Maximum outrigger extension is 4.4m. Two intermediate extension positions are also provided at 3.6m and 2.7m. Minimum outrigger extension is 1.65m.
   Over-the-side ratings depend on outrigger extension. Values for each outrigger position are given separately and must be followed accordingly during operaiton. Load rating over the front and rear assume fully extended outrigger position.

Over-the-front area Over-the-rear area



Outriggers	3.6m extension	2.7m extension	1.65m extension
α° (FRONT)	28	20	5
α° (REAR)	28	20	5

8. Ratings of the auxiliary sheave are the same as main boom ratings, but should not exceed 1,400kg. Ratings of the auxiliary sheave are calculated by deducting 1.4-ton hook weight (70kg) from main boom ratings.
9. To determine load ratings that fall between those shown in the charts, proceed as follows:
   a) For boom lengths not listed use rating for next longer boom length or next shorter boom length, whichever is smaller
   b) For load radii not shown, use rating for next larger radius.
10. To attempt to lift loads in the area other than those listed in the rated load charts, the machine may tip or collapse.
11. Standard hoist reevings are shown bellow. Rated single-line pull must not exceed 1,400kg.

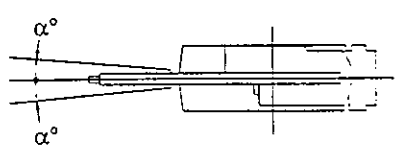
Boom length	5.1m	8.4m	11.6m	16.4m	21.2m	Aux. sheave
Hook	7-ton	7-ton	7-ton	7-ton	7-ton	1.4-ton
Parts of line	6	4	4	4	4	1

12. Free fall should in principle be done with no load on a hook. When a load must unavoidably be applied, load allowabel for free fall operations are restricted to one-fifth of rated loads at the given load radius.
    Never brake suddenly during free fall, or machine may tip.

OPERATION WITHOUT OUTRIGGERS (ON TIRES)

1. Suspension lock-up cylinder is available for X-type outrigger carrier as option.
   Do not attempt to lift loads other than over the front area with H-type outrigger carrier with which suspension lock-up is not available.
2. Load ratings are the allowable maximum lifting capacities for a firm and level surface, with tires filled to prescribed pressure; Bias (6.75kg/cm²), Radial (7.25kg/cm²),Tubeless Radial (8.25kg/cm²) and wide Radial (6.00kg/cm²). Damaged tires are hazardous to safe operation of crane. Ratings include hook block and all other load handling accessories.
   Values in the bold line are based on the machine's hydraulic or structural limitations; all others are based on stability.
   7-ton hook block weight 76kg
   1.4-ton hook block weight 25kg
3. The working radius given in the charts allow for loaded boom deflection. Always operate the machine on the basis of actual operating radius.
4. Load ratings differ for over-the-front and 360° operation. Care must be taken to avoid overload when swinging a load from an over-the-front position to a over-the-side position.

Over-the-front area



On tires	Stationery	Pick & carry
α° (FRONT)	1°	1°

5. Ratings of the auxiliary sheave are the same as main boom ratings, but should not exceed 1,400kg. Ratings of the auxiliary sheave are calculated by deducting 1.4-ton hook weight (70kg) from main boom ratings.
6. Do not use free fall.
7. Parking brake and auxiliary operation brake must be applied during stationary load lifting.
8. Pick and carry operations must be done in the low travel mode.
9. During pick and carry operations, keep the load close to the ground to avoid swaying, and travel no faster than 2.0km/h. Avoid cornering, sudden starts (acceleration), and sudden braking. Boom must be centered over the frontarea.
10. Do not operate the crane functions while carring the load.
11. Single-line load must not exceed 1,400kg.

With outrigger in 1.65m position – over the side (H-type outrigger only)

Capacities do not exceed 75% of the tipping loads.
Capacities factors other than machine stability such as structural components are shown by bold lines.

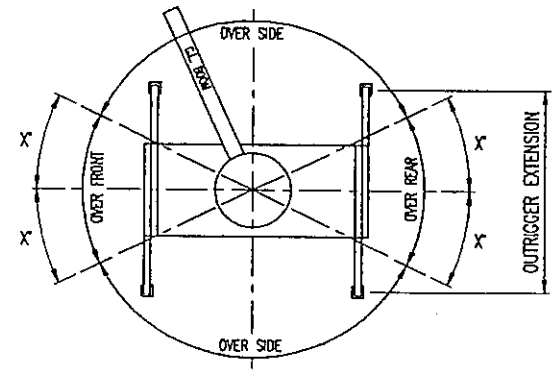
KOBELCO RK70 (METRICTON)

Operating radius in meters	Boom length in meters				
	5.1	8.4	11.6	16.4	21.2
1.0	7.00	4.90			
1.5	7.00	4.90	4.90		
2.0	5.19	4.90	4.90		
2.5	3.40	3.14	3.12	2.02	
3.0	2.50	2.30	2.26	2.02	1.34
3.5	1.93	1.74	1.73	2.02	1.34
4.0	1.74 (3.7m)	1.32	1.30	1.60	1.34
4.5		1.05	1.01	1.30	1.34
5.0		0.83	0.81	1.04	1.17
5.5		0.64	0.60	0.81	0.99
6.0		0.47	0.43	0.64	0.81
7.0		0.22 (6.9m)	0.17	0.38	0.54
8.0				0.19	0.34
9.0					0.19
10.0					0.09
Min angle	–	–	47°	57°	59°

On tyre 1 (only over the front)

Capacities do not exceed 67% of the tipping loads.

Operating radius in meters	Boom length in meters
	5.1 – 8.4
5.0	0.859 TONNE



MINI ROUGH TERRAIN CRANE

With outrigger in 2.7m position – over the side

KOBELCO **RK70**

Capacities do not exceed 75% of the tipping loads.

Capacities factors other than machine stability such as structural components are shown by bold lines. (METRICTON)

Operating radius in meters	Boom length in meters				
	5.1	8.4	11.6	16.4	21.2
1.0	7.00	4.90			
1.5	7.00	4.90	4.90		
2.0	7.00	4.90	4.90		
2.5	7.00	4.90	4.90	3.90	
3.0	6.10	4.90	3.94	3.90	2.00
3.5	4.23	3.91	3.46	3.90	2.00
4.0	4.04 (3.7m)	3.13	2.86	3.60	2.00
4.5		2.53	2.30	2.79	2.00
5.0		2.02	1.90	2.33	2.00
5.5		1.64	1.57	1.97	1.85
6.0		1.34	1.30	1.69	1.70
7.0		1.03 (6.9m)	0.96	1.26	1.25
8.0			0.63	0.92	0.93
9.0			0.39	0.67	0.73
10.0			0.22	0.48	0.57
11.0			0.2 (10.2m)	0.32	0.45
12.0				0.20	0.33
13.0					0.25
14.0					0.16
15.0					
16.0					
17.0					
18.0					
19.0					
20.0					
21.0					
Min. angle					

With outrigger in 3.6m position – over the side

KOBELCO **RK70**

Capacities do not exceed 75% of the tipping loads.

Capacities factors other than machine stability such as structural components are shown by bold lines. (METRICTON)

Operating radius in meters	Boom length in meters				
	5.1	8.4	11.6	16.4	21.2
1.0	7.00	4.90			
1.5	7.00	4.90	4.90		
2.0	7.00	4.90	4.90		
2.5	7.00	4.90	4.90	3.90	
3.0	6.10	4.90	4.90	3.90	2.00
3.5	5.30	4.90	4.90	3.90	2.00
4.0	4.90 (3.7m)	4.50	4.50	3.60	2.00
4.5		3.85	3.87	3.30	2.00
5.0		3.33	3.37	3.05	2.00
5.5		2.74	2.97	2.82	1.85
6.0		2.36	2.42	2.56	1.70
7.0		1.81 (6.9m)	1.80	1.95	1.50
8.0			1.34	1.51	1.28
9.0			0.98	1.17	1.13
10.0			0.75	0.92	1.00
11.0			0.73 (10.2m)	0.72	0.87
12.0				0.55	0.75
13.0				0.42	0.62
14.0				0.32	0.51
15.0				0.26	0.40
16.0					0.31
17.0					0.25
18.0					0.18
19.0					0.12
20.0					
21.0					

With outrigger in 4.4m position – 360° working area

KOBELCO **RK70**

Capacities do not exceed 75% of the tipping loads.

Capacities factors other than machine stability such as structural components are shown by bold lines. (METRICTON)

Operating radius in meters	Boom length in meters				
	5.1	8.4	11.6	16.4	21.2
1.0	7.00	4.90			
1.5	7.00	4.90	4.90		
2.0	7.00	4.90	4.90		
2.5	7.00	4.90	4.90	3.90	
3.0	6.10	4.90	4.90	3.90	2.00
3.5	5.30	4.90	4.90	3.90	2.00
4.0	4.90 (3.7m)	4.50	4.50	3.60	2.00
4.5		3.85	3.87	3.30	2.00
5.0		3.33	3.37	3.05	2.00
5.5		2.95	2.97	2.82	1.85
6.0		2.62	2.65	2.56	1.70
7.0		2.15 (6.9m)	2.14	2.15	1.50
8.0			1.63	1.84	1.40
9.0			1.34	1.60	1.23
10.0			1.15	1.40	1.09
11.0			1.11 (10.2m)	1.15	0.98
12.0				0.98	0.89
13.0				0.81	0.82
14.0				0.66	0.75
15.0				0.53	0.69
16.0					0.56
17.0					0.49
18.0					0.41
19.0					0.34
20.0					0.33 (19.8m)
21.0					
Min angle	–	–	–	–	–