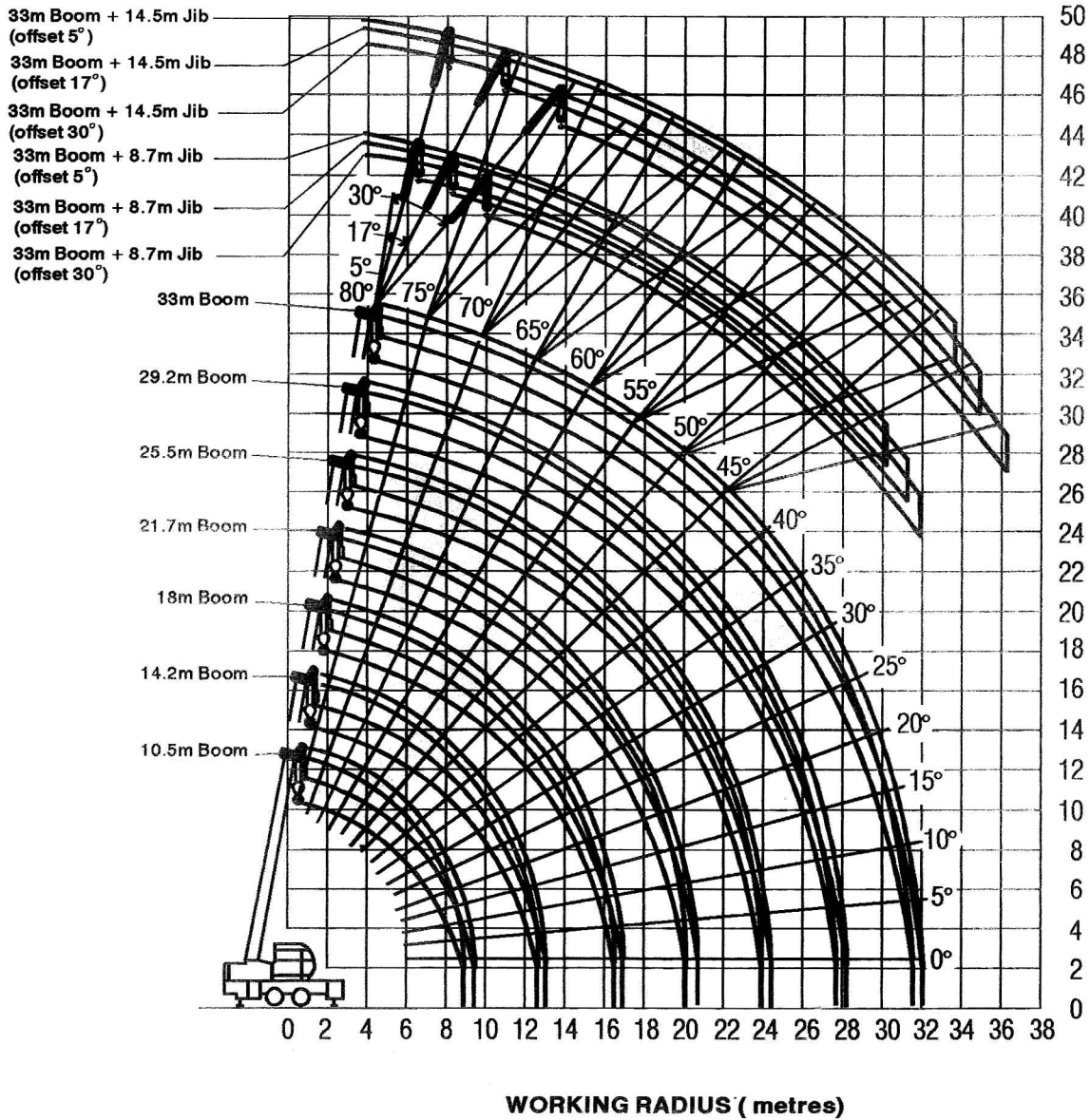
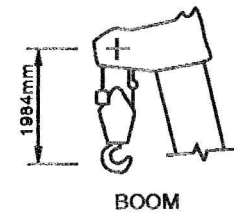
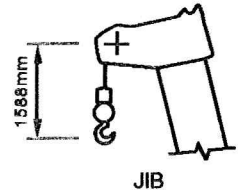


KATO NK-250-v2

WORKING RADIUS - LIFTING HEIGHT DIAGRAM



HOOK CLEARANCE



LIFTING HEIGHT (metres)

NOTES

- (1) The above lifting heights and boom angles are based on a straight (unladen) boom, and allowance should be made for boom deflection obtained under laden conditions.
- (2) The diagram is shown as with the outriggers fully extended.

KATO NK-250-v2 HYDRAULIC CRANE

CHART 1

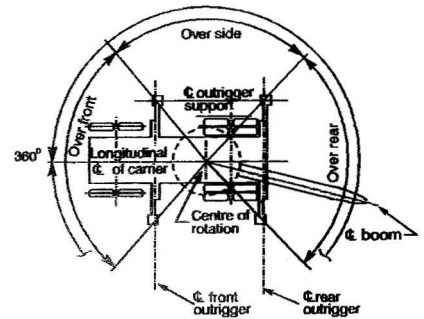
TOTAL RATED LOAD IN KILOGRAMS

THIS DOCUMENT SHOULD BE READ IN CONJUNCTION WITH THE A.C.S.

OUTRIGGERS FULLY EXTENDED WITH THE FRONT JACK DOWN (360°)								
OUTRIGGERS AT MEDIUM EXTENSION WITH THE FRONT JACK DOWN (OVER THE FRONT & REAR)								
OUTRIGGERS AT MINIMUM EXTENSION (OVER THE REAR)								
B(m) \ A	10.5m	14.2m	18m	21.7m	25.5m	29.2m	33m	
2.5	25,000	20,000	16,000					
3.0	25,000	20,000	16,000					
3.5	25,000	20,000	16,000	12,000				
4.0	22,900	20,000	16,000	12,000	11,500			
4.5	21,000	20,000	16,000	12,000	11,500			
5.0	19,400	18,400	16,000	12,000	11,500	9,000		
6.0	16,200	15,300	13,700	12,000	11,500	9,000	7,000	
7.0	13,700	12,650	11,950	11,000	10,000	9,000	7,000	
8.0	11,500	10,650	10,550	10,200	8,900	8,200	7,000	
8.8	9,500	9,300	9,200	9,400	8,250	7,600	6,400	
9.0		9,050	8,800	9,200	8,050	7,450	6,250	
10.0		7,400	7,200	7,700	7,300	6,750	5,700	
12.0		5,150	5,000	5,450	5,750	5,650	4,800	
12.5		4,700	4,600	5,000	5,300	5,450	4,550	
13.0			4,250	4,650	4,900	5,050	4,450	
14.0			3,600	4,000	4,250	4,450	4,100	
16.0			2,550	3,000	3,250	3,400	3,500	
16.3			2,400	2,850	3,100	3,250	3,400	
18.0				2,200	2,500	2,700	2,800	
20.0				1,550	1,850	2,050	2,200	
22.0					1,350	1,550	1,700	
23.8					950	1,200	1,350	
26.0						800	950	
27.5						600	750	
29.0							550	
30.0							450	

A : BOOM LENGTH

B : WORKING RADIUS (m)



Working Radius Diagram

NOTES :

- These capacities are based on condition that the crane is set on firm ground horizontally. Those above bold lines are based on the crane's strength and those below, on its stability.
- Total rated loads below the bold lines do not exceed 75% of tipping load.
- The total rated loads shown are based on the actual working radius which includes any deflection of the boom.
- Boom operations must be related to the working radius. However the working radii shown for jib operations are based upon the values obtained when the boom is fully extended (33M). Jib operations should be performed on the basis of boom angle only, regardless of boom length.
- If the boom length exceeds the specified value, refer to the rated lifting capacities for the boom length and the next highest boom length. The crane should be operated within the smaller lifting capacity.
- The boom angle must not be reduced to less than the number of degrees shown as the critical boom angle at the bottom of each load chart. In the event of such a reduction the crane will tip.
- The weight of the hook (280kg for 25,000kg capacity, 60 kg for 3,400kg capacity), slings and all similarly used load handling devices must be added to the weight of the load.

- Standard number of part lines for each boom length are as shown below. Load per line should not surpass 3,125kg.

BOOM LENGTH	10.5m	14.2m	18m	21.7m	25.5m	29.2m	33m	BOTH JIBS	SINGLE TOP
NO. OF PART LINES	8	8	8	4	4	4	4	1	1

- Total rated load of the single top should not exceed 3,400kg.
- Free fall operation should be performed without any load on the hook. If it is unavoidable, the load must not exceed 20% of the rated load. Sudden braking must be avoided.
- Deduct 1,800kg from the rated lifting loads of the main boom, when the jib is attached to the main boom head. The single top must not be used whilst the jib is attached.
- Over the front lifting performance is inferior to over the sides/over the rear lifting performance. Great care should be taken when transferring from over side to over front since there is a distinct danger of overloading.
- The crane's safe lifting ability over the sides will vary due to the amount the outriggers are extended. Refer to the rated load chart for each respective outrigger configuration. When the front jack is down and the outriggers are set at their minimum extension the stability of the crane is the same as if the front jack was not in use.
- Special weather caution: Should wind gusts exceed 10m/sec postpone the operation. Refer to the operation and maintenance manual.

KATO NK-250-v2 HYDRAULIC CRANE

CHART 2

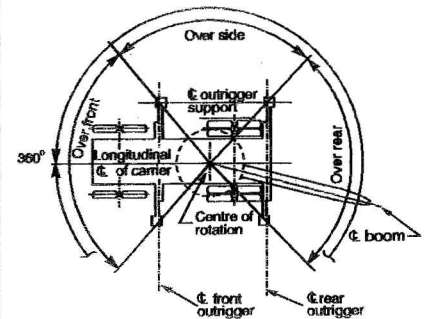
TOTAL RATED LOAD IN KILOGRAMS

THIS DOCUMENT SHOULD BE READ IN CONJUNCTION WITH THE A.C.S.

OUTRIGGERS AT MEDIUM (4.1M) EXTENSION (OVER THE SIDE)								
OUTRIGGERS AT MINIMUM EXTENSION WITH THE FRONT JACK DOWN (OVER THE FRONT)								
OUTRIGGERS AT ANY EXTENSION WITH FRONT JACK UP (OVER THE FRONT)								
B(m) \ A	10.5m	14.2m	18m	21.7m	25.5m	29.2m	33m	
2.5	25,000	20,000	16,000					
3.0	25,000	20,000	16,000					
3.5	25,000	20,000	16,000	12,000				
4.0	22,500	20,000	16,000	12,000	11,500			
4.2	19,850	19,400	16,000	12,000	11,500			
4.6	16,750	16,300	16,000	12,000	11,500	9,000		
5.5	12,100	11,800	11,550	12,000	11,500	9,000		
6.0	10,250	10,000	9,750	10,200	10,150	9,000	7,000	
6.6	8,550	8,400	8,150	8,600	8,550	9,000	7,000	
7.0	7,750	7,550	7,300	7,800	8,050	8,200	7,000	
7.7	6,500	6,300	6,100	6,550	6,800	6,950	7,000	
8.8	4,900	4,850	4,700	5,100	5,350	5,500	5,600	
9.0		4,600	4,450	4,900	5,150	5,300	5,400	
10.0		3,600	3,450	3,900	4,200	4,300	4,450	
12.0		2,100	1,950	2,450	2,750	2,950	3,100	
12.5		1,850	1,650	2,200	2,450	2,700	2,850	
13.0			1,400	1,950	2,200	2,450	2,600	
14.0			950	1,450	1,750	2,000	2,150	
15.0			600	1,050	1,350	1,600	1,750	
16.0				750	1,000	1,250	1,450	
17.0				450	750	950	1,150	
18.0					500	700	900	
19.0						500	650	
20.0							450	
CRITICAL BOOM ANGLE	-	-	15°	27°	38°	44°	47°	

A : BOOM LENGTH

B : WORKING RADIUS (m)



Working Radius Diagram

NOTES :

- These capacities are based on condition that the crane is set on firm ground horizontally. Those above bold lines are based on the crane's strength and those below, on its stability.
- Total rated loads below the bold lines do not exceed 75% of tipping load.
- The total rated loads shown are based on the actual working radius which includes any deflection of the boom.
- Boom operations must be related to the working radius. However the working radii shown for jib operations are based upon the values obtained when the boom is fully extended (33M). Jib operations should be performed on the basis of boom angle only, regardless of boom length.
- If the boom length exceeds the specified value, refer to the rated lifting capacities for the boom length and the next highest boom length. The crane should be operated within the smaller lifting capacity.
- The boom angle must not be reduced to less than the number of degrees shown as the critical boom angle at the bottom of each load chart. In the event of such a reduction the crane will tip.
- The weight of the hook (280kg for 25,000kg capacity, 60 kg for 3,400kg capacity), slings and all similarly used load handling devices must be added to the weight of the load.

- Standard number of part lines for each boom length are as shown below. Load per line should not surpass 3,125kg.

BOOM LENGTH	10.5m	14.2m	18m	21.7m	25.5m	29.2m	33m	BOTH JOBS	SINGLE TOP
NO. OF PART LINES	8	8	8	4	4	4	4	1	1

- Total rated load of the single top should not exceed 3,400kg.
- Free fall operation should be performed without any load on the hook. If it is unavoidable, the load must not exceed 20% of the rated load. Sudden braking must be avoided.
- Deduct 1,800kg from the rated lifting loads of the main boom, when the jib is attached to the main boom head. The single top must not be used whilst the jib is attached.
- Over the front lifting performance is inferior to over the sides/over the rear lifting performance. Great care should be taken when transferring from over side to over front since there is a distinct danger of overloading.
- The crane's safe lifting ability over the sides will vary due to the amount the outriggers are extended. Refer to the rated load chart for each respective outrigger configuration. When the front jack is down and the outriggers are set at their minimum extension the stability of the crane is the same as if the front jack was not in use.
- Special weather caution: Should wind gusts exceed 10m/sec postpone the operation. Refer to the operation and maintenance manual.

KATO NK-250-v2 HYDRAULIC CRANE

CHART 3

TOTAL RATED LOAD IN KILOGRAMS

THIS DOCUMENT SHOULD BE READ IN CONJUNCTION WITH THE A.C.S.

OUTRIGGERS AT MINIMUM EXTENSION (OVER THE SIDE)								
B(m) \ A	10.5m	14.2m	18m	21.7m	25.5m	29.2m	33m	
2.5	10,000	9,900						
3.0	10,000	9,900	7,500					
3.5	7,950	7,750	7,500	6,400				
4.0	6,500	6,250	6,100	6,400	5,500			
4.5	5,450	5,150	5,000	5,300	5,500			
5.0	4,600	4,300	4,200	4,500	4,700	4,100		
5.5	3,900	3,600	3,500	3,850	4,000	4,100	3,700	
6.0	3,300	3,050	2,950	3,300	3,500	3,550	3,700	
7.0	2,450	2,200	2,100	2,450	2,600	2,700	2,850	
8.0	1,800	1,600	1,450	1,800	2,000	2,100	2,200	
9.0		1,100	900	1,350	1,500	1,600	1,750	
10.0				850	1,100	1,250	1,350	
11.0						900	1,050	
CRITICAL BOOM ANGLE	-	40°	52°	56°	62°	63°	66°	

A : BOOM LENGTH

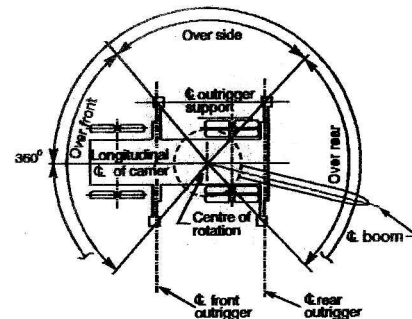
B : WORKING RADIUS (m)

NOTES :

- These capacities are based on condition that the crane is set on firm ground horizontally. Those above bold lines are based on the crane's strength and those below, on its stability.
- Total rated loads below the bold lines do not exceed 75% of tipping load.
- The total rated loads shown are based on the actual working radius which includes any deflection of the boom.
- Boom operations must be related to the working radius. However the working radii shown for jib operations are based upon the values obtained when the boom is fully extended (33M). Jib operations should be performed on the basis of boom angle only, regardless of boom length.
- If the boom length exceeds the specified value, refer to the rated lifting capacities for the boom length and the next highest boom length. The crane should be operated within the smaller lifting capacity.
- The boom angle must not be reduced to less than the number of degrees shown as the critical boom angle at the bottom of each load chart. In the event of such a reduction the crane will tip.
- The weight of the hook (280kg for 25,000kg capacity, 60 kg for 3,400kg capacity), slings and all similarly used load handling devices must be added to the weight of the load.
- Standard number of part lines for each boom length are as shown below. Load per line should not surpass 3,125kg.

BOOM LENGTH	10.5m	14.2m	18m	21.7m	25.5m	29.2m	33m	BOTH JIBS	SINGLE TOP
NO. OF PART LINES	8	8	8	4	4	4	4	1	1

- Total rated load of the single top should not exceed 3,400kg.
- Free fall operation should be performed without any load on the hook. If it is unavoidable, the load must not exceed 20% of the rated load. Sudden braking must be avoided.



Working Radius Diagram

- Deduct 1,800kg from the rated lifting loads of the main boom, when the jib is attached to the main boom head. The single top must not be used whilst the jib is attached.
- Over the front lifting performance is inferior to over the sides/over the rear lifting performance. Great care should be taken when transferring from over side to over front since there is a distinct danger of overloading.
- The crane's safe lifting ability over the sides will vary due to the amount the outriggers are extended. Refer to the rated load chart for each respective outrigger configuration. When the front jack is down and the outriggers are set at their minimum extension the stability of the crane is the same as if the front jack was not in use.
- Special weather caution: Should wind gusts exceed 10m/sec postpone the operation. Refer to the operation and maintenance manual.

KATO NK-250-v2 HYDRAULIC CRANE

CHART 4

TOTAL RATED LOAD IN KILOGRAMS

THIS DOCUMENT SHOULD BE READ IN CONJUNCTION WITH THE A.C.S.

OUTRIGGERS FULLY EXTENDED (OVER THE SIDE) OUTRIGGERS AT ANY EXTENSION (OVER THE REAR) OUTRIGGERS FULLY EXTENDED OR AT MEDIUM (4.1M) EXTENSION EITHER WITH FRONT JACK DOWN (OVER THE FRONT)													
TABLE A	33m BOOM + 8.7m JIB						TABLE B	33m BOOM + 14.5m JIB					
	5° OFFSET		17° OFFSET		30° OFFSET			5° OFFSET		17° OFFSET		30° OFFSET	
	BOOM ANGLE °	A (m)	B (kg)	A (m)	B (kg)	A (m)		B (kg)	BOOM ANGLE °	A (m)	B (kg)	A (m)	B (kg)
80	8.0	3,000	9.6	2,200	11.3	1,600	80	9.9	2,000	12.5	1,300	15.1	900
76.5	11.0	3,000	12.5	2,200	14.0	1,600	78.2	12.0	2,000	14.5	1,300	17.2	900
74.0	12.9	2,640	14.3	2,020	15.8	1,520	77.0	13.1	1,840	15.5	1,250	18.0	900
70.0	15.5	2,230	16.9	1,760	18.3	1,430	72	17.0	1,410	19.3	1,040	21.6	830
66.0	18.1	1,910	19.5	1,540	20.7	1,290	68	19.9	1,170	22.2	900	24.3	730
62.0	20.6	1,670	22.0	1,370	23.0	1,170	64	22.8	1,010	25.0	780	26.9	660
58.5	22.8	1,480	24.2	1,230	25.3	1,050	60	25.4	900	27.7	690	29.4	590
56.5	23.9	1,280	25.2	1,180	26.2	1,020	56	28.1	760	30.4	630	31.7	550
55.5	24.5	1,160	25.7	1,080	26.8	980	52.5	30.5	660	32.4	570	33.7	520
50.0	27.3	700	28.4	650	29.3	600	51.5	31.1	580	32.9	550	34.2	510
46.0	29.3	440	30.3	390	31.1	360	47.0	33.6	330	35.1	310	36.3	290
44.0	30.2	320	31.2	290	31.8	280	CRITICAL BOOM ANGLE	44°					
CRITICAL BOOM ANGLE	41°												

A : WORKING RADIUS (m)

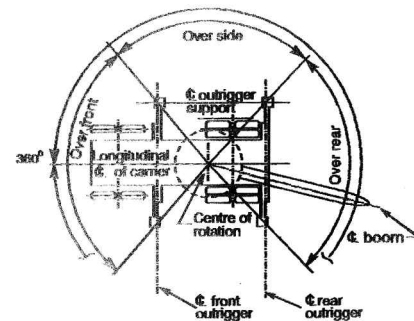
B : PERMITTED LOAD (Kg)

NOTES :

- These capacities are based on condition that the crane is set on firm ground horizontally. Those above bold lines are based on the crane's strength and those below, on its stability.
- Total rated loads below the bold lines do not exceed 75% of tipping load.
- The total rated loads shown are based on the actual working radius which includes any deflection of the boom.
- Boom operations must be related to the working radius. However the working radii shown for jib operations are based upon the values obtained when the boom is fully extended (33M). Jib operations should be performed on the basis of boom angle only, regardless of boom length.
- If the boom length exceeds the specified value, refer to the rated lifting capacities for the boom length and the next highest boom length. The crane should be operated within the smaller lifting capacity.
- The boom angle must not be reduced to less than the number of degrees shown as the critical boom angle at the bottom of each chart. In the event of such a reduction the crane will tip.
- The weight of the hook (280kg for 25,000kg capacity, 60 kg for 3,400kg capacity), slings and all similarly used load handling devices must be added to the weight of the load.
- Standard number of part lines for each boom length are as shown below. Load per line should not surpass 3,125kg.

BOOM LENGTH	10.5m	14.2m	18m	21.7m	25.5m	29.2m	33m	BOTH JIBS	SINGLE TOP
NO. OF PART LINES	8	8	8	4	4	4	4	1	1

- Total rated load of the single top should not exceed 3,400kg.



Working Radius Diagram

- Free fall operation should be performed without any load on the hook. If it is unavoidable, the load must not exceed 20% of the rated load. Sudden braking must be avoided.
- Deduct 1,800kg from the rated lifting loads of the main boom, when the jib is attached to the main boom head. The single top must not be used whilst the jib is attached.
- Over the front lifting performance is inferior to over the sides/over the rear lifting performance. Great care should be taken when transferring from over side to over front since there is a distinct danger of overloading.
- The crane's safe lifting ability over the sides will vary due to the amount the outriggers are extended. Refer to the rated load chart for each respective outrigger configuration. When the front jack is down and the outriggers are set at their minimum extension the stability of the crane is the same as if the front jack was not in use.
- Special weather caution: Should wind gusts exceed 10m/sec postpone the operation. Refer to the operation and maintenance manual.

KATO NK-250-v2 HYDRAULIC CRANE

CHART 5

TOTAL RATED LOAD IN KILOGRAMS

THIS DOCUMENT SHOULD BE READ IN CONJUNCTION WITH THE A.C.S.

OUTRIGGERS AT MEDIUM (4.1M) EXTENSION (OVER THE SIDE)						
OUTRIGGERS AT MINIMUM EXTENSION WITH THE FRONT JACK DOWN (OVER THE FRONT)						
OUTRIGGERS AT ANY EXTENSION WITH THE FRONT JACK UP (OVER THE FRONT)						
TABLE A	33m BOOM + 8.7m JIB					
	5° OFFSET		17° OFFSET		30° OFFSET	
BOOM ANGLE °	A (m)	B (kg)	A (m)	B (kg)	A (m)	B (kg)
80	8.0	3,000	9.6	2,200	11.3	1,600
76.5	11.0	3,000	12.5	2,200	14.0	1,600
73.5	13.4	2,580	14.7	1,970	16.2	1,500
72.0	14.0	2,290	15.6	1,860	17.0	1,480
71.0	14.6	2,030	16.2	1,710	17.7	1,460
68.0	16.4	1,390	17.9	1,200	19.3	1,040
65.0	18.3	870	19.8	720	21.1	1,640
62.0	20.1	470	21.4	420	22.8	330
CRITICAL BOOM ANGLE	59°					
TABLE B	33m BOOM + 14.5m JIB					
	5° OFFSET		17° OFFSET		30° OFFSET	
BOOM ANGLE °	A (m)	B (kg)	A (m)	B (kg)	A (m)	B (kg)
80	9.9	2,000	12.5	1,300	15.1	900
78.2	12.0	2,000	14.5	1,300	17.2	900
77.0	13.1	1,840	15.5	1,250	18.0	900
73	15.4	1,570	17.8	1,120	20.2	840
70.5	18.0	1,360	20.4	950	22.6	780
69	18.9	1,140	21.5	940	23.6	770
66	21.0	710	23.4	580	25.4	510
64	22.3	490	24.6	400	26.6	340
CRITICAL BOOM ANGLE	61°					

A : WORKING RADIUS (m)

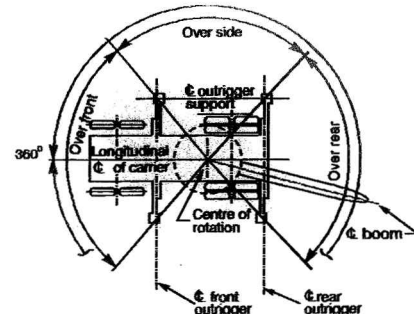
B : PERMITTED LOAD (Kg)

NOTES :

- These capacities are based on condition that the crane is set on firm ground horizontally. Those above bold lines are based on the crane's strength and those below, on its stability.
- Total rated loads below the bold lines do not exceed 75% of tipping load.
- The total rated loads shown are based on the actual working radius which includes any deflection of the boom.
- Boom operations must be related to the working radius. However the working radii shown for jib operations are based upon the values obtained when the boom is fully extended (33M). Jib operations should be performed on the basis of boom angle only, regardless of boom length.
- If the boom length exceeds the specified value, refer to the rated lifting capacities for the boom length and the next highest boom length. The crane should be operated within the smaller lifting capacity.
- The boom angle must not be reduced to less than the number of degrees shown as the critical boom angle at the bottom of each load chart. In the event of such a reduction the crane will tip.
- The weight of the hook (280kg for 25,000kg capacity, 60 kg for 3,400kg capacity), slings and all similarly used load handling devices must be added to the weight of the load.
- Standard number of part lines for each boom length are as shown below. Load per line should not surpass 3,125kg.

BOOM LENGTH	10.5m	14.2m	18m	21.7m	25.5m	29.2m	33m	BOTH JIBS	SINGLE TOP
NO. OF PART LINES	8	8	8	4	4	4	4	1	1

- Total rated load of the single top should not exceed 3,400kg.



Working Radius Diagram

- Free fall operation should be performed without any load on the hook. If it is unavoidable, the load must not exceed 20% of the rated load. Sudden braking must be avoided.
- Deduct 1,800kg from the rated lifting loads of the main boom, when the jib is attached to the main boom head. The single top must not be used whilst the jib is attached.
- Over the front lifting performance is inferior to over the sides/over the rear lifting performance. Great care should be taken when transferring from over side to over front since there is a distinct danger of overloading.
- The crane's safe lifting ability over the sides will vary due to the amount the outriggers are extended. Refer to the rated load chart for each respective outrigger configuration. When the front jack is down and the outriggers are set at their minimum extension the stability of the crane is the same as if the front jack was not in use.
- Special weather caution: Should wind gusts exceed 10m/sec postpone the operation. Refer to the operation and maintenance manual.