

1997 KATO NK300E-V

30 TONNE TRUCK CRANE - MACK CARRIER

TRANSPORT DIMENSIONS

Overall length	Approx. 12.8 m
Overall width	Approx. 2.50 m
Overall height	Approx. 3.50 m
Wheelbase	Approx. 6.40 m
Gross vehicle mass	Approx. 29,000 kg
Front axle load	Approx. 9,400 kg
Rear axle load	Approx. 19,600 kg
Outrigger spread	Approx. 6.10 m

CRANE SPECIFICATIONS

Maximum lifting capacity	30 tonne
Main boom	10.5 m - 33.0 m
Fly jib	8.7 m - 14.5 m
Maximum tip height	Approx. 47.5 m
Maximum working radius	Approx. 31.0 m
Minimum working radius	Approx. 2.5 m
Boom sections	4-section telescopic
Outriggers	Hydraulic H-type

CARRIER & PERFORMANCE

Carrier make	Mack
Drive	6x4
Engine	Mack E7 6-cylinder diesel
Transmission	Mack 8LL
Maximum travel speed	Approx. 65 km/h
Gradeability	Approx. 40%
Outside turning radius	Approx. 13.5 m
Tail swing radius	Approx. 3.40 m

ORIGINAL CAB LOAD CHARTS

The following pages reproduce the actual Kato rated lifting capacity charts, performance diagram, ACS checks and caution information fitted in this crane.

DISCLAIMER All specifications, dimensions, weights and performance information in this document are approximate and are provided as a guide only. Prospective purchasers must independently inspect the crane and verify all information, load charts, capacities, dimensions, weights, condition and suitability before purchase or use.

Rated Lifting Capacity Tables 1 and 2

KATO NK-300E-v RATED LIFTING CAPACITY

TABLE(1)

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

Outriggers fully extended with front jack -360° full range
Outriggers fully extended without front jack -over side and over rear

Working radius(m)	10.5m Boom	14.2m Boom	18m Boom	21.7m Boom	25.5m Boom	29.2m Boom	33m Boom
2.5	30.00	20.00	16.00				
3.0	30.00	20.00	16.00				
3.5	25.40	20.00	16.00	12.00			
4.0	22.90	20.00	16.00	12.00	11.50		
4.5	21.00	20.00	16.00	12.00	11.50		
5.0	19.40	18.40	16.00	12.00	11.50	9.00	
6.0	16.20	15.30	13.70	12.00	11.50	9.00	7.00
7.0	13.70	12.65	11.95	11.00	10.00	9.00	7.00
8.0	11.15	10.65	10.55	10.20	8.90	8.20	7.00
8.5	10.25	9.70	9.65	9.65	8.45	7.80	6.60
9.0		8.80	8.80	9.20	8.05	7.45	6.25
10.0		7.30	7.15	7.65	7.30	6.75	5.70
12.0		5.10	4.95	5.40	5.65	5.65	4.80
12.5		4.70	4.55	5.05	5.25	5.45	4.55
13.0			4.20	4.65	4.90	5.05	4.45
14.0			3.55	4.00	4.25	4.40	4.10
16.0			2.55	2.95	3.20	3.40	3.50
18.0				2.20	2.45	2.65	2.80
20.0				1.65	1.85	2.05	2.20
22.0					1.40	1.60	1.70
24.0						1.20	1.35
26.0						0.90	1.00
27.5						0.70	0.85
29.0							0.65
31.0							0.45
Standard hook	for 30 ton						
Hook weight	300kg						
Parts of line	10	8		4			
Critical boom angle	—	—	—	—	—	—	—

(Unit : Metric ton)

KATO NK-300E-v RATED LIFTING CAPACITY

TABLE(2)

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

Outriggers intermediately extended without front jack -360° full range
Outriggers fully extended without front jack -over front

Working radius(m)	10.5m Boom	14.2m Boom	18m Boom	21.7m Boom	25.5m Boom	29.2m Boom	33m Boom
2.5	25.00	20.00	16.00				
3.0	25.00	20.00	16.00				
3.5	25.00	20.00	16.00	12.00			
4.0	22.90	20.00	16.00	12.00	11.50		
4.5	17.35	16.20	16.00	12.00	11.50		
5.0	14.00	13.60	13.45	12.00	11.50	9.00	
5.5	11.60	11.40	11.20	12.00	11.50	9.00	
6.0	10.00	9.80	9.60	10.20	10.10	9.00	7.00
6.5	8.50	8.50	8.15	8.95	9.10	9.00	7.00
7.0	7.55	7.25	7.15	7.80	8.10	8.30	7.00
7.5	6.50	6.40	6.20	6.85	7.25	7.35	7.00
8.5	5.00	4.95	4.85	5.40	5.75	5.85	5.80
9.0		4.35	4.30	4.80	5.10	5.25	5.30
10.0		3.45	3.35	3.85	4.10	4.30	4.40
12.0		2.10	1.95	2.45	2.70	2.90	3.05
12.5		1.70	1.70	2.15	2.40	2.65	2.80
13.0			1.40	1.90	2.15	2.40	2.55
14.0			0.95	1.40	1.70	1.95	2.10
15.0			0.55	1.05	1.30	1.55	1.75
16.0				0.70	1.00	1.20	1.40
17.0				0.40	0.70	0.95	1.10
18.0					0.45	0.70	0.85
19.0						0.45	0.60
20.0							0.40
Standard hook	for 30 ton						
Hook weight	300kg						
Parts of line	10	8		4			
Critical boom angle	—	—	—	25°	35°	42°	47°

(Unit : Metric ton)

Rated Lifting Capacity Tables 1 and 3

KATO NK-300E-v RATED LIFTING CAPACITY TABLE(1)

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

Outriggers fully extended with front jack -360° full range

Outriggers fully extended without front jack -over side and over rear

Working radius(m)	10.5m Boom	14.2m Boom	18m Boom	21.7m Boom	25.5m Boom	29.2m Boom	33m Boom
2.5	30.00	20.00	16.00				
3.0	30.00	20.00	16.00				
3.5	25.40	20.00	16.00	12.00			
4.0	22.90	20.00	16.00	12.00	11.50		
4.5	21.00	20.00	16.00	12.00	11.50		
5.0	19.40	18.40	16.00	12.00	11.50	9.00	
6.0	16.20	15.30	13.70	12.00	11.50	9.00	7.00
7.0	13.70	12.65	11.95	11.00	10.00	9.00	7.00
8.0	11.15	10.65	10.55	10.20	8.90	8.20	7.00
8.5	10.25	9.70	9.65	9.65	8.45	7.80	6.60
9.0		8.80	8.80	9.20	8.05	7.45	6.25
10.0		7.30	7.15	7.65	7.30	6.75	5.70
12.0		5.10	4.95	5.40	5.65	5.65	4.80
12.5		4.70	4.55	5.05	5.25	5.45	4.55
13.0			4.20	4.65	4.90	5.05	4.45
14.0			3.55	4.00	4.25	4.40	4.10
16.0			2.55	2.95	3.20	3.40	3.50
18.0				2.20	2.45	2.65	2.80
20.0				1.65	1.85	2.05	2.20
22.0					1.40	1.60	1.70
24.0						1.20	1.35
26.0						0.90	1.00
27.5						0.70	0.85
29.0							0.65
31.0							0.45
Standard hook	for 30 ton						
Hook weight	300kg						
Parts of line	10	8			4		
Critical boom angle	—	—	—	—	—	—	—

(Unit : Metric ton)

KATO NK-300E-v RATED LIFTING CAPACITY TABLE (3)

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

Outriggers fully extended with front jack -360° full range

Outriggers fully extended without front jack -over side and over rear

Boom angle (°)	33mBoom+8.7m Jib					
	Offset 5°		Offset 17°		Offset 30°	
	Working radius(m)	Load (t)	Working radius(m)	Load (t)	Working radius(m)	Load (t)
80.0	8.0	3.00	9.6	2.20	11.3	1.60
78.0	11.0	3.00	12.5	2.20	14.0	1.60
74.0	12.5	2.72	14.0	2.05	15.3	1.54
70.0	15.3	2.26	16.6	1.78	18.0	1.45
66.0	18.0	1.92	19.2	1.57	20.4	1.30
62.0	20.5	1.68	21.8	1.38	22.8	1.17
58.0	23.0	1.48	24.1	1.24	25.0	1.06
56.0	24.0	1.28	25.2	1.18	26.0	1.02
54.0	25.1	1.08	26.3	1.00	27.1	0.98
50.0	27.2	0.74	28.2	0.70	29.0	0.67
46.0	29.2	0.47	30.1	0.44	30.7	0.43
43.0	30.6	0.30	31.5	0.30	32.0	0.30
Standard hook	for 3 ton					
Hook weight	60kg					
Parts of line	1					
Critical boom angle	40°					

KATO NK-300E-v RATED LIFTING CAPACITY TABLE (3)

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

Outriggers fully extended with front jack -360° full range

Outriggers fully extended without front jack -over side and over rear

Boom angle (°)	33mBoom+14.5m jib					
	Offset 5°		Offset 17°		Offset 30°	
	Working radius(m)	Load (t)	Working radius(m)	Load (t)	Working radius(m)	Load (t)
80.0	9.9	2.00	12.5	1.30	15.1	0.90
77.7	12.0	2.00	14.5	1.30	16.9	0.90
76.3	13.2	1.85	15.7	1.24	18.0	0.90
72.0	16.4	1.50	19.0	1.06	21.2	0.81
68.0	19.5	1.25	22.0	0.91	24.0	0.74
64.0	22.6	1.06	24.8	0.79	26.6	0.67
60.0	25.4	0.90	27.4	0.70	29.1	0.60
56.0	28.0	0.77	29.9	0.64	31.5	0.55
52.0	30.7	0.66	32.4	0.57	33.7	0.52
51.0	31.2	0.61	33.0	0.55	34.2	0.51
50.4	31.6	0.57	33.3	0.52	34.5	0.50
48.0	32.9	0.45	34.5	0.40	35.6	0.38
46.0	33.9	0.35	35.2	0.33	36.5	0.30
Standard hook	for 3 ton					
Hook weight	60kg					
Parts of line	1					
Critical boom angle	42°					

Rated Lifting Capacity Tables 1 and 4

KATO NK-300E-v RATED LIFTING CAPACITY TABLE(1)

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

Outriggers fully extended with front jack -360° full range							
Outriggers fully extended without front jack -over side and over rear							
Working radius(m)	10.5m Boom	14.2m Boom	18m Boom	21.7m Boom	25.5m Boom	29.2m Boom	33m Boom
2.5	30.00	20.00	16.00				
3.0	30.00	20.00	16.00				
3.5	25.40	20.00	16.00				
4.0	22.90	20.00	16.00	12.00			
4.5	21.00	20.00	16.00	12.00	11.50		
5.0	19.40	18.40	16.00	12.00	11.50		
6.0	16.20	15.30	13.70	12.00	11.50	9.00	
7.0	13.70	12.65	11.95	11.00	10.00	9.00	7.00
8.0	11.15	10.65	10.55	10.20	8.90	8.20	7.00
8.5	10.25	9.70	9.65	9.65	8.45	7.80	6.60
9.0		8.80	8.80	9.20	8.05	7.45	6.25
10.0		7.30	7.15	7.65	7.30	6.75	5.70
12.0		5.10	4.95	5.40	5.65	5.65	4.80
12.5		4.70	4.55	5.05	5.25	5.45	4.55
13.0			4.20	4.65	4.90	5.05	4.45
14.0			3.55	4.00	4.25	4.40	4.10
16.0			2.55	2.95	3.20	3.40	3.50
18.0				2.20	2.45	2.65	2.80
20.0				1.65	1.85	2.05	2.20
22.0					1.40	1.60	1.70
24.0						1.20	1.35
26.0						0.90	1.00
27.5						0.70	0.85
29.0							0.65
31.0							0.45
Standard hook	for 3 ton						
Hook weight	300kg						
Parts of line	10	8			4		
Critical boom angle	—	—	—	—	—	—	—

(Unit : Metric ton)

KATO NK-300E-v RATED LIFTING CAPACITY TABLE(4)

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

Outriggers intermediately extended without front jack -360° full range
Outriggers fully extended without front jack -over front

Boom angle (°)	33m Boom + 8.7 Jib					
	Offset 5°		Offset 17°		Offset 30°	
	Working radius(m)	Load (t)	Working radius(m)	Load (t)	Working radius(m)	Load (t)
80.0	8.0	3.00	9.6	2.20	11.3	1.60
76.0	11.0	3.00	12.5	2.20	14.0	1.60
72.5	13.5	2.56	15.0	1.94	16.2	1.50
71.0	14.5	2.14	16.0	1.84	17.3	1.47
70.0	15.1	1.90	16.6	1.65	18.0	1.45
68.0	16.3	1.48	17.8	1.28	19.0	1.18
65.0	18.1	0.97	19.5	0.86	20.7	0.78
60.0	21.0	0.37	22.4	0.30	23.3	0.30
Standard hook	for 3 ton					
Hook weight	60kg					
Parts of line	1					
Critical boom angle	58°					

KATO NK-300E-v RATED LIFTING CAPACITY TABLE(4)

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

Outriggers intermediately extended without front jack -360° full range
Outriggers fully extended without front jack -over front

Boom angle (°)	33m Boom + 14.5m Jib					
	Offset 5°		Offset 17°		Offset 30°	
	Working radius(m)	Load (t)	Working radius(m)	Load (t)	Working radius(m)	Load (t)
80.0	9.9	2.00	12.5	1.30	15.1	0.90
77.7	12.0	2.00	14.5	1.30	16.9	0.90
76.3	13.2	1.85	15.7	1.24	18.0	0.90
73.0	15.6	1.57	18.2	1.10	20.4	0.84
69.0	18.7	1.31	21.2	0.95	23.3	0.76
68.4	19.1	1.18	21.7	0.92	23.8	0.75
67.8	19.5	1.08	22.0	0.88	24.2	0.73
64.0	22.0	0.60	24.4	0.49	26.4	0.43
62.0	23.4	0.39	25.6	0.33	27.5	0.30
Standard hook	for 3 ton					
Hook weight	60kg					
Parts of line	1					
Critical boom angle	60°					

(Unit: Metric ton)

Performance Diagram

KATO NK-300E-v RATED LIFTING CAPACITY

TABLE(1)

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

Outriggers fully extended with front jack -360° full range
Outriggers fully extended without front jack -over side and over rear

Working radius(m)	10.5m Boom	14.2m Boom	18m Boom	21.7m Boom	25.5m Boom	29.2m Boom	33m Boom
2.5	30.00	20.00	16.00				
3.0	30.00	20.00	16.00				
3.5	25.40	20.00	16.00	12.00			
4.0	22.90	20.00	16.00	12.00	11.50		
4.5	21.00	20.00	16.00	12.00	11.50		
5.0	19.40	18.40	16.00	12.00	11.50	9.00	
6.0	16.20	15.30	13.70	12.00	11.50	9.00	7.00
7.0	13.70	12.65	11.95	11.00	10.00	9.00	7.00
8.0	11.15	10.65	10.55	10.20	8.90	8.20	7.00
8.5	10.25	9.70	9.65	9.65	8.45	7.80	6.60
9.0		8.80	8.80	9.20	8.05	7.45	6.25
10.0		7.30	7.15	7.65	7.30	6.75	5.70
12.0		5.10	4.95	5.40	5.65	5.65	4.80
12.5		4.70	4.55	5.05	5.25	5.45	4.55
13.0			4.20	4.65	4.90	5.05	4.45
14.0			3.55	4.00	4.25	4.40	4.10
16.0			2.55	2.95	3.20	3.40	3.50
18.0				2.20	2.45	2.65	2.80
20.0				1.65	1.85	2.05	2.20
22.0					1.40	1.60	1.70
24.0						1.20	1.35
26.0						0.90	1.00
27.5						0.70	0.85
29.0							0.65
31.0							0.45

Standard hook

Hook weight

Parts of line

Critical boom angle

for 30 ton

300kg

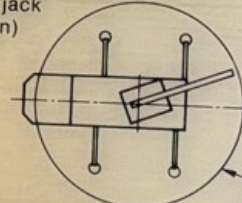
(Unit : Metric ton)

KATO PERFORMANCE DIAGRAM

1. Performance of this machine varies depending on usage of the outriggers and the front jack as traced in the figure below. Therefore, refer to a correct rated lifting capacity table corresponding to each working status.
2. When slewing from high to low performance side, operation must be conducted based on the low performance.

Working Status 1

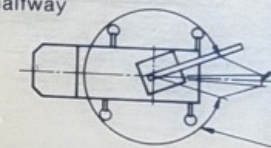
Outriggers extended fully
Front jack (option) used



Rated lifting capacity table (1)/(3)

Working Status 4

Outriggers extended halfway

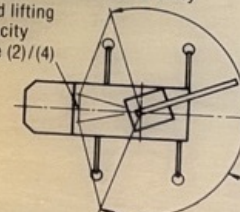


Rated lifting capacity table (1)/(3)

Rated lifting capacity table (2)/(4)

Working Status 2

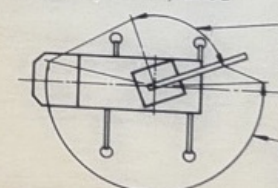
Outriggers extended fully
Rated lifting capacity table (2)/(4)



Rated lifting capacity table (1)/(3)

Working Status 5

Left-side outriggers extended fully
Right-side outriggers extended halfway
Front jack (option) used

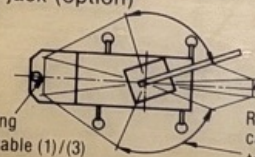


Rated lifting capacity table (2)/(4)

Rated lifting capacity table (1)/(3)

Working Status 3

Outriggers extended halfway
Front jack (option) used

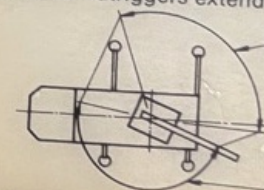


Rated lifting capacity table (1)/(3)

Rated lifting capacity table (2)/(4)

Working Status 6

Right-side outriggers extended fully
Left-side outriggers extended halfway



Rated lifting capacity table (1)/(3)

Rated lifting capacity table (2)/(4)

Preoperational Checks - ACS

KATO NK-300E-v RATED LIFTING CAPACITY TABLE(1)

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

Outriggers fully extended with front jack -360° full range
Outriggers fully extended without front jack -over side and over rear

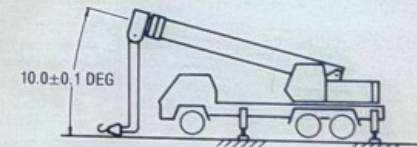
Working radius(m)	10.5m Boom	14.2m Boom	18m Boom	21.7m Boom	25.5m Boom	29.2m Boom	33m Boom
2.5	30.00	20.00	16.00				
3.0	30.00	20.00	16.00				
3.5	25.40	20.00	16.00	12.00			
4.0	22.90	20.00	16.00	12.00	11.50		
4.5	21.00	20.00	16.00	12.00	11.50		
5.0	19.40	18.40	16.00	12.00	11.50	9.00	
6.0	16.20	15.30	13.70	12.00	11.50	9.00	7.00
7.0	13.70	12.65	11.95	11.00	10.00	9.00	7.00
8.0	11.15	10.65	10.55	10.20	8.90	8.20	7.00
8.5	10.25	9.70	9.65	9.65	8.45	7.80	6.60
9.0		8.80	8.80	9.20	8.05	7.45	6.25
10.0		7.30	7.15	7.65	7.30	6.75	5.70
12.0		5.10	4.95	5.40	5.65	5.65	4.80
12.5		4.70	4.55	5.05	5.25	5.45	4.55
13.0			4.20	4.65	4.90	5.05	4.45
14.0			3.55	4.00	4.25	4.40	4.10
16.0			2.55	2.95	3.20	3.40	3.50
18.0				2.20	2.45	2.65	2.80
20.0				1.65	1.85	2.05	2.20
22.0					1.40	1.60	1.70
24.0						1.20	1.35
26.0						0.90	1.00
27.5						0.70	0.85
29.0							0.65
31.0							0.45
Standard hook							for 30 ton
Hook weight							300kg
Parts of line	10	8					
Critical boom angle	—	—	—	—	—	—	—

(Unit : Metric ton)

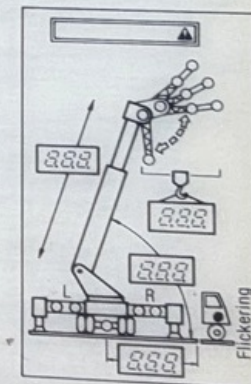
PREOPERATIONAL CHECKS OF ACS

1. Make sure that the crane is set horizontal. Set the outrigger setting status selecting switch according to the set status of the outriggers, and confirm that no error is indicated on the ACS display.

2. Retract the boom completely, lower the hook onto the ground and set the boom at an angle of 10.0 ± 0.1 degrees (boom must be located on the front).



3. Set the boom operation selecting switch at . Confirm that the front jack lamp flickers, the safety indicator lamp and all lamps light up, "888" appears on all displays and an alarm is emitted. If a boom length and a boom angle are indicated instead of "888", boom length and angle should be set again.



4. Derrick/lower the boom, hoist the winch and extend the boom in order to confirm that the crane does not move.

5. Set the boom operation selecting switch at the desired working status, and confirm the status of outriggers and the outrigger setting status indicator lamp.

- The above checks must be performed on firm level ground with standard lifting equipments and the jib housed.
- If an abnormality is found at the time of preoperational checks, please report it to KATO's representative.

Caution and Operating Information

KATO NK-300E-v RATED LIFTING CAPACITY

TABLE(1)

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

Outriggers fully extended with front jack -360° full range
Outriggers fully extended without front jack -over side and over rear

Working radius(m)	10.5m Boom	14.2m Boom	18m Boom	21.7m Boom	25.5m Boom	29.2m Boom	33m Boom
2.5	30.00	20.00	16.00				
3.0	30.00	20.00	16.00				
3.5	25.40	20.00	16.00	12.00			
4.0	22.90	20.00	16.00	12.00	11.50		
4.5	21.00	20.00	16.00	12.00	11.50		
5.0	19.40	18.40	16.00	12.00	11.50	9.00	
6.0	16.20	15.30	13.70	12.00	11.50	9.00	7.00
7.0	13.70	12.65	11.95	11.00	10.00	9.00	7.00
8.0	11.15	10.65	10.55	10.20	8.90	8.20	7.00
8.5	10.25	9.70	9.65	9.65	8.45	7.80	6.60
9.0		8.80	8.80	9.20	8.05	7.45	6.25
10.0		7.30	7.15	7.65	7.30	6.75	5.70
12.0		5.10	4.95	5.40	5.65	5.65	4.80
12.5		4.70	4.55	5.05	5.25	5.45	4.55
13.0			4.20	4.65	4.90	5.05	4.45
14.0			3.55	4.00	4.25	4.40	4.10
16.0			2.55	2.95	3.20	3.40	3.50
18.0				2.20	2.45	2.65	2.80
20.0				1.65	1.85	2.05	2.20
22.0					1.40	1.60	1.70
24.0						1.20	1.35
26.0						0.90	1.00
27.5						0.70	0.85
29.0							0.65
31.0							0.45
Standard hook	for 30 ton						
Hook weight	300kg						
Parts of line	10	8					
Critical boom angle	—	—	—	—	—	—	—

(Unit : Metric ton)

CAUTION

1. The rated lifting capacities are the maximum loads guaranteed on a firm level ground and include the weight of hook block and other lifting equipment. The capacities enclosed with bold lines are based on the structural strength of machine and the others are based on the stability of machine.

Hook	For 30 tons	For 3 tons
WEIGHT(kg)	300	60

2. The working radii as given in the table are actual values including the deflection of the boom. Therefore, operate the machine based on the working radius. However, the working radii shown for jib operations are based on 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 when the boom is not fully extended.
3. The rated lifting capacities for the rooster sheave are equivalent to the rated lifting capacities for the main boom to a maximum of 3000kg. At all times the weight of all lifting equipment in use (including main hook block suspended from boom head) forms part of load and must be subtracted from the rated lifting capacity.
4. If the boom length exceeds the specified value, the rated lifting capacities for the boom length above and below the present boom length should be referred to, and the crane should be operated within the smaller lifting capacity.
5. When using the main boom with the jib installed, 1800kg plus the weight of hook block and other lifting equipment, etc, should be subtracted from the rated lifting capacities. When performing the above operation, do not use the rooster sheave.
6. The standard number of parts of line is shown in the rated lifting capacity table. When the standard number of parts of line is not used, the minimum number of line is determined so that weight per part will not exceed 3000kg.
7. Without front jack, over front lifting performance is inferior to over side and over rear lifting performance. Great care should be taken when transferring from over side to over front since there is a danger of over loading.
8. Critical boom angles for each boom length are shown on bottommost line of lifting capacity table. If the boom angle is lowered to less than the critical boom angle, the machine will tip over without load. Therefore, never lower the boom below these angles.
9. Free fall is adopted in principle lower the hook only. If it is necessary to lower a load by free fall, its weight should be less than 20% of the rated lifting capacity and abrupt braking should not be allowed.
10. Rated lifting capacities do not account for wind on lifted load or boom. Interrupt operation when wind velocity surpasses 10m/s, and restore the boom.
11. The machine will tip over or be damaged if operated with a load exceeding that specified in the rated lifting capacity table or not conforming to correct handling. If such trouble occurs, the machine will not be warranted.