https://truckmanualshub.com/

KATO

FULLY HYDRAULIC TRUCK CRANE

MODEL

NK-300

https://www.katocrane.com/

KATO WORKS CO., LTD.

TOKYO

https://truckmanualshub.com/

KATO NK-300

FULLY-HYDRAULIC FULL-SLEWING TRUCK CRANE

SINGLE LEVER CONTROL 4 SECTION "FULL POWER" BOOM:

Each section of boom has an independent hydraulic cylinder, permitting the boom length quite free on extension or retraction within the range from minimum 10 m to maximum 31 m in length. Controlled by only one lever.

NEW CONTROLLED FREE FALL "FREOMATIC" WINCHES ENSURE SPEEDY OPERATION:

Tandem-drive two speed main and auxiliary winches are driven by high-torque hydraulic motor, having automatic brakes and clutches. This mechanism enables the safe operation of "Free Fall" or "Power Lowering" of the hook.

"GLIDE-MASTER" PLANETARY SLEWING:

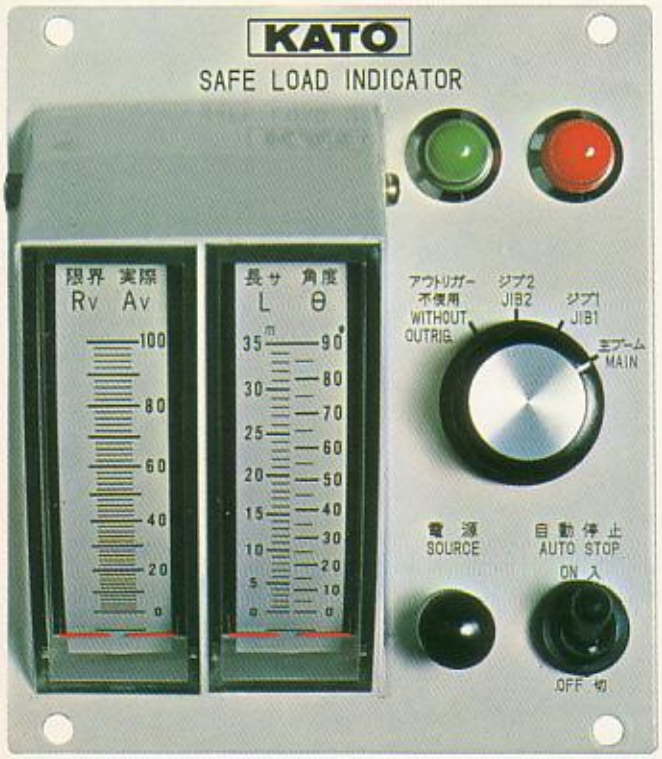
"Glide-Master" planetary slewing system enables smooth, precise slewing operation, and in addition a hydrostatic controlled disk brake is provided.

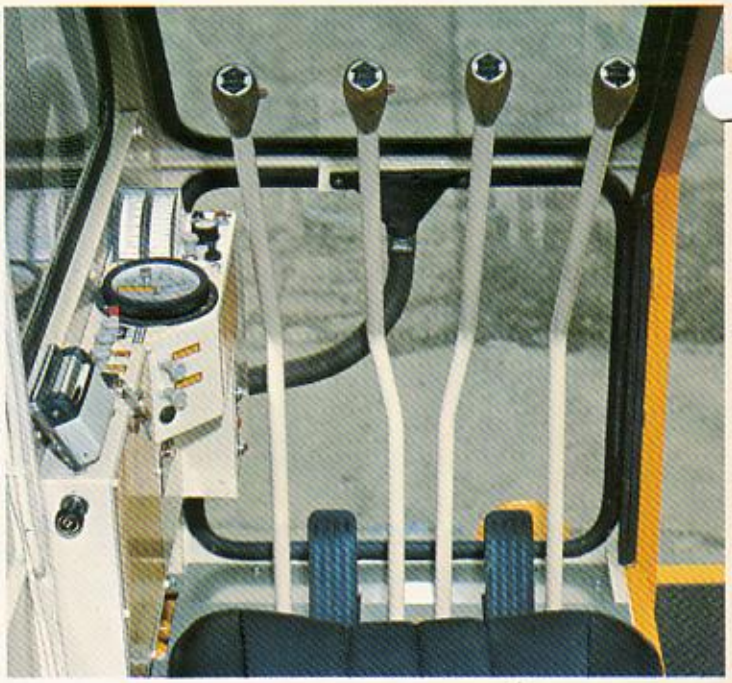
FULL VISION SUPERSTRUCTURE CAB:

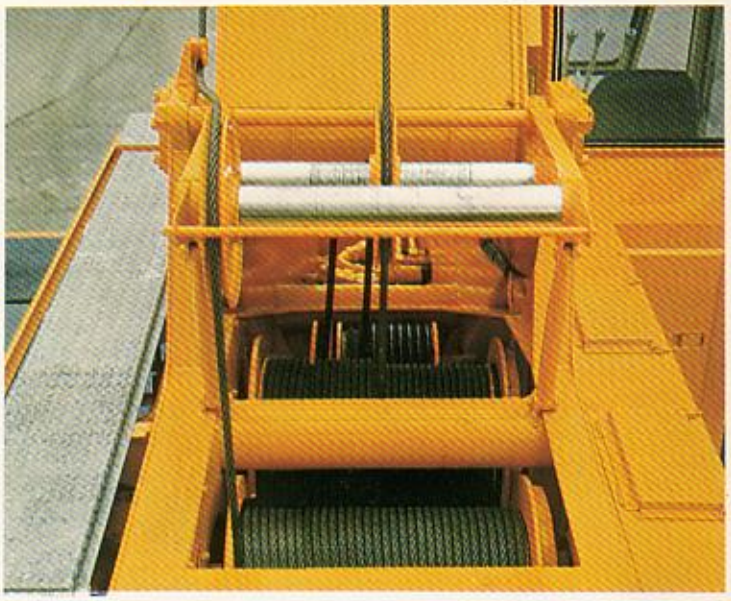
Provided with safety glass in all windows and all necessary control levers, gauges, instruments, etc. are well arranged at convenient location for the operator. A comfortable reclining seat gives no fatigue to the operator.

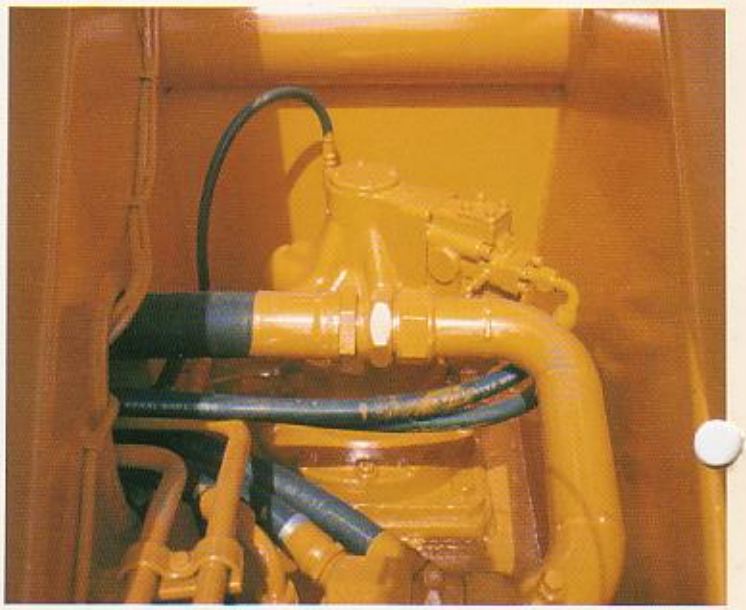
AUTOMATIC SAFETY CUT-OUT: (A.S.L.I.)

Automatic Safety Load Indicator shows continuously both the rated allowable load and the actual lifting status along the boom length and working radius. For a safe operation, a buzzer warns of the danger as soon as the crane operation reaches any overload condition and then the hydraulic power is cut off automatically in the event of dangerous excess. (optional)



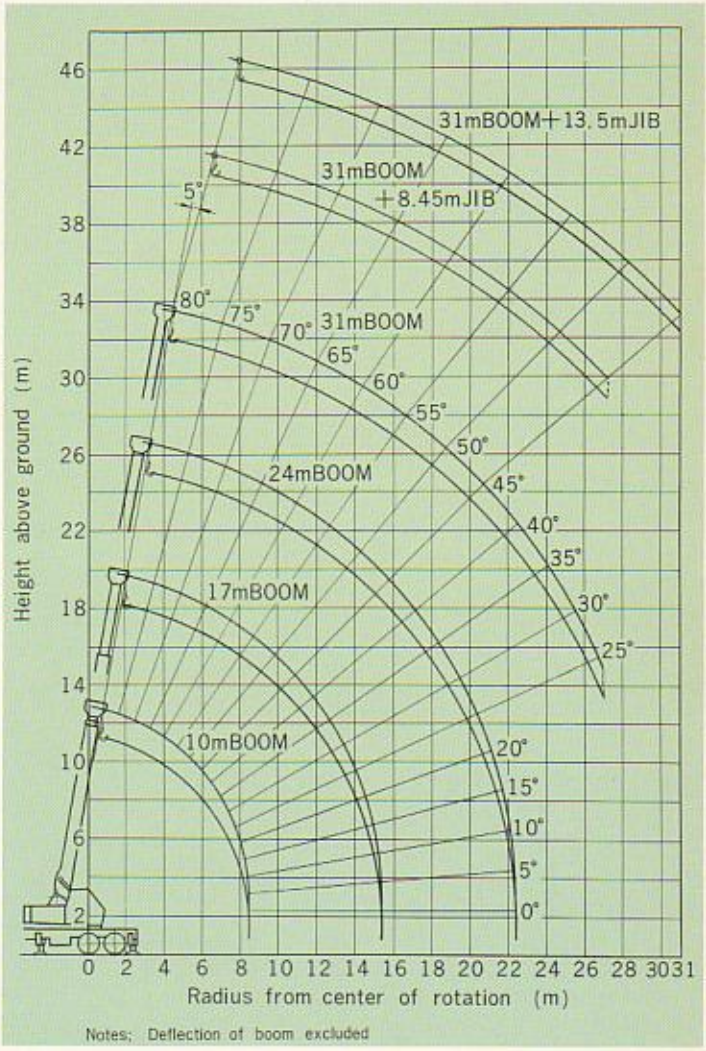






https://truckmanualshub.com/

WORKING RANGES



SUPERSTRUCTURE

CRANE PERFORMANCE

Boom length (Full power 4 section):	10m ~ 31m
Fly jib length:	8.45m ~ 13.5m
Boom derricking angle:	-3° ~ 80°
Boom telescoping speed Extension:	0.3m/sec.
Hoist and lower rope speed Main winch:	High-74m/min. Low-28m/min.
Auxiliary winch:	High-74m/min. Low-28m/min.
Hoist and lower hook speed Main winch:	High-9.2m/min. Low-3.5m/min.
Auxiliary winch:	High-74m/min. Low-28m/min.
Slewing speed:	2.5 rpm.

WIRE ROPE FOR HOISTING

Main winch	Type:	6 x Fi (29) I.W.R.C.
	Parts of line:	8
	Length:	135m x 18mm dia.
Auxiliary winch	Type:	6 x Fi (29) I.W.R.C.
	Parts of line:	1
	Length:	100m x 18mm dia.

HYDRAULIC SYSTEM

Oil pump:	3 section gear type
Hoist motor:	Radial piston type
Slewing motor:	Radial piston type
Control valve	3 position 4 way double-acting type with integral check, and relief valves.
Cylinder:	Double acting type with safety check valve or balancing valve.

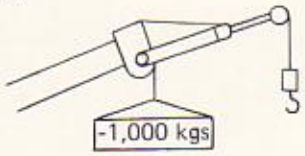
https://truckmanualshub.com/

NOTES

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 equipments.

Hook	for 30 ton	for 12 ton	for 4 ton
Weight (kg)	350	200	100

   The capacities in the blue area are based on the structural strength and other capacities do not exceed 75% of tipping loads.
2. The working radii are the actual values including the deflection of the booms.
3. The rated lifting capacities for operation without outriggers are based on best conditions of tyre pressure and ground surface.
4. The capacities are based on use of outriggers fully extended. Any operation is prohibited unless the outriggers are fully extended even if in no load condition except the shortest boom 10 m.
5. When the boom length exceeds the rated one, operation must be carried out under the lifting capacities rated for the longer rated boom length.
6. When using boom with jib extended, 1,000 kgs should be subtracted from rated lifting capacities.



7. With the jib installed, the boom must not be lowered below 45° to avoid tipping.
8. Minimum number of parts line must be calculated considering single line pull has 4,000 kgs lifting capacity. Standard number of parts line for each boom length is as follows.

Boom length	10m	10m~17m	17m~24m	31m
Parts line	8	5	4	3

RATED LIFTING CAPACITIES

(Metric ton)

Working Radius (m)	With Outriggers				Without Outriggers
	Over Side and Over Rear				Over Side and Over Rear
	10m Boom	17m Boom	24m Boom	31m Boom	10m Boom
3.0	30.00	20.00			8.00
3.35	30.00	20.00			7.00
3.5	28.10	20.00			6.40
4.0	24.20	20.00			5.10
4.5	21.40	20.00	13.00		4.20
4.8	20.00	20.00	13.00		3.70
5.0	19.20	19.20	13.00		3.40
5.5	17.50	17.50	13.00		2.80
6.0	16.00	16.00	13.00		2.30
6.5	14.60	14.60	13.00	9.00	1.90
7.0	13.50	13.50	12.00	9.00	1.60
7.5	12.00	12.00	11.20	9.00	1.30
8.0	10.50	10.50	10.50	9.00	1.00
8.5		9.40	9.40	9.00	
9.8		7.20	7.20	7.70	
10.0		6.95	6.95	7.50	
11.0		5.80	5.80	6.40	
12.0		4.90	4.90	5.55	
14.0		3.45	3.45	4.20	
16.0			2.50	3.20	
18.0			1.80	2.45	
20.0			1.30	1.90	
22.0			0.85	1.50	
24.0				1.10	
26.0				0.75	
27.0				0.60	

Boom Angle	Working Radius (m)	With Outriggers Over side & Over rear 8.45m Jib Offset 5°
80°	9.0	4.00
78.5°	9.5	4.00
78°	10.2	3.80
76°	11.2	3.30
74°	12.2	2.90
72°	13.4	2.70
70°	14.6	2.50
68°	16.0	2.35
66°	17.3	2.20
64°	18.5	2.10
62°	19.8	2.05
60°	20.9	1.85
58°	21.9	1.65
55°	23.6	1.30
54°	24.1	1.15
52°	25.0	0.95
50°	25.8	0.75
48°	26.8	0.60

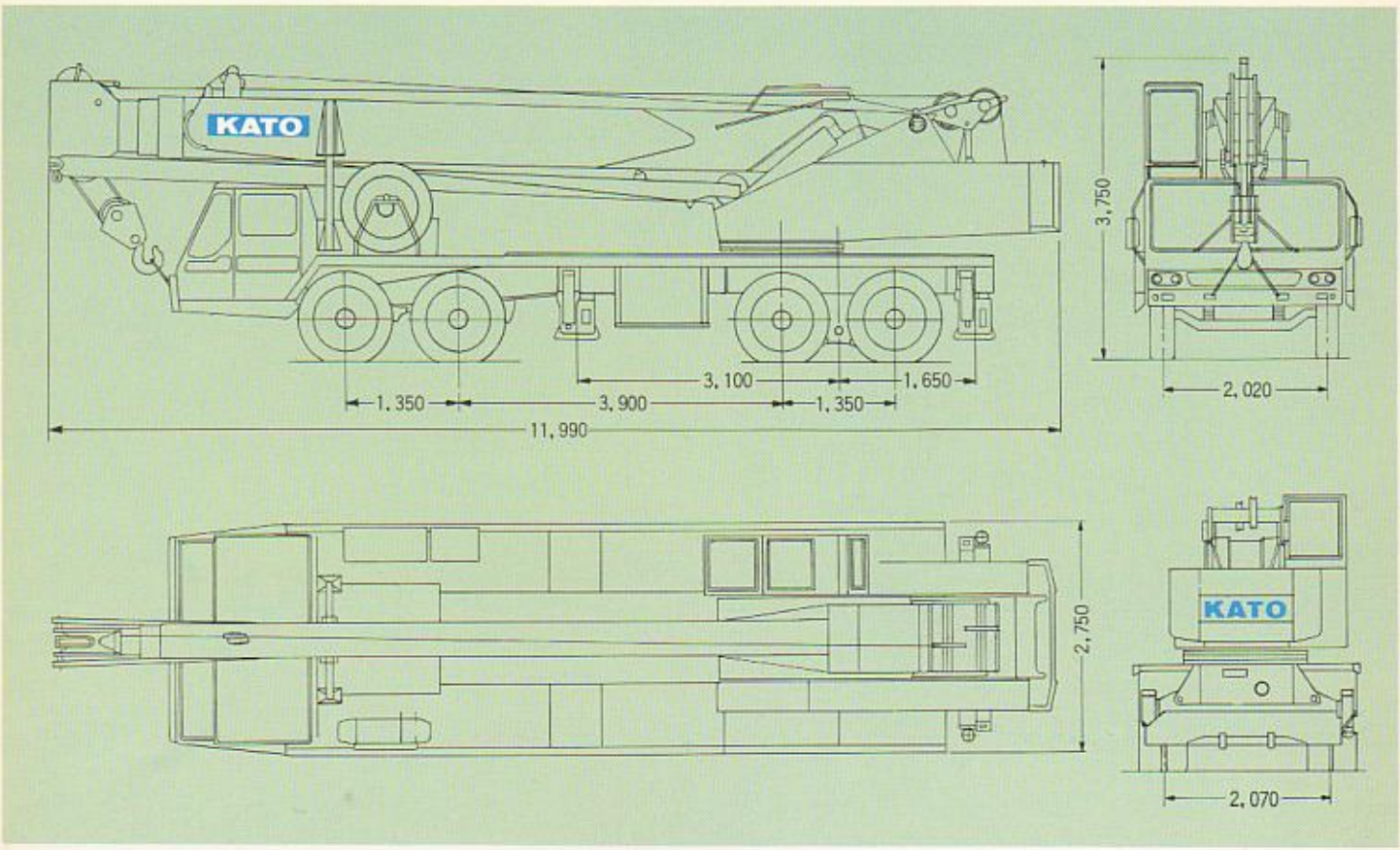
Boom Angle	Working Radius (m)	With Outriggers Over side & Over rear 13.5m Jib Offset 5°
78.5°	11.0	2.50
77°	12.0	2.50
76°	12.7	2.35
74°	14.1	2.10
72°	15.6	1.95
70°	17.1	1.80
68°	18.5	1.65
66°	19.9	1.50
64°	21.3	1.40
62°	22.7	1.30
60°	24.0	1.20
58°	25.3	1.15
55°	27.1	1.05
54°	27.7	0.95
52°	28.8	0.80
50°	29.9	0.65
48°	30.9	0.55

https://truckmanualshub.com/

GENERAL DATA

MODEL	NK-300
CARRIER MODEL	MITSUBISHI K302
TOTAL LENGTH mm	11990
TOTAL WIDTH mm	2750
TOTAL HEIGHT mm	3750
ENGINE	
Model	MITSUBISHI 8DC20A
Max. Output PS/rpm	265/2500
Max. Torque kg-m/rpm	89/1200
GROSS WEIGHT Kg	31800
FRONT Kg	11900
REAR Kg	19900
WHEEL BASE mm	1350 + 3900 + 1350
TREAD FRONT mm	2020
TREAD REAR mm	2070
MAX. SPEED Km/h	67
TURNING RADIUS m	11.5
GRADEABILITY (%)	31
DRIVE SYSTEM	8x4
CLUTCH TYPE	Dry single disc
TRANSMISSION SYSTEM	Synchromesh
TIRE FRONT	11.00-20-14PRx2
REAR	11.00-20-14PRx8
FUEL TANK CAPACITY	300 Lt.
STEERING TYPE	Ball nut with power assist
ELECTRICAL SYSTEM	24V starting, lighting, instrumental light, beam headlight, tail and stop-light, windshield wiper, horn and turn signal.

- *MACHINE is subject to the user's specifications and any chassis having proper capacity and dimension are applicable.*
- *We reserve the right to make specification or equipment changes without notice.*



https://truckmanualshub.com/

KATO

QUALITY & EXPERIENCE
SINCE 1895

KATO WORKS CO.,LTD.

HEAD OFFICE: No. 9-37, 1-chome, Higashi-ohi, Shinagawa-ku, Tokyo, Japan
Tel: Tokyo 471-8111

FOREIGN DEPARTMENT: The 17th Mori Bldg., 1-26-5, Toranomon, Minato-ku, Tokyo, Japan
Tel: Tokyo 591-5111
Cable Address: CRANEKATO TOKYO
Telex: 0 222-4519 (CRKATO J)

77105000R5(Tp) Printed in Japan