SPECIFICATION

___OF___

KATO FULLY HYDRAULIC TRUCK CRANE

MODEL NK - 550VR

CARRIER : NISSAN DIESEL KG48U

KATO WORKS CO., LTD.
Tokyo, Japan

KATO FULLY HYDRAULIC TRUCK CRANE

MODEL NK-550VR

FOREWORD:

As the production and development of construction machinery has increased, so has the demand for the KATO NK-550VR. This model has established great popularity and renown reputation for its simplified handling, all hydraulic system, reliable service and wide range of application.

These achievements are due solely to the vast technical knowledge of KATO engineers and the foresighted planning of KATO ideas presented to us by our customers, for we have, at all times, fostered good customer relationships.

This KATO NK-550VR is mounted on a truck-carrier, and it develops a maximum pay load of 55 metric tons whilst maintaining minimum weight and dimensions. This enhances the maneuverability of the KATO NK-550VR and enables the machine to be rapidly transported from site to site.

Rapid, rugged and reliable. These are the key words to describe the KATO NK-550VR for this machine is able to perform lifting, lowering, slewing and outrigger operations by a fast and reliable hydraulic system, providing the best service during handling operations.

SPECIFICATION OF NK-550VR

1. Crane Specification

Maximum rated lifting capacity : 55 metric tons \times 3.0 m

Boom length : 11.0 m 43.0 m (5 section) Fly jib length : 9.2 m 15.0 m (2 section)

Boom derricking angle : -2.5° 81°

* Boom derricking time : $62 \text{ sec.} (-2.5^{\circ} \text{ 81}^{\circ})$ * Boom extending time : 149 sec. (11.0 m 43.0 m)

* Hoisting line speed

Main winch : 117 m/min. (at 3rd layer)
Auxiliary winch : 108 m/min. (at 2nd layer)

* Hoisting hook speed

Main winch

(part of line; 14) : 8.35 m/min. (at 3rd layer)

Auxiliary winch

(part of line; 1) : 108 m/min. (at 2nd layer)

* Slewing speed : 2.0 min⁻¹

Wire rope for hoisting

Main winch;

Type : $SeS(48)+6 \times WS(31)$

Diameter : 18 mm

Length : 235 m

Auxiliary winch;

Type : $IWRC6 \times WS(31)$

Diameter : 18 mm Length : 125 m Hydraulic system

Oil pump : 4 section gear type
Hoisting motor : Axial plunger type
Slewing motor : Axial plunger type
Cylinder : Double acting type

Control valve : 3 position 4 way double acting with

integral check and relief valves

Oil reservoir capacity : 695 L

Winch system

Main winch : Driven by axial plunger type
Auxiliary winch hoisting motor through planetary

gear reduction.

Controlled independently by respective operating lever. Equipped with automatic brake.

With FREE FALL DEVICE

Crane cab : All steel welded construction

Safety devices : ACS (Automatic crane stopper)

Boom falling prevention device

Winds being prevention device

Winch hoisting limiter Winch drum lock device

Winch drum turning indicator

Automatic winch brake

Irregular winding prevention device

Hydraulic safety valve Outrigger lock device

* Speed : Subject to no load

2. Carrier Specification

Maximum traveling speed : 83 km/h

Grade ability (tan): 53 % (computed, @G.V.W.= 39700kg)

Minimum turning radius

(center of extreme outer tire) : 10.8 m

General dimensions

Overall length : approx. 13370 mm Overall width : approx. 2820 mm Overall height : approx. 3650 mm

Wheel base : 1470 mm + 3930 mm + 1400 mm = 6800 mm

Treads; Front : 2250 mm

Rear : 2110 mm

Center to center of

extended outriggers : 7000 mm (Fully extended)

4800 mm (Intermediately extended)

2500 mm (Fully retracted

blocked on vertical cyls.)

Gross vehicle weight : approx. 39700 kg

Front weight : approx. 15800 kg Rear weight : approx. 23900 kg

Carrier

Maker : NISSAN DIESEL

Model : KG48U Drive system : 8×4

Engine

Maker : NISSAN DIESEL
Model : PF6TB (EURO-)

Type : 4 cycle, turbo charged, direct injection

water cooled, diesel

No. of cylinder : 6 inline Piston displacement : 12.503 L Max. output horsepower : 257 kW/ 2100 min⁻¹

 $(350 \text{ PS}/ 2100 \text{ min}^{-1})$

Max. output torque : $1460 \text{ N} \cdot \text{m} / 1200 \text{ min}^{-1}$

(148 kg · m/ 1200 min⁻¹)

Clutch : Single dry plate, hydraulic

control with air booster

Transmission : 7 forward & 1 reverse speed

Axles; Front : Reverse "ELLIOT" type

Rear : Full floating type

Steering : Ball nut type with power booster

Suspension; Front : Semi-elliptic leaf springs

Rear : Equalizer beams and torque rods

Brake; Service : 2 circuit air brake,

8 wheels internal expanding type

Parking : Spring loaded brake

Auxiliary : Exhaust brake

Electric system : 24 V

Battery : 12 V - 115F51 \times 2

Fuel tank capacity : 300 L

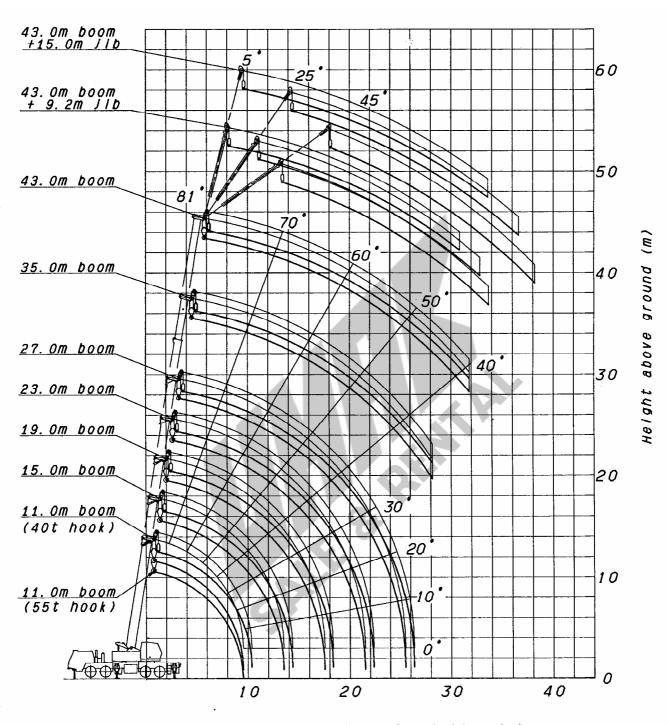
Driver s cab : Steel, two man, semi under floor

type, one side cab

Tire size; Front : 315/80R22.5 156/150k

Rear (dual tire) : 315/80R22.5 156/150k

WORKING RANGE



Radius from center of rotation (m)

Note: Deflection of boom and jib excluded.

RATED LIFTING CAPACITY

Based on ISO 4305

					Note	: Front	jack is o	optional.	
Outriggers	Outriggers fully extended with front jack - 360° full range								
Outriggers	fully ex	tended wi	thout fro	nt jack	- over s	ide and o	ver rear		
Working	11.0m	11.0m	15.0m	19.0m	23.0m	27.0m	35.0m	43.0m	
radius(m)	Boom	Boom	Boom	Boom	Boom	Boom	Boom	Boom	
3.0	55.00	40.00	28.00	28.00	24.00				
3.5	43.70	40.00	28.00	28.00	24.00				
4.0	38.50	38.50	28.00	28.00	24.00	20.00			
4.5	34.20	34.20	28.00	28.00	24.00	20.00			
5.0	30.80	30.80	28.00	28.00	24.00	20.00	14.00		
5.5	27.80	27.80	27.40	27.20	24.00	20.00	14.00		
6.0	25.40	25.40	25.00	24.80	24.00	20.00	14.00		
6.5	23.20	23.20	22.80	22.60	22.50	20.00	14.00	8.00	
7.0	21.40	21.40	21.00	20.80	20.60	19.60	14.00	8.00	
7.5	19.70	19.70	19.30	19.10	19.00	18.00	14.00	8.00	
8.0	17.90	17.90	17.75	17.50	17.30	17.25	14.00	8.00	
8.5	16.20	16.20	15.90	15.70	15.50	15.45	13.80	8.00	
9.0	14.60	14.60	14.40	14.15	14.00	13.90	13.60	8.00	
10.0			11.90	11.65	11.50	11.45	12.30	8.00	
11.0			10.00	9.75	9.60	9.50	10.40	7.80	
12.0			8.40	8.15	8.10	8.00	8.85	7.10	
13.0			7.15	6.90	6.80	6.75	7.55	6.65	
14.0				5.90	5.80	5.75	6.50	6.15	
16.0				4.30	4.20	4.10	4.95	5.35	
18.0					3.00	2.95	3.75	4.20	
20.0				0.	2.10	2.05	2.80	3.30	
22.0						1.30	2.10	2.55	
24.0						0.75	1.50	2.00	
26.0							1.05	1.50	
28.0							0.65	1.05	
30.0								0.70	
31.0								0.50	
Standard hook	for 40 ton + sub hook sheave	for 40 ton			f	or 20 to	n		
Hook mass	450 + 150 kg		450 kg				320 kg		
Parts of line	14	10	8	8	6	5	4	4	
Critical boom angle	-	-	-	-	-	-	33 °	40 °	

Outriggers intermediately extended without front jack - 360° full range							
Outriggers fu	ully extend	ded without	t front ja	ck - over	front		
Working	11.0m	15.0m	19.0m	23.0m	27.0m	35.0m	43.0m
radius(m)	Boom	Boom	Boom	Boom	Boom	Boom	Boom
3.0	32.00	28.00	28.00	24.00			
3.5	32.00	28.00	28.00	24.00			
4.0	32.00	28.00	28.00	24.00	20.00		
4.5	29.00	28.00	28.00	24.00	20.00		
5.0	22.00	21.90	21.50	21.40	20.00	14.00	
5.5	17.30	17.20	16.90	16.80	16.70	14.00	
6.0	14.10	14.00	13.70	13.60	13.50	14.00	8.00
6.5	11.80	11.65	11.35	11.30	11.20	12.30	8.00
7.0	10.00	9.85	9.55	9.50	9.45	10.45	8.00
7.5	8.55	8.40	8.15	8.10	8.05	9.00	8.00
8.0	7.40	7.25	7.00	6.95	6.90	7.85	8.00
9.0	5.70	5.55	5.30	5.25	5.20	6.05	6.50
10.0		4.25	4.00	3.90	3.85	4.75	5.20
11.0		3.20	2.95	2.90	2.80	3.70	4.20
12.0		2.40	2.20	2.10	2.05	2.90	3.40
13.0		1.80	1.55	1.45	1.40	2.25	2.70
14.0						1.70	2.15
15.0				1			1.70
Standard hook		for 4	0 ton			for 20 to	ı
Hook mass		450	kg			320 kg	
Parts of line	8	8	8	6	5	4	4
Critical boom angle	-		35 °	48 °	58 °	64 °	68 °

,	(blocked on vertical cyls.) ull range				
Working	11.0m				
radius(m)	Boom				
3.0	8.00				
3.5	6.40				
4.0	5.10				
4.5	4.20				
5.0	3.40				
5.5	2.80				
6.0	2.30				
6.5	1.90				
7.0	1.60				
7.5	1.25				
8.0	1.00				
Standard hook	for 40 ton				
Hook mass	450 kg				
Parts of line	10				

Outriggers fully extended with front jack – 360° full range Outriggers fully extended without front jack – over side and over rear							
D	43m Boom + 9.2m Jib						
Boom angle	Offse	t 5°	Offset	t 25°	Offset 45°		
(°)	Working	Load	Working	Load	Working	Load	
()	radius(m)	(t)	radius(m)	(t)	radius(m)	(t)	
81.0	10.00	3.50	12.75	2.30	14.60	1.25	
80.0	11.05	3.50	13.70	2.30	15.45	1.25	
79.0	12.05	3.48	14.65	2.30	16.30	1.24	
78.0	13.00	3.40	15.60	2.25	17.20	1.23	
77.0	13.90	3.23	16.50	2.19	18.05	1.21	
76.0	14.85	3.04	17.40	2.12	18.90	1.19	
75.0	15.75	2.90	18.25	2.06	19.75	1.17	
74.0	16.70	2.75	19.15	1.99	20.55	1.16	
72.0	18.50	2.49	20.90	1.85	22.25	1.12	
70.0	20.15	2.28	22.60	1.73	23.90	1.09	
68.0	21.85	2.09	24.20	1.62	25.40	1.06	
66.0	23.55	1.91	25.80	1.53	26.85	1.04	
64.0	25.05	1.68	27.40	1.43	28.35	1.02	
62.0	26.55	1.41	28.85	1.24	29.85	1.00	
60.0	28.00	1.13	30.20	1.00	31.15	0.85	
59.0	28.75	1.00	30.85	0.89	31.80	0.77	
58.0	29.45	0.86	31.50	0.77	32.45	0.69	
57.0	30.20	0.73	32.20	0.66	33.05	0.61	
56.0	30.85	0.63	32.85	0.56	33.70	0.53	
Standard hook			for 4	4 ton			
Hook mass		120 kg					
Parts of line				1			
Critical boom angle			55	o			

	Outriggers fully extended with front jack - 360° full range Outriggers fully extended without front jack - over side and over rear 43m Boom + 15m Jib						
Boom	Offse	t 5°	43m Boom Offse		Offset 45°		
angle							
(°)	Working	Load	Working	Load	Working	Load	
04.0	radius(m)	(t)	radius(m)	(t)	radius(m)	(t)	
81.0	11.75	2.50	16.20	1.20	19.40	0.70	
80.0	12.95	2.50	17.20	1.20	20.35	0.69	
79.0	14.10	2.49	18.15	1.19	21.25	0.69	
78.0	15.10	2.45	19.10	1.17	22.15	0.68	
77.0	16.20	2.30	20.10	1.15	23.05	0.67	
76.0	17.25	2.17	21.10	1.12	24.00	0.67	
75.0	18.25	2.06	22.15	1.10	24.85	0.65	
74.0	19.20	1.95	23.15	1.07	25.70	0.64	
72.0	21.10	1.76	25.05	1.02	27.45	0.62	
70.0	23.00	1.59	26.80	0.97	29.10	0.61	
68.0	24.90	1.47	28.60	0.93	30.65	0.59	
66.0	26.75	1.35	30.30	0.90	32.25	0.58	
64.0	28.60	1.24	32.00	0.87	33.80	0.57	
62.0	30.40	1.10	33.70	0.84	35.30	0.56	
60.0	32.00	0.87	35.25	0.72	36.75	0.55	
59.0	32.80	0.76	36.00	0.66	37.45	0.55	
58.0	33.60	0.64	36.60	0.58	38.20	0.54	
Standard hook			for 4	1 ton			
Hook mass			120	kg			
Parts of line				1			
Critical boom angle		6	57	•			

	Outriggers intermediately extended without front jack – 360° full range Outriggers fully extended without front jack – over front							
	43m Boom + 9.2m Jib							
Boom angle	Offse	t 5°	Offset	Offset 25°		t 45°		
(°)	Working	Load	Working	Load	Working	Load		
()	radius(m)	(t)	radius(m)	(t)	radius(m)	(t)		
81.0	10.00	3.50	12.75	2.30	14.60	1.25		
80.0	11.05	3.50	13.70	2.30	15.45	1.25		
79.0	12.05	12.05 3.42 14.65 2.30 16.30 1.						
78.0	12.90	3.05	15.60	2.25	17.20	1.23		
77.0	13.65	2.67	16.45	2.06	18.05	1.21		
76.0	14.50	2.27	17.20	1.76	18.90	1.19		
Standard hook			for 4	4 ton				
Hook mass		120 kg						
Parts of line		1						
Critical boom angle			75	0				

(Unit : Metric ton)

Outriggers intermediately extended without front jack - 360° full range Outriggers fully extended without front jack - over front								
	43m Boom + 15m Jib							
Boom angle	Offse	t 5°	Of fse	t 25°	Offset 45°			
	Working	Load	Working	Load	Working	Load		
()	radius(m)	(t)	radius(m)	(t)	radius(m)	(t)		
81.0	11.75	2.50	16.20	1.20	19.40	0.70		
80.0	12.95	2.50	17.20	1.20	20.35	0.69		
79.0	14.10	2.49	18.15	1.19	21.25	0.69		
78.0	15.10	2.45	19.10	1.17	22.15	0.68		
77.0	16.05	2.06	20.10	1.15	23.05	0.67		
Standard hook			for 4	4 ton				
Hook mass		120 kg						
Parts of line		1						
Critical boom angle			76	0				

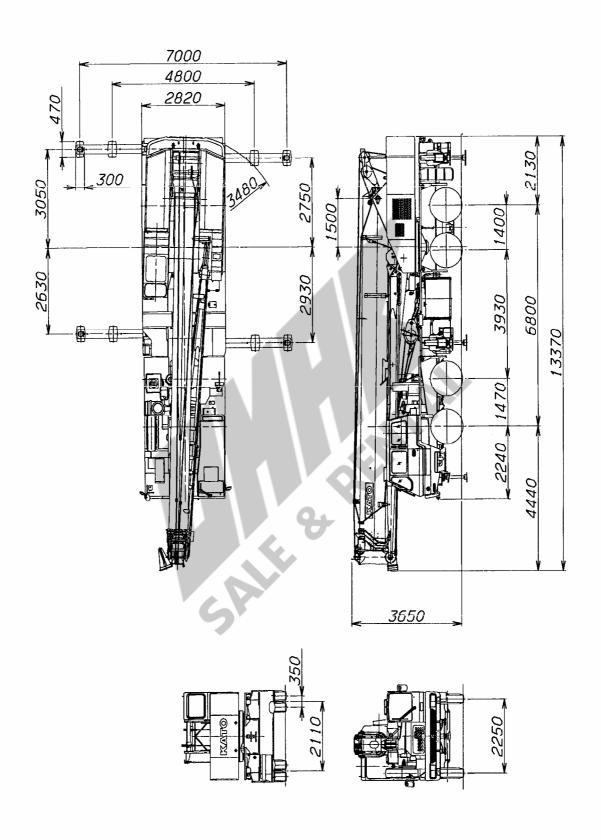
NOTES:

- (1) The rated lifting capacities are the maximum load guaranteed on a firm level ground and include the mass 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.
- (2) The working radii as given in the table are the 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 (43 m). 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 4000 kg. At all times the mass 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, 2000 kg plus the mass 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) 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.

- (7) The standard number of parts of line is shown in the rated lifting capacity table. If you work with a non-standard number of parts of line, take 39.2kN (4tf) as the maximum load on any part of the wire rope.
- (8) 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 overloading.
- (9) Free fall is adopted in principle to lower the hook only.
 If it is necessary to lower a load by free fall, its mass should be
 less than 20 % of the rated lifting capacity and abrupt braking should
 not be allowed.
- (10) Crane operation is permissible up to a wind speed of 10m/s.
 Even in relatively light wind conditions, extra care should be taken when handling loads presenting large wind catching areas.
- (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 guaranteed.

EDIL &

KATO FULLY HYDRAULIC TRUCK CRANE MODEL NK-550VR (CARRIER: NISSAN DIESEL KG48U)



Standard equ	uipment
For crane	For carrier
* Front jack	* Towing hook (front and rear, eye type)
* Fly jib	* Spare tire & wheel
* Rooster sheave	* Air dryer
* Independent two winches control system	* Cab heater
* Irregular winding prevention device	* Radio AM
* Winch automatic brake	* Cigar lighter
* Free fall device	* Ashtray
* Control pedals for main winch & auxiliary winch	
* Sub hook sheave for 55t	
* Hooks (40 ton, 20 ton, 4 ton)	
* Hydraulic oil cooler	4
* Full size fender	
* Large size steps	
* 3 working lights	
* Moment limiter with voice alarm (English)	
* Winch drum turning indicator	
* Sun visor	
* Cigar lighter	
* Ashtray	
* Cab floor mat	
* Tool kit	

Optional equipment									
For crane	For carrier								
* Winch over-unwinding device	* Cab cooler								
* Winch drum mirror (hoist mirror)	* Radio AM FM								
* Yellow rev. light									
* Cab heater									
* Cab cooler	17-7								
* Fan									
* Radio AM FM									
* Fire extinguisher									

Performance and specifications are for cranes fitted with all standard equipment.

WE RESERVE THE RIGHT TO MAKE SPECIFICATION AND EQUIPMENT CHANGES WITHOUT NOTICE

CONCLUSION

This is the KATO NK-550VR specification, and should there be any further details you require information on, or any points you wish to have clarified, please do not hesitate to contact our Overseas Marketing Department at;

KATO WORKS CO., LTD.

9-37, Higashi-ohi 1-chome, Shinagawa-ku, Tokyo, 140 Japan

Phone : Head Office

Tokyo (03) 3458-1111

Overseas Marketing Dept.

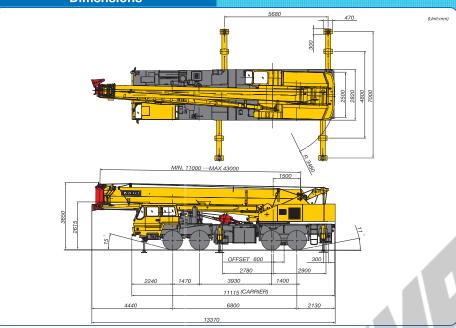
Tokyo (03) 3458-1115

Fax. : Tokyo (03) 3458-1151

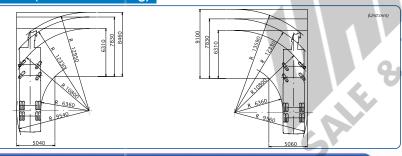
where our Overseas Marketing Dept. staff will be happy to assist you.

NK-550VR

Dimensions



Turning radius (left hand steering)



URL http://www.kato-works.co.jp

NOTE: Illustrations may include optional equipment. KATO products and specifications are subject to improvements and changes without notice. Before you use this crane, study the instruction manual thoroughly and follow the instructions it contains. Some differences may arise between the machine delivered and the photographs in the catalogue due to the country the crane will be used in or any added improvements. The specification may be changed without notice.

The actual colours of the body and interior may appear slightly different from those shown in this catalogue due to the limitations of photography and printing

Address inquiries to :





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9-37, Higashi-ohi 1-chome, Shinagawa-ku, Tokyo 140-0011, Japan. Tokyo(03)3458-1111

Overseas Marketing Department Tokyo(03)3458-1115

Fax. : Tokyo(03)3458-1163



SUPERBOOM

NK-550VR

FULLY HYDRAULIC TRUCK CRANE





More Height and More Working Ranges with 43m Solid SUPERBOOM



Advanced "SUPERBOOM"

·Max. boom length · · · · · · 43 m •Fly jib length ••••• 9.2 m &15 m ·Max lifting height · · · · 43 m (boom) 58 m (boom + fly jib)

Wide working ranges in narrows spaces

·Max. derricking angle · · · · · · · · 81° • Fly jib with 3 offset angles •••• 5°, 25°, 45°

·Small tail slewing radius · · · · · · · 3.48 m

Wide & roomy operator's cabin

Operating lever system · · · · · · ISO Type

·Safe load indicator · · · · ACS COMPULOAD with working range limiting function

Compact body with better mobility

Overall length · · · · · · · · 13.37 m ·Overall height · · · · · · · 3.65 m •Min. turning radius •••••• 10.80 m

New model engine

· Conformity regulation · · · · · Euro II Engine ·Max. output ······ 257 kw • Max. torque • • • • • • • 1.460 Nm

MORE CLOSER! MORE HIGHER! MORE FARTHER!

43m

25°

Newly designed solid 43m SUPERBOOM combined with 15m fly jib offers you steady operation and wider range capacity in narrow spaces.

 Fly jib is stored under the boom while traveling and set up easily & speedily even in narrow spaces at job site.

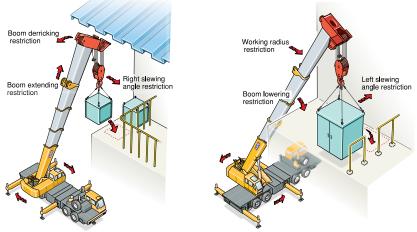


Wide & roomy operator's cabin for the safe work



Safe load indicator "ACS COMPULOAD" with working range limiting function

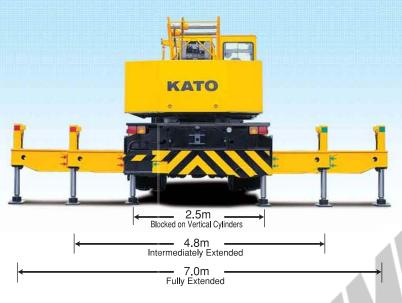
Working range limiting function ensures safe operation in a confined and limited job site with control of 6 factors: boom extending, boom derricking, boom lowering, working radius, left slewing angle, right slewing angle.



Slewing does not stop automatically, sound alarm only.

5

Three-position outrigger setting offers variations of machine-setting in the limited space



Easy accessibility with large steps and full-sized fenders



Safety Devices

- ACS (Automatic Crane Stopper)
- Winch hoisting limiter
- Winch drum turning indicator
- Irregular winding prevention device
- Outrigger lock device

- Boom falling prevention device
- Winch drum lock device
- Automatic winch brake
- Hydraulic safety valve
- Slewing lock device

Standard equipment

For crane

- Front jack
- Fly jib
- Rooster sheave
- Independent two winches control system
- Irregular winding prevention device
- Winch automatic brake
- Free fall device
- Control pedals for main winch & auxiliary winch
- Sub hook sheave for 55t
- Hooks (40 ton, 20 ton, 4 ton)
- Hydraulic oil cooler
- Full size fender
- Large size steps
- 3 working lights
- Moment limiter with voice alarm (English)
- Winch drum turning indicator
- Sun visor
- Cigar lighter
- Ashtray
- Cab floor mat
- Tool kit

For carrier

- Towing hooks (front and rear, eye type)
- Spare tire & wheel
- Air dryer
- Cab heater
- Radio AM
- Cigar lighter
- Ashtray

Optional equipment

For crane

- Winch over-unwinding device
- Winch drum mirror (hoist mirror)
- Yellow rev. light
- Cab heater
- Cab cooler
- Fan
- Radio AM FM
- Fire extinguisher

ii equipinent

- For carrier

 Cab cooler
- Radio AM FM

NOTE: Performance and specifications are based on the condition fitted with all standard equipment.



NK-550VR FULLY HYDRAULIC TRUCK CRANE

[SPECIFICATION]

				KOI			
CRANE							
Description		Truck crane wit	h maximum lifting cap	acity 55 ton			
Model		NK-550VR	Triaxillani inting dap	doity do ton			
●Specifica	tion	1111 000 111					
Specifica	шоп						
		11.0 m Boom	55,000 kg × 3.0 m	(Parts of line : 1			
		11.0 m Boom 40,000 kg × 3.5 m (Parts of line : 10)					
			15.0 m Boom 28,000 kg × 5.0 m (Parts of line : 8)				
		19.0 m Boom	9.0 m Boom 28,000 kg × 5.0 m (Parts of line : 8)				
Maximum rate	d	23.0 m Boom	24,000 kg × 6.0 m	(Parts of line : 6	,		
lifting capacity	u	27.0 m Boom	20,000 kg × 6.5 m	(Parts of line :	5)		
		35.0 m Boom	14,000 kg × 8.0 m	(Parts of line : 4	4)		
		43.0 m Boom	8,000 kg × 10.0 m	(Parts of line : 4	1)		
		9.2 m Jib	3,500 kg × 80°	(Parts of line :	1)		
		15.0 m Jib	2,500 kg × 80°	(Parts of line :	1)		
		Rooster	4,000 kg	(Parts of line : 1	1)		
Boom length		11.0 m — 43.0	m				
Fly jib length		9.2 m, 15.0 m					
Maximum lifting	g	43.0 m (Boom)					
height		58.0 m (Jib)					
Hoisting line	Main winch	114 m/min. (at 3	Brd layer)				
speed	Auxiliary winch	105 m/min. (at 2	2nd layer)				
Hoisting hook	Main winch	(part of line; 14)	: 8.1 m/min. (at 3rd la	ayer)	4		
speed	Auxiliary winch	(part of line; 1)	: 105 m/min. (at 2nd la	ayer)			
Boom derricking	angle	-2.5° — 81°					
Boom derricking	time	70 s (-2.5° —	81°)				
Boom extending	time	170 s (11.0 m — 43.0 m)					
Slewing speed		1.85 min ⁻¹					
Tail slewing rad	dius	3,480 mm					
●Equipme	nt and	d structure					
			section hydraulically to	alesconic type	_		
Boom type			2/3 and 4/5 simultane				
Jib type		2 sections (2nd (offset angles 5	section of draw-out ty °, 25° and 45°))	pe, 3-step inclin	ation typ		
Boom extension retraction equip		Three hydraulic cylinders and wire ropes used together					
Boom derrickir lowering equip		One hydraulic cylinder of direct acting type with pressure-compensated flow control valve					
Winch system Main & Auxiliary	winches	Driven by axial plunger type hoisting motor through planetary gear reduction.					
Slewing equipr	ment	Ball bearing type					
Wire rope for	Main winch		nm×Length : 235 m				
hoisting	Auxiliary	Diameter: 18 mm × Length: 125 m					
●Hydraulio							
Oil pump	, 0,01.	4 section gear t	Vne				
Оприпр	Hoisting						
Hydraulic motor	motor Slewing	Axial plunger ty Axial plunger ty					
Control valve	motor			ral check and ral	ief valvos		
		3 position 4 way double acting with integral check and relief valves					
Oil reservoir can	acity	Double acting type					
Oil reservoir cap		695 L					
Safety de	evices						
		Winch hoisting limite Automatic winch bral	ne System with voice alarm), r, Winch drum lock device, Wi ke, Irregular winding prevention, e, Joystick control safety stop	inch drum turning indie on device, Hydraulic s	cator, afety va l ve,		
Standard	equip	oment					
		Front jack, Fly jib, Rooster sheave, Independent two winches control system, Irregular winding prevention device, Winch automatic brake, Hooks (40 ton, 20 ton, 4 ton), Hydraulic oil cooler, Full size fender, Large size steps, 3 working lights, Moment limiter with voice alarm, Winch drum turning indicator, Sun visor, Cigar lighter, Ashtray, Cab floor mat, Tool kit					
Optional	equip	ment					
		Winch over-unwind Cab heater, Cab co	ng device, Winch drum mirr oler, Fan, Radio AM FM, Fir 55t, Outrigger sheet, Cab lev	e extinguisher, Roof			

■CAR	RIF	-R					
Maker an			FAW CA5425JQZ				
			TAV ONOTZOUGE				
Spec							
Maximum tra		speed	70 km/h				
Gradeabi			30% (theoretical value)				
Minimum tu	ırning	radius	11.9 m				
●Gene	eral (dimen	sions & G.V.W.				
Overall le	ngth		approx.13,370 mm				
Overall w	idth		approx. 2,800 mm				
Overall he	eight		approx. 3,780 mm				
Wheel ba	se		1,450 mm + 3,900 mm + 1,350 mm = 6,700 mm				
Treads		Front	2,282 mm				
ITEaus		Rear	2,059 mm				
		Туре	Hydraulic H-beam type (with float and vertical cylinder in single unit)				
Outriggor	•	7	7,000 mm (Fully extended)				
Outrigger	5	Extension width	4,800 mm (Intermediately extended)				
4			2,500 mm (Fully retracted)				
C		Gross weight	approx. 41,600 kg				
Gross mad weight	cnine	Front weight	approx. 15,650 kg				
Wolghi		Rear weight	approx. 25,950 kg				
●Engir	ne						
Model			CA6DL2-35E3 (EURO-Ⅲ) (turbo charged)				
Туре			6-inline, 4 cycle, water cooled, diesel				
Piston dis	place	ement	8.6 L				
Max. pow	er		258 kW/ 2,100 min ⁻¹ (350 PS/ 2,100 min ⁻¹)				
Max. torq	ue		1,500 N·m/ 1,600 min ⁻¹ (153 kg·m/ 1,600 min ⁻¹)				
* NOTE :	Dies	el Fuel	recommended by KATO must be used				
●Equi	ome	nt and	d structure				
Drive syst	tem		8×4				
Clutch			Single dry plate, hydraulic control with air booster				
Transmiss	sion		Manual transmission type				
Number o	of spe	eds	9 forward & 1 reverse speed				
		Front	Reverse "ELLIOT" type				
Axles		Rear	Full floating type with hub reduction				
C	on	Front	Leaf springs with shock absorber				
Suspensi	UII	Rear	Equalizer beams & torque rods with leaf springs (with lockout device)				
	Serv	rice	2 circuit air brake, 8 wheels internal expanding type				
Brake	Park	ing	Spring loaded brake				
	Auxi	liary	Exhaust brake				
Steering		Туре	Ball nut type with power booster				
Tire size		Front	315 / 80R 22.5-18PR				
Tile Size		Rear	315 / 80R 22.5-18PR				
Fuel tank	сара	city	380 L				
Seating c	Seating capacity		2 persons				
Battery	Battery		(12V-6-QAW-180) × 2				
●Stan	dard	equip	oment				
			Towing hook (front and rear, eye type), Spare tire & wheel,				
			Air dryer, Radio AM FM , Cigar lighter, Ashtray, Cab heater,				
			Cab cooler				

Before you use this machine, read the precautions in the instruction manual thoroughly to operate it correctly.

Stow the hooks in place before traveling.

•KATO products and specifications are subject to improvements and changes without notice.

11.0 m — 43.0 m Boom

							(Unit:	Metric ton
	Outrigge	ers fully ext	ended with	front jack -	360° full ra	nge		
	Outrigge	ers fully ext	ended with	out front jac	k – over side	e and over r	ear	
Working	11.0m	11.0m	15.0m	19.0m	23.0m	27.0m	35.0m	43.0m
radius (m)	Boom	Boom	Boom	Boom	Boom	Boom	Boom	Boom
3.0	55.00	40.00	28.00	28.00	24.00			
3.5	43.70	40.00	28.00	28.00	24.00			
4.0	38.50	38.50	28.00	28.00	24.00	20.00		
4.5	34.20	34.20	28.00	28.00	24.00	20.00		
5.0	30.80	30.80	28.00	28.00	24.00	20.00		
5.5	27.80	27.80	27.40	27.20	24.00	20.00	14.00	
6.0	25.40	25.40	25.00	24.80	24.00	20.00	14.00	
6.5	23.20	23.20	22.80	22.60	22.50	20.00	14.00	8.00
7.0	21.40	21.40	21.00	20.80	20.60	19.60	14.00	8.00
7.5	19.70	19.70	19.30	19.10	19.00	18.00	14.00	8.00
8.0	17.90	17.90	17.75	17.50	17.30	17.25	14.00	8.00
8.5	16.20	16.20	15.90	15.70	15.50	15.45	13.80	8.00
9.0	14.60	14.60	14.40	14.15	14.00	13.90	13.60	8.00
10.0			11.90	11.65	11.50	11.45	12.30	8.00
11.0			10.00	9.75	9.60	9.50	10.40	7.80
12.0			8.40	8.15	8.10	8.00	8.85	7.10
13.0			7.15	6.90	6.80	6.75	7.55	6.65
14.0				5.90	5.80	5.75	6.50	6.15
16.0				4.30	4.20	4.10	4.95	5.35
18.0					3.00	2.95	3.75	4.20
20.0					2.10	2.05	2.80	3.30
22.0						1.30	2.10	2.55
24.0				41		0.75	1.50	2.00
26.0							1.05	1.50
28.0							0.65	1.05
30.0								0.70
31.0			4					0.50
Standard hook	for 55 ton		for 4	0 ton		7.	for 20 ton	
Hook mass	600 kg	4	450 kg				320 kg	
Parts of line	14	10	8	8	6	5	4	4
Critical boom angle	4	+				_	33 °	40°

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Outriggers intermediately extended without front jack - 360° full range Outriggers fully extended without front jack - over front										
Working radius (m)	11.0m Boom	15.0m Boom	19.0m Boom	23.0m Boom	27.0m Boom	35.0m Boom	43.0m Boom			
3.0	32.00	28.00	28.00	24.00						
3.5	32.00	28.00	28.00	24.00						
4.0	32.00	28.00	28.00	24.00	20.00					
4.5	29.00	28.00	28.00	24.00	20.00					
5.0	22.00	21.90	21.50	21.40	20.00	14.00				
5.5	17.30	17.20	16.90	16.80	16.70	14.00				
6.0	14.10	14.00	13.70	13.60	13.50	14.00	8.00			
6.5	11.80	11.65	11.35	11.30	11.20	12.30	8.00			
7.0	10.00	9.85	9.55	9.50	9.45	10.45	8.00			
7.5	8.55	8.40	8.15	8.10	8.05	9.00	8.00			
8.0	7.40	7.25	7.00	6.95	6.90	7.85	8.00			
9.0	5.70	5.55	5.30	5.25	5.20	6.05	6.50			
10.0		4.25	4.00	3.90	3.85	4.75	5.20			
11.0		3.20	2.95	2.90	2.80	3.70	4.20			
12.0		2.40	2.20	2.10	2.05	2.90	3.40			
13.0		1.80	1.55	1.45	1.40	2.25	2.70			
14.0						1.70	2.15			
15.0							1.70			
Standard hook		for 4	0 ton			for 20 ton				
Hook mass		450) kg			320 kg				
Parts of line	8	8	8	6	5	4	4			
Critical boom angle			35°	48°	58°	64°	68°			

43 m Boom + 9.2 m Jib

43 m Boom + 15 m Jib

(Unit : Metric ton)

			Outrigo	ers full	v extend	ded wit	h front jac	.k - 360°	full ra	ange		TIIL . IVIE	
		Outri			•		front jack - over side and over rear						
	4	3m Bo	om + 9.2	2m Jib			43m Boom + 15m Jib						
Boom	Offse	et 5°	Offse	t 25°	Offse	t 45°	Boom	Offset 5° Offset 25°			Offset 45°		
angle (°)	Working radius (m)	Load (t)	Working radius (m)	Load (t)	Working radius (m)	Load (t)	angle (°)	Working radius (m)	Load (t)	Working radius (m)	Load (t)	Working radius (m)	Load (t)
81.0	10.00	3.50	12.75	2.30	14.60	1.25	81.0	11.75	2.50	16.20	1.20	19.40	0.70
80.0	11.05	3.50	13.70	2.30	15.45	1.25	80.0	12.95	2.50	17.20	1.20	20.35	0.69
79.0	12.05	3.48	14.65	2.30	16.30	1.24	79.0	14.10	2.49	18.15	1.19	21.25	0.69
78.0	13.00	3.40	15.60	2.25	17.20	1.23	78.0	15.10	2.45	19.10	1.17	22.15	0.68
77.0	13.90	3.23	16.50	2.19	18.05	1.21	77.0	16.20	2.30	20.10	1.15	23.05	0.67
76.0	14.85	3.04	17.40	2.12	18.90	1.19	76.0	17.25	2.17	21.10	1.12	24.00	0.67
75.0	15.75	2.90	18.25	2.06	19.75	1.17	75.0	18.25	2.06	22.15	1.10	24.85	0.65
74.0	16.70	2.75	19.15	1.99	20.55	1.16	74.0	19.20	1.95	23.15	1.07	25.70	0.64
72.0	18.50	2.49	20.90	1.85	22,25	1.12	72.0	21.10	1.76	25.05	1.02	27.45	0.62
70.0	20.15	2.28	22.60	1.73	23.90	1.09	70.0	23.00	1.59	26.80	0.97	29.10	0.61
68.0	21.85	2.09	24.20	1.62	25.40	1.06	68.0	24.90	1.47	28.60	0.93	30.65	0.59
66.0	23.55	1.91	25.80	1.53	26.85	1.04	66.0	26.75	1.35	30.30	0.90	32.25	0.58
64.0	25.05	1.68	27.40	1.43	28.35	1.02	64.0	28.60	1.24	32.00	0.87	33.80	0.57
62.0	26.55	1.41	28.85	1.24	29.85	1.00	62.0	30.40	1.10	33.70	0.84	35.30	0.56
60.0	28.00	1.13	30.20	1.00	31.15	0.85	60.0	32.00	0.87	35.25	0.72	36.75	0.55
59.0	28.75	1.00	30.85	0.89	31.80	0.77	59.0	32.80	0.76	36.00	0.66	37.45	0.55
58.0	29.45	0.86	31.50	0.77	32.45	0.69	58.0	33.60	0.64	36.60	0.58	38.20	0.54
57.0	30.20	0.73	32.20	0.66	33.05	0.61							
56.0	30.85	0.63	32.85	0.56	33.70	0.53							
Standard hook			for 4	ton			Standard hook			for 4	ton		
Hook mass			120	kg		\setminus	Hook mass			120	kg		
Parts of line	1						Parts of line 1						
Critical boom angle			5.	5°			Critical boom angle			5	7°		

421-75105000

43 m Boom + 9.2 m Jib

43 m Boom + 15 m Jib

(Unit : Metric ton)

		Outri					I without f				nge		
	4	3m Bo	om + 9.2	2m Jib			43m Boom + 15m Jib						
Boom	Offse	et 5°	Offse	t 25°	Offse	t 45°	Boom	Offse	et 5°	Offse	t 25°	25° Offset 45°	
angle (°)	Working radius (m)	Load (t)	Working radius (m)	Load (t)	Working radius (m)	Load (t)	angle (°)	Working radius (m)	Load (t)	Working radius (m)	Load (t)	Working radius (m)	Load (t)
81.0	10.00	3.50	12.75	2.30	14.60	1.25	81.0	11.75	2.50	16.20	1.20	19.40	0.70
80.0	11.05	3.50	13.70	2.30	15.45	1.25	80.0	12.95	2.50	17.20	1.20	20.35	0.69
79.0	12.05	3.42	14.65	2.30	16.30	1.24	79.0	14.10	2.49	18.15	1.19	21.25	0.69
78.0	12.90	3.05	15.60	2.25	17.20	1.23	78.0	15.10	2.45	19.10	1.17	22.15	0.68
77.0	13.65	2.67	16.45	2.06	18.05	1.21	77.0	16.05	2.06	20.10	1.15	23.05	0.67
76.0	14.50	2.27	17.20	1.76	18.90	1.19							
Standard hook			for 4	ton	,		Standard hook	for 4 ton					
Hook mass			120	kg			Hook mass	120 kg					
Parts of line			1				Parts of line			,			
Critical boom angle			73	5°			Critical boom angle			70	3°		

421-75106000

(Unit : Metric ton)

Outriggers fully retracted (blocke	d on vertical cyls.) - 360° full range						
Working radius (m)	11.0 m Boom						
3.0	8.00						
3.5	6.40						
4.0	5.10						
4.5	4.20						
5.0	3.40						
5.5	2.80						
6.0	2.30						
6.5	1.90						
7.0	1.60						
7.5	1.25						
8.0	1.00						
Standard hook	for 40 ton						
Hook mass	450 kg						
Parts of line	10						



■Notes for the rated lifting capacity chart •

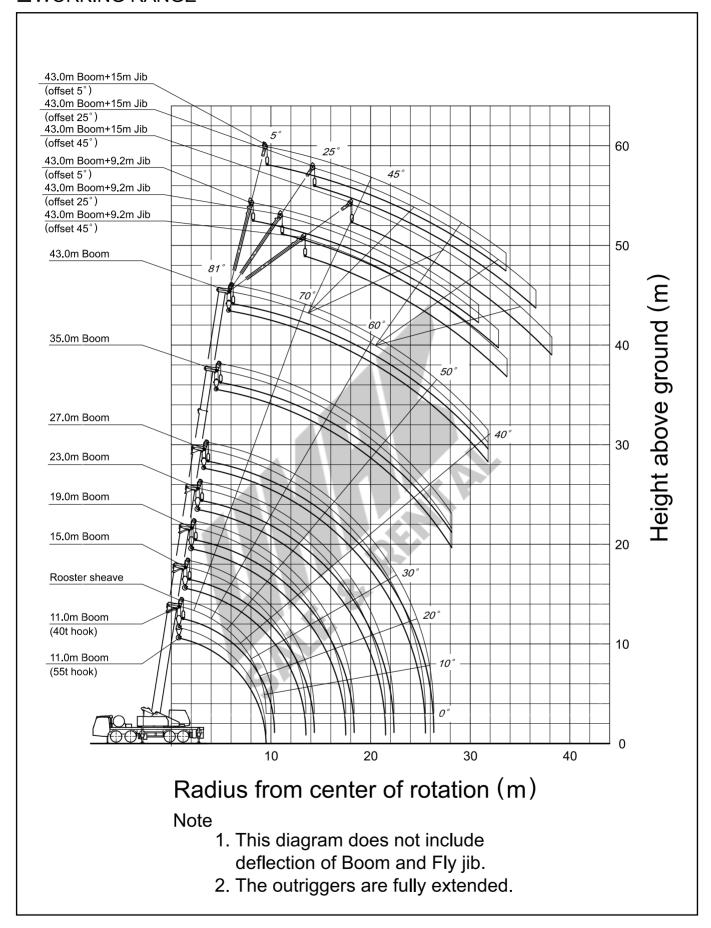
Precautions

- 1. The rated lifting capacities are the maximum load guaranteed on a firm level ground and include the mass 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.
- 2. The working radii as given in the table are the 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 (43 m). 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 4000 kg. At all times the mass 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, 4000 kg plus the mass of hook block and other lifting equipment, etc., should be subtracted from the rated lifting capacities.

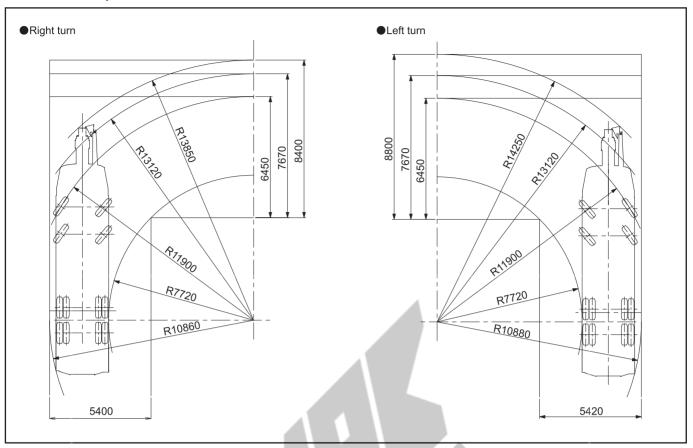
 When performing the above operation, do not use the rooster sheave.
- 6. Critical boom angles for each boom length are shown on bottommost line of lifting capacity table. If the boom angle is lowered to less than the critical boom angle, the machine will tip over without load. Therefore, never lower the boom below these angles.
- 7. The standard number of parts of line is shown in the rated lifting capacity table.

 If you work with a non-standard number of parts of line, take 39.2kN (4tf) as the maximum load on any part of the wire rope.
- 8. Over front lifting performance without front jack 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 overloading.
- 9. Crane operation is permissible up to a wind speed of 10m/s.

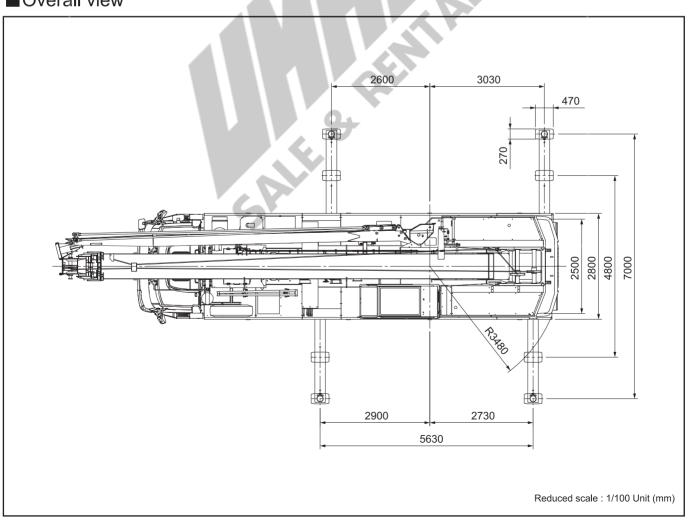
 Even in relatively light wind conditions, extra care should be taken when handling loads presenting large wind catching areas.
- 10. The machine will tip over or be damaged if operated with a load exceeding that specified in the rated lifting capacity table or not conforming to correct handling.
 If such trouble occurs, the machine will not be guaranteed.



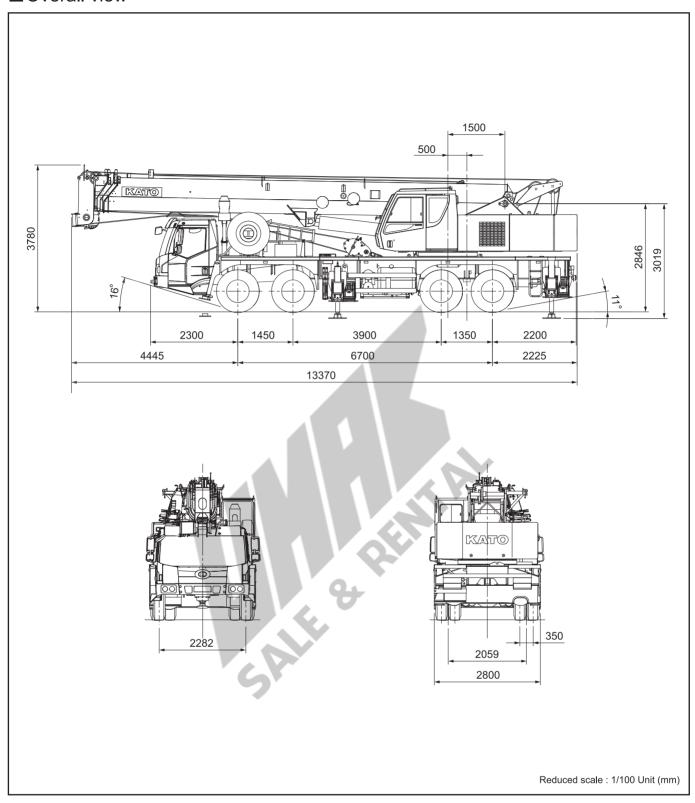
■Minimum path width



■Overall view



■Overall view



* KATO products and specifications are subject to improvements and changes without notice.

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C02325 3.2014-1000(TI)5





NK-550VR FULLY HYDRAULIC TRUCK CRANE

[SPECIFICATION]

■CRANE	:									
Description		Truck crane wit	h maximum lifting cap	acity 55 ton						
Model		NK-550VR	Triaximum inting cap	acity 00 ton						
Specifica	tion	1111 000 111								
Ореспіса	ition	11.0 m Boom	EE 000 kg v 2.0 m	(Darta of line + 14)						
		11.0 m Boom	55,000 kg × 3.0 m	(Parts of line : 14)						
		11.0 m Boom	40,000 kg × 3.5 m	(Parts of line : 10)						
		15.0 m Boom	28,000 kg × 5.0 m	(Parts of line : 8)						
		19.0 m Boom	28,000 kg × 5.0 m	(Parts of line : 8)						
Maximum rate	d	23.0 m Boom 24,000 kg × 6.0 m (Parts of line : 6)								
lifting capacity		27.0 m Boom	20,000 kg × 6.5 m	(Parts of line : 5)						
		35.0 m Boom	14,000 kg × 8.0 m	(Parts of line : 4)						
		43.0 m Boom	8,000 kg × 10.0 m	,						
		9.2 m Jib	3,500 kg × 80°	(Parts of line : 1)						
		15.0 m Jib	2,500 kg × 80°	(Parts of line : 1)						
December 1		Rooster	4,000 kg	(Parts of line : 1)						
Boom length		11.0 m — 43.0	m							
Fly jib length		9.2 m, 15.0 m								
Maximum liftin	g	43.0 m (Boom)								
height	Main	58.0 m (Jib)	and laves							
Hoisting line	winch	114 m/min. (at 3	· , ,							
speed	winch	105 m/min. (at 2		<u> </u>						
Hoisting hook	winch		: 8.1 m/min. (at 3rd la							
speed	winch		105 m/min. (at 2nd la	ayer)						
Boom derricking		-2.5° — 81°	0							
Boom derricking		70 s (-2.5° —								
Boom extending		170 s (11.0 m — 43.0 m)								
Slewing speed		1.85 min ⁻¹								
Tail slewing rad	dius	3,480 mm								
Equipme	nt and	d structure								
Boom type			section hydraulically to 2/3 and 4/5 simultane							
Jib type		2 sections (2nd		pe, 3-step inclination type						
Boom extension retraction equi		Three hydraulic cylinders and wire ropes used together								
Boom derrickir	ng/	One hydraulic cylinder of direct acting type with								
lowering equip	ment	pressure-compensated flow control valve Driven by axial plunger type hoisting motor through planetary gear reduction.								
Winch system Main & Auxiliary		Controlled indepen	dently by operating lever. I	rough planetary gear reduction. Equipped with automatic brake.						
Slewing equipr	ment Main	Ball bearing typ								
Wire rope for	winch	Diameter : 18 mm × Length : 235 m								
hoisting	Auxiliary winch	Diameter : 18 mm × Length : 125 m								
●Hydraulio	equi	pment								
Oil pump	h	4 section gear t								
Hydraulic motor	Hoisting motor	Axial plunger ty	ре							
,	Slewing motor	Axial plunger ty								
Control valve		3 position 4 way	double acting with integ	gral check and relief valves						
Cylinder		Double acting t	уре							
Oil reservoir cap	acity	695 L								
Safety de	evices	i								
		ACS (Automatic crane system with voice alarm), Boom falling prevention device, Winch hoisting limiter, Winch drum lock device, Winch drum lurning indicator, Automatic winch brake, Irregular winding prevention device, Hydraulic safety valve, Outrigaer lock device, Joystick control safety stop system, Slewing lock device								
Standard	l equi	oment								
		Front jack, Fly jib, Rooster sheave, Independent two winches control system, Irregular winding prevention device, Winch automatic brake, Hooks (40 ton, 20 ton, 4 ton), Hydraulic oil cooler, Full size fender, Large size steps, 3 working lights, Moment limiter with voice alarm, Winch drum turning indicator, Sun visor, Cigar lighter, Ashtray, Cab floor mat, Tool kit								
Optional	equip	ment								
	, r	Winch over-unwindi Cab heater, Cab co	ng device, Winch drum mirr oler, Fan, Radio AM FM, Fir 55t, Outrigger sheet, Cab lev							

= / · ^ O	DIE									
■ CAR										
Maker and	d mod	del	FAW CA5425JQZ							
Spec	ifica	tion								
Maximum tra	veling	speed	70 km/h							
Gradeabil	ity		30% (theoretical value)							
Minimum tu	Minimum turning radius		11.75 m							
●Gene	eral o	dimer	nsions & G.V.W.							
Overall ler			approx.13,370 mm							
Overall wi			approx. 2,800 mm							
Overall he			approx. 3,780 mm							
Wheel bas	_		1,450 mm + 3,900 mm + 1,350 mm = 6,700 mm							
vviieei bas	30	Front	2,282 mm							
Treads		Rear	2,059 mm							
			Hydraulic H-beam type (with float and vertical cylinder in single unit)							
	4	Туре								
Outriggers	5	Extension	7,000 mm (Fully extended)							
4		width	4,800 mm (Intermediately extended)							
41		Gross	2,500 mm (Fully retracted)							
Gross mad	chine	weight	approx. 41,600 kg							
weight		Front weight Rear	approx. 15,650 kg							
_		weight	approx. 25,950 kg							
Engir	ne									
Model			CA6DL2-35E3 (EURO-Ⅲ) (turbo charged)							
Туре			6-inline, 4 cycle, water cooled, diesel							
Piston dis	place	ment	8.6 L							
Max. power	er		258 kW/ 2,100 min ⁻¹ (350 PS/ 2,100 min ⁻¹)							
Max. torqu	ле	\wedge	1,500 N·m/ 1,600 min ⁻¹ (153 kg·m/ 1,600 min ⁻¹)							
* NOTE :	Diese	el Fuel	recommended by KATO must be used							
●Equip	mei	nt and	structure							
Drive syst			8×4							
D 0 0,00	Drive system									
Clutch										
			Single dry plate, hydraulic control with air booster							
Transmiss	sion	eds	Single dry plate, hydraulic control with air booster Manual transmission type							
	sion		Single dry plate, hydraulic control with air booster Manual transmission type 9 forward & 1 reverse speed							
Transmiss	sion	Front	Single dry plate, hydraulic control with air booster Manual transmission type 9 forward & 1 reverse speed Reverse "ELLIOT" type							
Transmiss Number o	sion	Front Rear	Single dry plate, hydraulic control with air booster Manual transmission type 9 forward & 1 reverse speed Reverse "ELLIOT" type Full floating type with hub reduction							
Transmiss Number o	sion f spe	Front Rear Front	Single dry plate, hydraulic control with air booster Manual transmission type 9 forward & 1 reverse speed Reverse "ELLIOT" type Full floating type with hub reduction Leaf springs with shock absorber							
Transmiss Number of Axles	sion f spe	Front Rear Front Rear	Single dry plate, hydraulic control with air booster Manual transmission type 9 forward & 1 reverse speed Reverse "ELLIOT" type Full floating type with hub reduction Leaf springs with shock absorber Equalizer beams & torque rods with leaf springs (with lockout device)							
Transmiss Number of Axles Suspension	sion f spe	Front Rear Front Rear ice	Single dry plate, hydraulic control with air booster Manual transmission type 9 forward & 1 reverse speed Reverse "ELLIOT" type Full floating type with hub reduction Leaf springs with shock absorber Equalizer beams & torque rods with leaf springs (with lockout device) 2 circuit air brake, 8 wheels internal expanding type							
Transmiss Number of Axles	sion f spe on Serv Park	Front Rear Front Rear ice ing	Single dry plate, hydraulic control with air booster Manual transmission type 9 forward & 1 reverse speed Reverse "ELLIOT" type Full floating type with hub reduction Leaf springs with shock absorber Equalizer beams & torque rods with leaf springs (with lockout device) 2 circuit air brake, 8 wheels internal expanding type Spring loaded brake							
Transmiss Number o Axles Suspensio	sion f spe	Front Rear Front Rear ice ing	Single dry plate, hydraulic control with air booster Manual transmission type 9 forward & 1 reverse speed Reverse "ELLIOT" type Full floating type with hub reduction Leaf springs with shock absorber Equalizer beams & torque rods with leaf springs (with lockout device) 2 circuit air brake, 8 wheels internal expanding type Spring loaded brake Exhaust brake							
Transmiss Number of Axles Suspension	sion f spe on Serv Park	Front Rear Front Rear ice ing iary Type	Single dry plate, hydraulic control with air booster Manual transmission type 9 forward & 1 reverse speed Reverse "ELLIOT" type Full floating type with hub reduction Leaf springs with shock absorber Equalizer beams & torque rods with leaf springs (with lockout device) 2 circuit air brake, 8 wheels internal expanding type Spring loaded brake Exhaust brake Ball nut type with power booster							
Transmiss Number o Axles Suspensio	sion f spe on Serv Park	Front Rear Front Rear ice ing iary Type Front	Single dry plate, hydraulic control with air booster Manual transmission type 9 forward & 1 reverse speed Reverse "ELLIOT" type Full floating type with hub reduction Leaf springs with shock absorber Equalizer beams & torque rods with leaf springs (with lockout device) 2 circuit air brake, 8 wheels internal expanding type Spring loaded brake Exhaust brake Ball nut type with power booster 315 / 80R 22.5-18PR							
Transmiss Number o Axles Suspensio Brake Steering Tire size	sion f spe on Serv Park Auxil	Front Rear Front Rear ice ing liary Type Front Rear	Single dry plate, hydraulic control with air booster Manual transmission type 9 forward & 1 reverse speed Reverse "ELLIOT" type Full floating type with hub reduction Leaf springs with shock absorber Equalizer beams & torque rods with leaf springs (with lockout device) 2 circuit air brake, 8 wheels internal expanding type Spring loaded brake Exhaust brake Ball nut type with power booster 315 / 80R 22.5-18PR 315 / 80R 22.5-18PR							
Transmiss Number of Axles Suspension Brake Steering Tire size Fuel tank	f spe Serv Park Auxil	Front Rear Front Rear ice ing iary Type Front Rear city	Single dry plate, hydraulic control with air booster Manual transmission type 9 forward & 1 reverse speed Reverse "ELLIOT" type Full floating type with hub reduction Leaf springs with shock absorber Equalizer beams & torque rods with leaf springs (with lockout device) 2 circuit air brake, 8 wheels internal expanding type Spring loaded brake Exhaust brake Ball nut type with power booster 315 / 80R 22.5-18PR 315 / 80R 22.5-18PR 380 L							
Transmiss Number of Axles Suspension Brake Steering Tire size Fuel tank Seating of	f spe Serv Park Auxil	Front Rear Front Rear ice ing iary Type Front Rear city	Single dry plate, hydraulic control with air booster Manual transmission type 9 forward & 1 reverse speed Reverse "ELLIOT" type Full floating type with hub reduction Leaf springs with shock absorber Equalizer beams & torque rods with leaf springs (with lockout device) 2 circuit air brake, 8 wheels internal expanding type Spring loaded brake Exhaust brake Ball nut type with power booster 315 / 80R 22.5-18PR 380 L 2 persons							
Transmiss Number of Axles Suspension Brake Steering Tire size Fuel tank Seating or Battery	sion f spe Serv Park Auxil	Front Rear Front Rear ice ing liary Type Front Rear city	Single dry plate, hydraulic control with air booster Manual transmission type 9 forward & 1 reverse speed Reverse "ELLIOT" type Full floating type with hub reduction Leaf springs with shock absorber Equalizer beams & torque rods with leaf springs (with lockout device) 2 circuit air brake, 8 wheels internal expanding type Spring loaded brake Exhaust brake Ball nut type with power booster 315 / 80R 22.5-18PR 380 L 2 persons (12V-6-QAW-180) × 2							
Transmiss Number of Axles Suspension Brake Steering Tire size Fuel tank Seating of	sion f spe Serv Park Auxil	Front Rear Front Rear ice ing liary Type Front Rear city	Single dry plate, hydraulic control with air booster Manual transmission type 9 forward & 1 reverse speed Reverse "ELLIOT" type Full floating type with hub reduction Leaf springs with shock absorber Equalizer beams & torque rods with leaf springs (with lockout device) 2 circuit air brake, 8 wheels internal expanding type Spring loaded brake Exhaust brake Ball nut type with power booster 315 / 80R 22.5-18PR 380 L 2 persons (12V-6-QAW-180) × 2							
Transmiss Number of Axles Suspension Brake Steering Tire size Fuel tank Seating or Battery	sion f spe Serv Park Auxil	Front Rear Front Rear ice ing liary Type Front Rear city	Single dry plate, hydraulic control with air booster Manual transmission type 9 forward & 1 reverse speed Reverse "ELLIOT" type Full floating type with hub reduction Leaf springs with shock absorber Equalizer beams & torque rods with leaf springs (with lockout device) 2 circuit air brake, 8 wheels internal expanding type Spring loaded brake Exhaust brake Ball nut type with power booster 315 / 80R 22.5-18PR 380 L 2 persons (12V-6-QAW-180) × 2 pment Towing hook (front and rear, eye type), Spare tire & wheel,							
Transmiss Number of Axles Suspension Brake Steering Tire size Fuel tank Seating or Battery	sion f spe Serv Park Auxil	Front Rear Front Rear ice ing liary Type Front Rear city	Single dry plate, hydraulic control with air booster Manual transmission type 9 forward & 1 reverse speed Reverse "ELLIOT" type Full floating type with hub reduction Leaf springs with shock absorber Equalizer beams & torque rods with leaf springs (with lockout device) 2 circuit air brake, 8 wheels internal expanding type Spring loaded brake Exhaust brake Ball nut type with power booster 315 / 80R 22.5-18PR 380 L 2 persons (12V-6-QAW-180) × 2							

- Stow the hooks in place before traveling.
- Before you use this machine, read the precautions in the instruction manual thoroughly to operate it correctly.
- KATO products and specifications are subject to improvements and changes without notice.

11.0 m — 43.0 m Boom

(Unit : Metric ton)

							(Unit :	Metric ton
	Outrigge	ers fully ext	ended with	front jack -	360° full ra	nge		
	Outrigge	ers fully ext	ended with	out front jacl	c – over side	e and over r	ear	
Working	11.0m	11.0m	15.0m	19.0m	23.0m	27.0m	35.0m	43.0m
radius (m)	Boom	Boom	Boom	Boom	Boom	Boom	Boom	Boom
3.0	55.00	40.00	28.00	28.00	24.00			
3.5	43.70	40.00	28.00	28.00	24.00			
4.0	38.50	38.50	28.00	28.00	24.00	20.00		
4.5	34.20	34.20	28.00	28.00	24.00	20.00		
5.0	30.80	30.80	28.00	28.00	24.00	20.00		
5.5	27.80	27.80	27.40	27.20	24.00	20.00	14.00	
6.0	25.40	25.40	25.00	24.80	24.00	20.00	14.00	
6.5	23.20	23.20	22.80	22.60	22.50	20.00	14.00	8.00
7.0	21.40	21.40	21.00	20.80	20.60	19.60	14.00	8.00
7.5	19.70	19.70	19.30	19.10	19.00	18.00	14.00	8.00
8.0	17.90	17.90	17.75	17.50	17.30	17.25	14.00	8.00
8.5	16.20	16.20	15.90	15.70	15.50	15.45	13.80	8.00
9.0	14.60	14.60	14.40	14.15	14.00	13.90	13.60	8.00
10.0			11.90	11.65	11.50	11.45	12.30	8.00
11.0			10.00	9.75	9.60	9.50	10.40	7.80
12.0			8.40	8.15	8.10	8.00	8.85	7.10
13.0			7.15	6.90	6.80	6.75	7.55	6.65
14.0				5.90	5.80	5.75	6.50	6.15
16.0				4.30	4.20	4.10	4.95	5.35
18.0					3.00	2.95	3.75	4.20
20.0				4	2.10	2.05	2.80	3.30
22.0				- 4		1.30	2.10	2.55
24.0						0.75	1.50	2.00
26.0							1.05	1.50
28.0							0.65	1.05
30.0			A 1					0.70
31.0			41					0.50
Standard hook	for 40 ton + sub hook sheave		for 4	0 ton			for 20 ton	
Hook mass	450 150 kg	A	450) kg			320 kg	
Parts of line	14	10	8	8	6	5	4	4
Critical boom angle			4				33°	40°

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				4		(01110)	. Metric tori,		
C	Outriggers int					range			
	Outrig	gers fully ex	tended witho	ut front jack	- over front				
Working	11.0m	15.0m	19.0m	23.0m	27.0m	35.0m	43.0m		
radius (m)	Boom	Boom	Boom	Boom	Boom	Boom	Boom		
3.0	32.00	28.00	28.00	24.00					
3.5	32.00	28.00	28.00	24.00					
4.0	32.00	28.00	28.00	24.00	20.00				
4.5	29.00	28.00	28.00	24.00	20.00				
5.0	22.00	21.90	21.50	21.40	20.00	14.00			
5.5	17.30	17.20	16.90	16.80	16.70	14.00			
6.0	14.10	14.00	13.70	13.60	13.50	14.00	8.00		
6.5	11.80	11.65	11.35	11.30	11.20	12.30	8.00		
7.0	10.00	9.85	9.55	9.50	9.45	10.45	8.00		
7.5	8.55	8.40	8.15	8.10	8.05	9.00	8.00		
8.0	7.40	7.25	7.00	6.95	6.90	7.85	8.00		
9.0	5.70	5.55	5.30	5.25	5.20	6.05	6.50		
10.0		4.25	4.00	3.90	3.85	4.75	5.20		
11.0		3.20	2.95	2.90	2.80	3.70	4.20		
12.0		2.40	2.20	2.10	2.05	2.90	3.40		
13.0		1.80	1.55	1.45	1.40	2.25	2.70		
14.0						1.70	2.15		
15.0							1.70		
Standard			0.4	•		f 00 t			
hook		for 4	U ton			for 20 ton			
Hook mass		450 kg 320 kg							
Parts of line	8	8	8	6	5	4	4		
Critical boom angle	_		35°	48°	58°	64°	68°		

43 m Boom + 9.2 m Jib

43 m Boom + 15 m Jib

(Unit : Metric ton)

											()	nit : Met	iic toii)
		Outr	00	,	,		h front jad front jack			U	ar		
	4	3m Bo	om + 9.2	2m Jib			43m Boom + 15m Jib						
Boom	Offse	et 5°	Offse	t 25°	Offse	t 45°	Boom	Offse	et 5°	Offse	et 25°	Offse	t 45°
angle	Working radius (m)	Load (t)	Working radius (m)	Load (t)	Working radius (m)	Load (t)	angle (°)	Working radius (m)	Load (t)	Working radius (m)	Load (t)	Working radius (m)	Load (t)
81.0	10.00	3.50	12.75	2.30	14.60	1.25	81.0	11.75	2.50	16.20	1.20	19.40	0.70
80.0	11.05	3.50	13.70	2.30	15.45	1.25	80.0	12.95	2.50	17.20	1.20	20.35	0.69
79.0	12.05	3.48	14.65	2.30	16.30	1.24	79.0	14.10	2.49	18.15	1.19	21.25	0.69
78.0	13.00	3.40	15.60	2.25	17.20	1.23	78.0	15.10	2.45	19.10	1.17	22.15	0.68
77.0	13.90	3.23	16.50	2.19	18.05	1.21	77.0	16.20	2.30	20.10	1.15	23.05	0.67
76.0	14.85	3.04	17.40	2.12	18.90	1.19	76.0	17.25	2.17	21.10	1.12	24.00	0.67
75.0	15.75	2.90	18.25	2.06	19.75	1.17	75.0	18.25	2.06	22.15	1.10	24.85	0.65
74.0	16.70	2.75	19.15	1.99	20.55	1.16	74.0	19.20	1.95	23.15	1.07	25.70	0.64
72.0	18.50	2.49	20.90	1.85	22.25	1.12	72.0	21.10	1.76	25.05	1.02	27.45	0.62
70.0	20.15	2.28	22.60	1.73	23.90	1.09	70.0	23.00	1.59	26.80	0.97	29.10	0.61
68.0	21.85	2.09	24.20	1.62	25.40	1.06	68.0	24.90	1.47	28.60	0.93	30.65	0.59
66.0	23.55	1.91	25.80	1.53	26.85	1.04	66.0	26.75	1.35	30.30	0.90	32.25	0.58
64.0	25.05	1.68	27.40	1.43	28.35	1.02	64.0	28.60	1.24	32.00	0.87	33.80	0.57
62.0	26.55	1.41	28.85	1.24	29.85	1.00	62.0	30.40	1.10	33.70	0.84	35.30	0.56
60.0	28.00	1.13	30.20	1.00	31.15	0.85	60.0	32.00	0.87	35.25	0.72	36.75	0.55
59.0	28.75	1.00	30.85	0.89	31.80	0.77	59.0	32.80	0.76	36.00	0.66	37.45	0.55
58.0	29.45	0.86	31.50	0.77	32.45	0.69	58.0	33.60	0.64	36.60	0.58	38.20	0.54
57.0	30.20	0.73	32.20	0.66	33.05	0.61							
56.0	30.85	0.63	32.85	0.56	33.70	0.53							
Standard hook	for 4 ton						Standard for 4 ton						
Hook mass	120 kg						Hook mass	120 KG					
Parts of line	1						Parts of line			1			
Critical boom angle			5:	5°			Critical boom angle			5.	7°		

421-75105000

43 m Boom + 9.2 m Jib

43 m Boom + 15 m Jib

(Unit : Metric ton)

					-								
	Outriggers intermediately extended without front jack - 360° full range Outriggers fully extended without front jack - over front												
	4	3m Bo	om + 9.2	2m Jib				4	3m Bo	om + 15	m Jib		
Boom	Offse	et 5°	Offse	t 25°	Offse	t 45°	Boom	Offse	et 5°	Offse	t 25°	Offset 45°	
angle (°)	Working radius (m)	Load (t)	Working radius (m)	Load (t)	Working radius (m)	Load (t)	angle (°)	Working radius (m)	Load (t)	Working radius (m)	Load (t)	Working radius (m)	Load (t)
81.0	10.00	3.50	12.75	2.30	14.60	1.25	81.0	11.75	2.50	16.20	1.20	19.40	0.70
80.0	11.05	3.50	13.70	2.30	15.45	1.25	80.0	12.95	2.50	17.20	1.20	20.35	0.69
79.0	12.05	3.42	14.65	2.30	16.30	1.24	79.0	14.10	2.49	18.15	1.19	21.25	0.69
78.0	12.90	3.05	15.60	2.25	17.20	1.23	78.0	15.10	2.45	19.10	1.17	22.15	0.68
77.0	13.65	2.67	16.45	2.06	18.05	1.21	77.0	16.05	2.06	20.10	1.15	23.05	0.67
76.0	14.50	2.27	17.20	1.76	18.90	1.19							
Standard hook			for 4	ton			Standard hook	for 4 ton					
Hook mass	Hook 120 kg							k s 120 kg					
Parts 1										,	1		
Critical boom angle			73	5°			Critical boom angle			70	6°		

421-75106000

Outriggers fully retracted (blocked	d on vertical cyls.) - 360° full range
Working radius (m)	11.0 m Boom
3.0	8.00
3.5	6.40
4.0	5.10
4.5	4.20
5.0	3.40
5.5	2.80
6.0	2.30
6.5	1.90
7.0	1.60
7.5	1.25
8.0	1.00
Standard hook	for 40 ton
Hook mass	450 kg
Parts of line	10

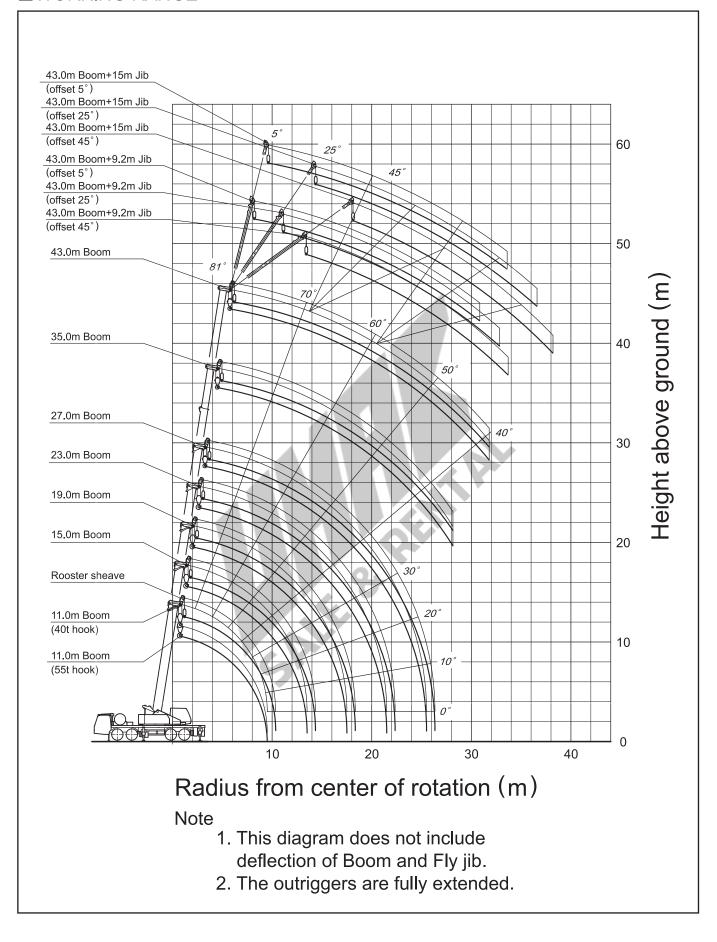


■ Notes for the rated lifting capacity chart

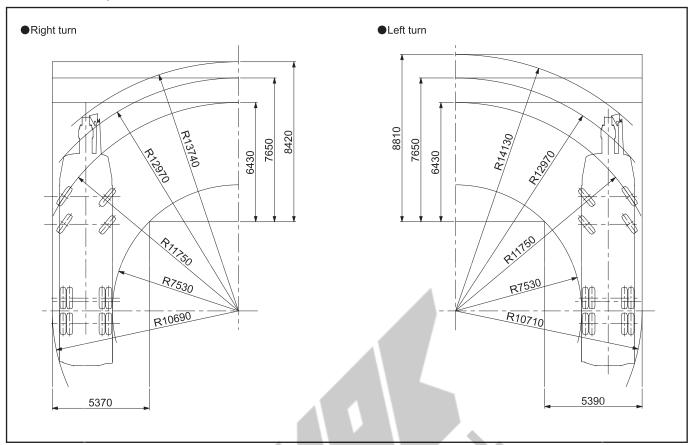
Precautions

- 1. The rated lifting capacities are the maximum load guaranteed on a firm level ground and include the mass 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.
- 2. The working radii as given in the table are the 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 (43 m). 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 4000 kg. At all times the mass 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, 4000 kg plus the mass 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. 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.
- 7. The standard number of parts of line is shown in the rated lifting capacity table.

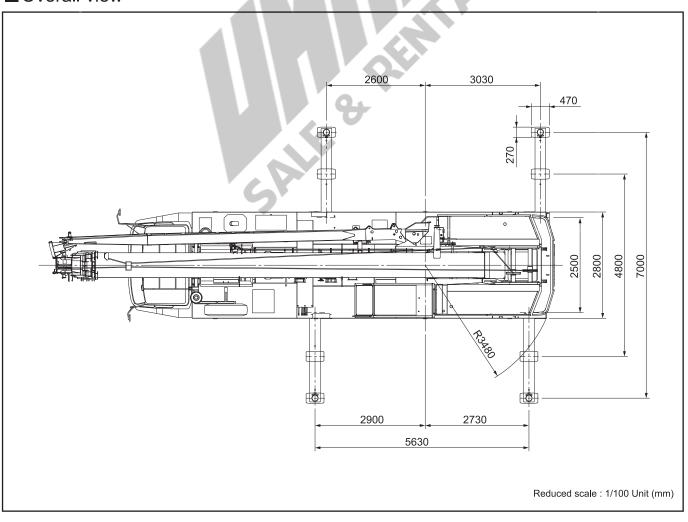
 If you work with a non-standard number of parts of line, take 39.2kN (4tf) as the maximum load on any part of the wire rope.
- 8. Over front lifting performance without front jack is inferior to over side and over rear lifting performance. Great care should be taken when transferring from over side to over front since there is a danger of overloading.
- Crane operation is permissible up to a wind speed of 10m/s.
 Even in relatively light wind conditions, extra care should be taken when handling loads presenting large wind catching areas.
- 10. 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 guaranteed.



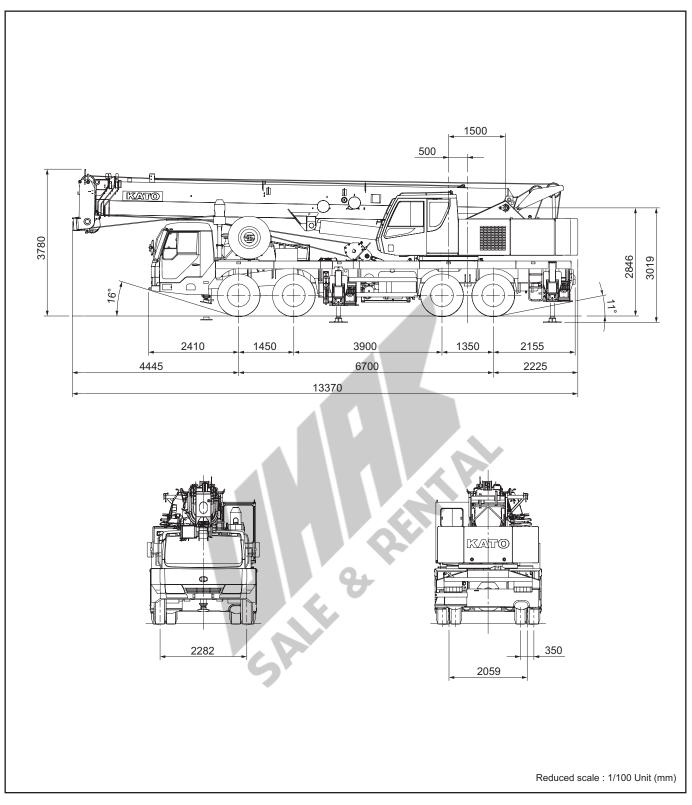
■ Minimum path width



■Overall view



■Overall view



* KATO products and specifications are subject to improvements and changes without notice.

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NOTE : Illustrations may include optional equipment. KATO products and specifications are subject to improvements and changes without notice.

Before you use this crane, study the instruction manual thoroughly and follow the instructions it contains. Some differences may arise between the machine delivered and the photographs in the catalogue. The actual colours of the body and interior may appear slightly different from those shown in this catalogue due to the limitations of photography and printing.





QUALITY & EXPERIENCE

SINCE 1895

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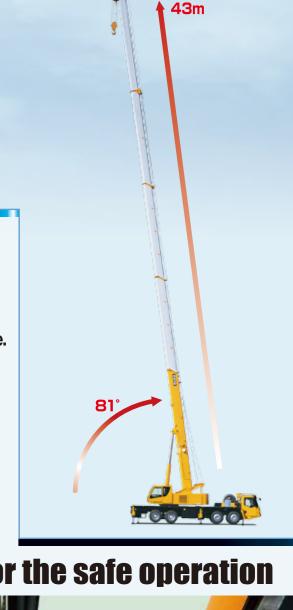
KATO FULLY HYDRAULIC TRUCK CRANE Maximum rated lifting capacity: 55t × 3.0m Maximum boom length: 43.0m Engine output: 258kW/2,100min⁻¹(ISO Net) NK-550VR Progress to the Next Stage KATO WORKS CO.,LTD.



Solid 43m SUPERBOOM combined with 15m fly jib offers you steady operation and wider working ranges in narrow spaces.



7.0 m Fully Extended



15m

Wide & roomy operator's cab for the safe operation

New ACS Moment Limiter Compuload (MS-200) with working range limiting function.



- Easy touch panel operation
- High quality color display
- Working range limiting function







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Before you use this crane, study the instruction manual thoroughly and follow the instructions it contains. Some differences may arise between the machine delivered and the photographs in the catalogue. The actual colours of the body and interior may appear slightly different from those shown in this catalogue due to the limitations of photography and printing.





QUALITY & EXPERIENCE

SINCE 1895

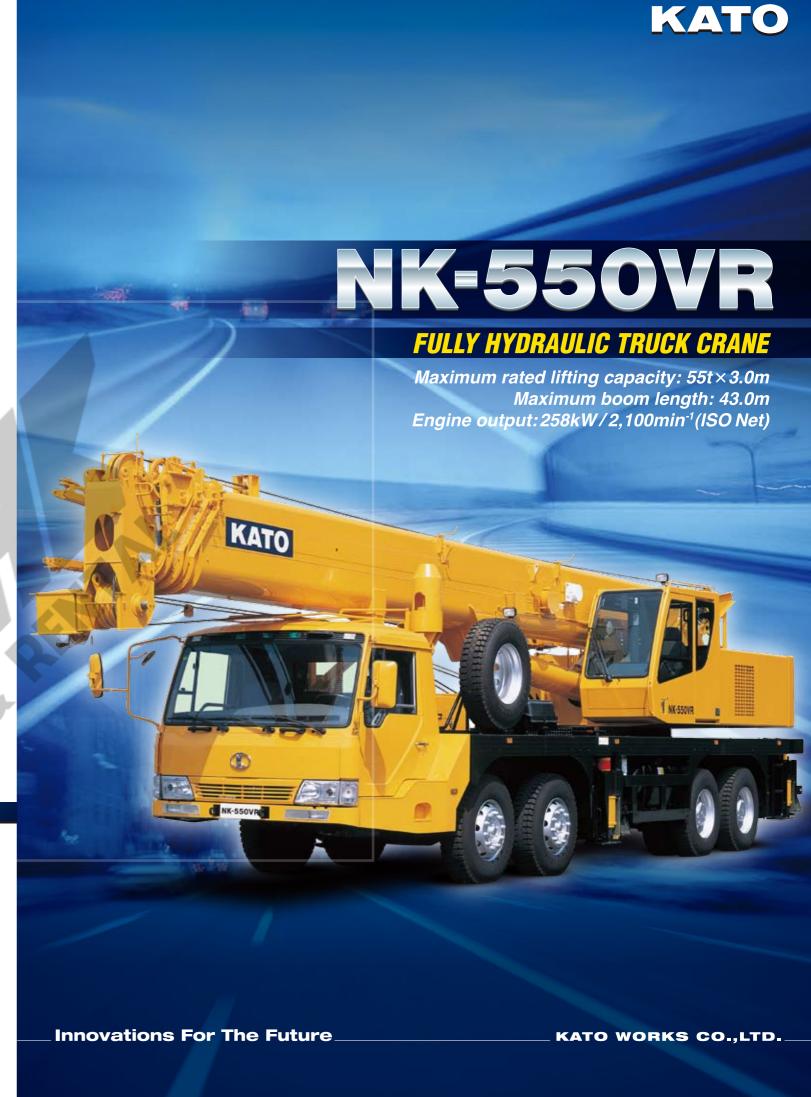
KATO WORKS CO.,LTD.

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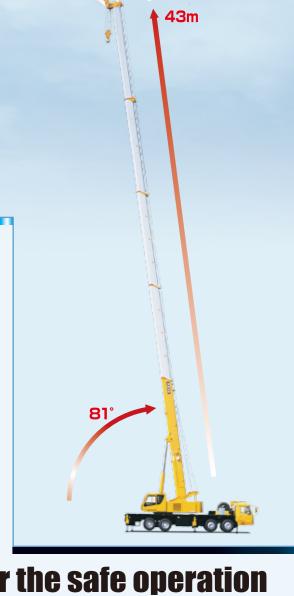


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Solid 43m SUPERBOOM combined with 15m fly jib offers you steady operation and wider working ranges in narrow spaces.





15m

Wide & roomy operator's cab for the safe operation

New ACS Moment Limiter Compuload (MS-200) with outrigger width detector and working range limiting function.



- Easy touch panel operation
- High quality color display
- Working range limiting function







Address inquiries to :

http://www.kato-works.co.jp

NOTE : Illustrations may include optional equipment. KATO products and specifications are subject to improvements and changes without notice.

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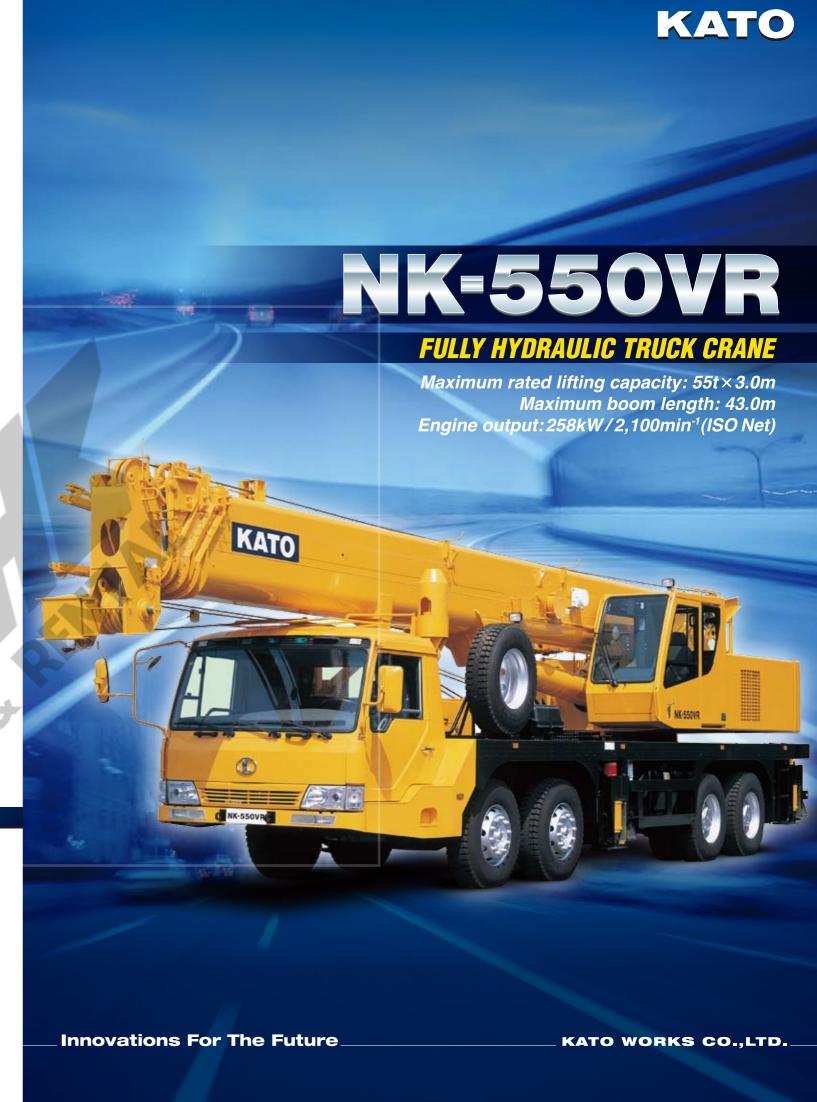
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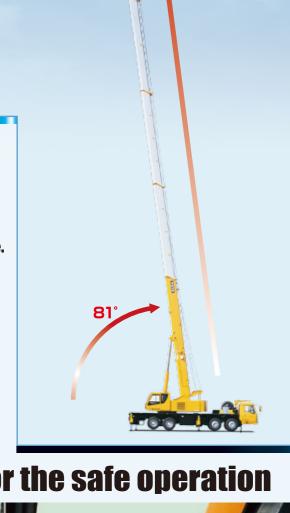




Solid 43m SUPERBOOM combined with 15m fly jib offers you steady operation and wider working ranges in narrow spaces.



7.0 m Fully Extended



15m

43m

Wide & roomy operator's cab for the safe operation

New ACS Moment Limiter Compuload (MS-200) with outrigger width detector and working range limiting function.



- Easy touch panel operation
- High quality color display
- Working range limiting function





FULLY HYDRAULIC TRUCK CRANE

[SPECIFICATION]

				LOI	LOI				
■ CRANE									
Description	-	Truck crane wit	h maximum lifting cap	acity 55 ton					
Model		NK-550VR	ir maximam inting cap	doity oo ton					
	tion								
● Specifica	шоп								
		11.0 m Boom	55,000 kg × 3.0 m	(Parts of line :					
		11.0 m Boom 40,000 kg × 3.5 m (Parts of line : 10)							
			5.0 m Boom 28,000 kg × 5.0 m (Parts of line : 8)						
		19.0 m Boom	, , ,						
Maximum rate	d		23.0 m Boom 24,000 kg × 6.0 m (Parts of line : 6)						
lifting capacity		27.0 m Boom	20,000 kg × 6.5 m	(Parts of line :					
		35.0 m Boom	14,000 kg × 8.0 m	(Parts of line :					
		43.0 m Boom	8,000 kg × 10.0 m	-					
		9.2 m Jib	3,500 kg × 80°	(Parts of line :	,				
		15.0 m Jib	2,500 kg × 80°	(Parts of line :					
		Rooster	4,000 kg	(Parts of line :	1)				
Boom length		11.0 m — 43.0	m						
Fly jib length		9.2 m, 15.0 m							
Maximum liftin	g	43.0 m (Boom)							
height	Main	58.0 m (Jib)							
Hoisting line	winch	114 m/min. (at 3							
speed	winch	105 m/min. (at 2							
Hoisting hook	winch		: 8.1 m/min. (at 3rd la						
speed	winch	(part of line; 1): 105 m/min. (at 2nd layer)							
Boom derricking		-2.5° — 81°							
Boom derricking		70 sec. (-2.5° — 81°)							
Boom extending		170 sec. (11.0 m — 43.0 m)							
Slewing speed		1.85 min ⁻¹							
Tail slewing ra	dius	3,480 mm							
● Equipme	nt and								
Boom type		Box-shaped, 5-section hydraulically telescopic type (boom sections 2/3 and 4/5 simultaneously operated)							
Jib type		2 sections (2nd section of draw-out type, 3-step inclination type (offset angles 5°, 25° and 45°))							
Boom extension retraction equi	pment	Three hydraulic cylinders and wire ropes used together One hydraulic cylinder of direct acting type with							
Boom derrickir lowering equip		One hydraulic cylinder of direct acting type with pressure-compensated flow control valve							
Winch system Main & Auxiliary									
Slewing equip	ment Main	Ball bearing typ			—				
Wire rope for hoisting	winch Auxiliary		nm × Length : 235 m						
	winch	Diameter : 18 mm × Length : 125 m							
●Hydraulio	equi								
Oil pump	h r	4 section gear t	ype						
Hydraulic motor	Hoisting motor Slewing	Axial plunger type							
	motor	Axiai piurigei type							
Control valve		3 position 4 way double acting with integral check and relief valves							
Cylinder		Double acting type							
Oil reservoir capacity		695 L							
●Safety de	evices	3							
		Winch hoisting limite Automatic winch bral	ne stopper), Boom falling prev r, Winch drum lock device, Wi ke, Irregular winding prevention e, Joystick control safety stop	inch drum turning inc on device, Hydraulic	safety valve,				
Standard	l equir	oment		-					
	1-1	Front jack, Fly jib, Ro Irregular winding pre Hooks (40 ton, 20 to	poster sheave, Independent to vention device, Winch automa n, 4 ton), Hydraulic oil cooler, ment limiter with voice alarm,	itic brake,Sub hook s Full size fender, Larg	heave for 55 ge size steps,				

3 working lights, Moment limiter with voice alarm, Winch drum turning indicator, Sun visor, Cigar lighter, Ashtray, Cab floor mat, Tool kit

Winch over-unwinding device, Winch drum mirror (hoist mirror), Yellow rev. light, Cab heater, Cab cooler, Fan, Radio AM FM, Fire extinguisher, Roof visor

Optional equipment

	CAR	RIE	R							
				FAM 045400 107						
_	ker and			FAW CA5420JQZ						
_	Spec	ifica	tion							
Max	imum tra	veling	speed	71 km/h						
Gra	adeabil	ity		63% (theoretical value)						
Mini	imum tu	rning	radius	11.75 m						
	Gene	eral o	dimen	sions & G.V.W.						
Ove	erall le	ngth		approx.13,370 mm						
Ove	erall wi	dth		approx. 2,800 mm						
Ove	erall he	eight		approx. 3,780 mm						
Wh	eel ba	se		1,450 mm + 3,900 mm + 1,350 mm = 6,700 mm						
T			Front	2,282 mm						
ire	ads		Rear	2,059 mm						
			Туре	Hydraulic H-beam type (with float and vertical cylinder in single unit)						
				7,000 mm (Fully extended)						
Out	trigger	3	Extension	4,800 mm (Intermediately extended)						
		4	Width	2,500 mm (Fully retracted)						
	-4		Gross weight	approx. 41,600 kg						
- 4	ss mad	chine	Front	approx. 15,650 kg						
wei	ght		Rear weight	approx. 25,950 kg						
	Engir	ne	weignt	3						
Mod	_			CA6DL2-35 (EURO- II) (turbo charged)						
Тур	_			6-inline, 4 cycle, direct injection water cooled, diesel						
	Piston displacement		ment	8.6 L						
_	Max. power			258 kW/ 2,100 min ⁻¹ (350 PS/ 2,100 min ⁻¹)						
	x. torq			1,475 N·m/ 1,450 min ⁻¹ (150 kg·m/ 1,450 min ⁻¹)						
	_	_	nt and	structure						
-	ve syst	_		8×4						
Clu	_			Single dry plate, hydraulic control with air booster						
_	nsmiss	ion		Manual transmission type						
_	mber o	-	eds	9 forward & 1 reverse speed						
1101	TIDOT O	OPC	Front	Reverse "ELLIOT" type						
Axle	es		Rear	Full floating type with hub reduction						
_			Front	Leaf springs with shock absorber						
Sus	spension	on	Rear	Equalizer beams & torque rods with leaf springs (with lockout device)						
_		Serv		2 circuit air brake, 8 wheels internal expanding type						
Bra	ıke	Park		Spring loaded brake						
Dia	iii			Exhaust brake						
Ste	Auxiliary Steering Type			Ball nut type with power booster						
010				315 / 80R 22.5						
Tire	Tire size		-							
Fue				315 / 80R 22.5						
	Fuel tank capacity			380 L 2 persons						
	Seating capacity Battery		ıy	(12V-6-QAW-180) × 2						
_		dard	earin	pment						
	Jiani	Jaiu	equi							
				Towing hook (front and rear, eye type), Spare tire & wheel,						
				Air dryer, Radio AM FM with cassette deck, Cigar lighter,						

Towing hook (front and rear, eye type), Spare tire & wheel, Air dryer, Radio AM FM with cassette deck, Cigar lighter, Ashtray, Cab heater, Cab cooler

- Stow the hooks in place before traveling.
- Before you use this machine, read the precautions in the instruction manual thoroughly to operate it correctly.
- KATO products and specifications are subject to improvements and changes without notice.

11.0 m — 43.0 m Boom

							(Unit :	Metric ton)
	Outriggers fully extended with front jack - 360° full range							
	Outriggers fully extended without front jack – over side and over rear							
Working	11.0m	11.0m	15.0m	19.0m	23.0m	27.0m	35.0m	43.0m
radius (m)	Boom	Boom	Boom	Boom	Boom	Boom	Boom	Boom
3.0	55.00	40.00	28.00	28.00	24.00			
3.5	43.70	40.00	28.00	28.00	24.00			
4.0	38.50	38.50	28.00	28.00	24.00	20.00		
4.5	34.20	34.20	28.00	28.00	24.00	20.00		
5.0	30.80	30.80	28.00	28.00	24.00	20.00		
5.5	27.80	27.80	27.40	27.20	24.00	20.00	14.00	
6.0	25.40	25.40	25.00	24.80	24.00	20.00	14.00	
6.5	23.20	23.20	22.80	22.60	22.50	20.00	14.00	8.00
7.0	21.40	21.40	21.00	20.80	20.60	19.60	14.00	8.00
7.5	19.70	19.70	19.30	19.10	19.00	18.00	14.00	8.00
8.0	17.90	17.90	17.75	17.50	17.30	17.25	14.00	8.00
8.5	16.20	16.20	15.90	15.70	15.50	15.45	13.80	8.00
9.0	14.60	14.60	14.40	14.15	14.00	13.90	13.60	8.00
10.0			11.90	11.65	11.50	11.45	12.30	8.00
11.0			10.00	9.75	9.60	9.50	10.40	7.80
12.0			8.40	8.15	8.10	8.00	8.85	7.10
13.0			7.15	6.90	6.80	6.75	7.55	6.65
14.0				5.90	5.80	5.75	6.50	6.15
16.0				4.30	4.20	4.10	4.95	5.35
18.0					3.00	2.95	3.75	4.20
20.0					2.10	2.05	2.80	3.30
22.0						1.30	2.10	2.55
24.0						0.75	1.50	2.00
26.0							1.05	1.50
28.0				4			0.65	1.05
30.0								0.70
31.0								0.50
Standard	for 40 ton							
	+ sub hook sheave		for 4	0 ton			for 20 ton	
	450		41					
Hook mass	11		450) kg			320 kg	
	150 kg						_	
Parts of line	14	10	8	8	6	5	4	4
Critical boom angle				17	Æ!		33°	40°

421-75103000

(Unit : Metric ton)

						(Offic.	weine ion)		
	Outriggers intermediately extended without front jack - 360° full range								
	Outriggers fully extended without front jack - over front								
Working	11.0m	15.0m	19.0m	23.0m	27.0m	35.0m	43.0m		
radius (m)	Boom	Boom	Boom	Boom	Boom	Boom	Boom		
3.0	32.00	28.00	28.00	24.00					
3.5	32.00	28.00	28.00	24.00					
4.0	32.00	28.00	28.00	24.00	20.00				
4.5	29.00	28.00	28.00	24.00	20.00				
5.0	22.00	21.90	21.50	21.40	20.00	14.00			
5.5	17.30	17.20	16.90	16.80	16.70	14.00			
6.0	14.10	14.00	13.70	13.60	13.50	14.00	8.00		
6.5	11.80	11.65	11.35	11.30	11.20	12.30	8.00		
7.0	10.00	9.85	9.55	9.50	9.45	10.45	8.00		
7.5	8.55	8.40	8.15	8.10	8.05	9.00	8.00		
8.0	7.40	7.25	7.00	6.95	6.90	7.85	8.00		
9.0	5.70	5.55	5.30	5.25	5.20	6.05	6.50		
10.0		4.25	4.00	3.90	3.85	4.75	5.20		
11.0		3.20	2.95	2.90	2.80	3.70	4.20		
12.0		2.40	2.20	2.10	2.05	2.90	3.40		
13.0		1.80	1.55	1.45	1.40	2.25	2.70		
14.0						1.70	2.15		
15.0							1.70		
Standard		, ,	<u> </u>						
hook		for 40 ton for 20 ton							
Hook mass		450 kg 320 kg							
Parts of line	8	8	8	6	5	4	4		
Critical boom angle	_	_	35°	48°	58°	64°	68°		

43 m Boom + 9.2 m Jib

43 m Boom + 15 m Jib

(Unit : Metric ton)

	Outriggers fully extended with front jack - 360° full range												
		Outri			•		h front jad ront jack			•	ar		
	4		om + 9.2				43m Boom + 15m Jib						
Boom	Offse	et 5°	Offse	t 25°	Offse	t 45°	Boom	Offse	et 5°	Offse	t 25°	Offse	t 45°
angle	Working radius (m)	Load (t)	Working radius (m)	Load (t)	Working radius (m)	Load (t)	angle	Working radius (m)	Load (t)	Working radius (m)	Load (t)	Working radius (m)	Load (t)
81.0	10.00	3.50	12.75	2.30	14.60	1.25	81.0	11.75	2.50	16.20	1.20	19.40	0.70
80.0	11.05	3.50	13.70	2.30	15.45	1.25	80.0	12.95	2.50	17.20	1.20	20.35	0.69
79.0	12.05	3.48	14.65	2.30	16.30	1.24	79.0	14.10	2.49	18.15	1.19	21.25	0.69
78.0	13.00	3.40	15.60	2.25	17.20	1.23	78.0	15.10	2.45	19.10	1.17	22.15	0.68
77.0	13.90	3.23	16.50	2.19	18.05	1.21	77.0	16.20	2.30	20.10	1.15	23.05	0.67
76.0	14.85	3.04	17.40	2.12	18.90	1.19	76.0	17.25	2.17	21.10	1.12	24.00	0.67
75.0	15.75	2.90	18.25	2.06	19.75	1.17	75.0	18.25	2.06	22.15	1.10	24.85	0.65
74.0	16.70	2.75	19.15	1.99	20.55	1.16	74.0	19.20	1.95	23.15	1.07	25.70	0.64
72.0	18.50	2.49	20.90	1.85	22.25	1.12	72.0	21.10	1.76	25.05	1.02	27.45	0.62
70.0	20.15	2.28	22.60	1.73	23.90	1.09	70.0	23.00	1.59	26.80	0.97	29.10	0.61
68.0	21.85	2.09	24.20	1.62	25.40	1.06	68.0	24.90	1.47	28.60	0.93	30.65	0.59
66.0	23.55	1.91	25.80	1.53	26.85	1.04	66.0	26.75	1.35	30.30	0.90	32.25	0.58
64.0	25.05	1.68	27.40	1.43	28.35	1.02	64.0	28.60	1.24	32.00	0.87	33.80	0.57
62.0	26.55	1.41	28.85	1.24	29.85	1.00	62.0	30.40	1.10	33.70	0.84	35.30	0.56
60.0	28.00	1.13	30.20	1.00	31.15	0.85	60.0	32.00	0.87	35.25	0.72	36.75	0.55
59.0	28.75	1.00	30.85	0.89	31.80	0.77	59.0	32.80	0.76	36.00	0.66	37.45	0.55
58.0	29.45	0.86	31.50	0.77	32.45	0.69	58.0	33.60	0.64	36.60	0.58	38.20	0.54
57.0	30.20	0.73	32.20	0.66	33.05	0.61							
56.0	30.85	0.63	32.85	0.56	33.70	0.53							
Standard hook	101.4.1011						Standard for 4 ton						
Hook mass	120 kg					Hook mass	120 Kg						
Parts of line						Parts of line			1				
Critical boom angle		1	5:	5°	1		Critical boom angle			5.	7°		

421-75105000

43 m Boom + 9.2 m Jib

43 m Boom + 15 m Jib

(Unit : Metric ton)

											(-		,
	Outriggers intermediately extended without front jack - 360° full range Outriggers fully extended without front jack - over front												
	4	3m Boo	om + 9.2	2m Jib			43m Boom + 15m Jib						
Boom	Offse	et 5°	Offse	t 25°	Offse	t 45°	Boom	Offse	et 5°	Offse	t 25°	Offset 45°	
angle (°)	Working radius (m)	Load (t)	Working radius (m)	Load (t)	Working radius (m)	Load (t)	angle (°)	Working radius (m)	Load (t)	Working radius (m)	Load (t)	Working radius (m)	Load (t)
81.0	10.00	3.50	12.75	2.30	14.60	1.25	81.0	11.75	2.50	16.20	1.20	19.40	0.70
80.0	11.05	3.50	13.70	2.30	15.45	1.25	80.0	12.95	2.50	17.20	1.20	20.35	0.69
79.0	12.05	3.42	14.65	2.30	16.30	1.24	79.0	14.10	2.49	18.15	1.19	21.25	0.69
78.0	12.90	3.05	15.60	2.25	17.20	1.23	78.0	15.10	2.45	19.10	1.17	22.15	0.68
77.0	13.65	2.67	16.45	2.06	18.05	1.21	77.0	16.05	2.06	20.10	1.15	23.05	0.67
76.0	14.50	2.27	17.20	1.76	18.90	1.19							
Standard hook	IOF 4 ION						Standard hook			for 4	l ton		
Hook mass 120 kg						Hook mass	120 kg						
Parts 1						Parts of line	1						
Critical boom angle			75	5°			Critical boom angle			70	5°		

421-75106000

(Unit: Metric ton)

Outriggers fully retracted (blocked on vertical cyls.) - 360° full range							
Working radius (m)	11.0 m Boom						
3.0	8.00						
3.5	6.40						
4.0	5.10						
4.5	4.20						
5.0	3.40						
5.5	2.80						
6.0	2.30						
6.5	1.90						
7.0	1.60						
7.5	1.25						
8.0	1.00						
Standard hook	for 40 ton						
Hook mass	450 kg						
Parts of line	10						



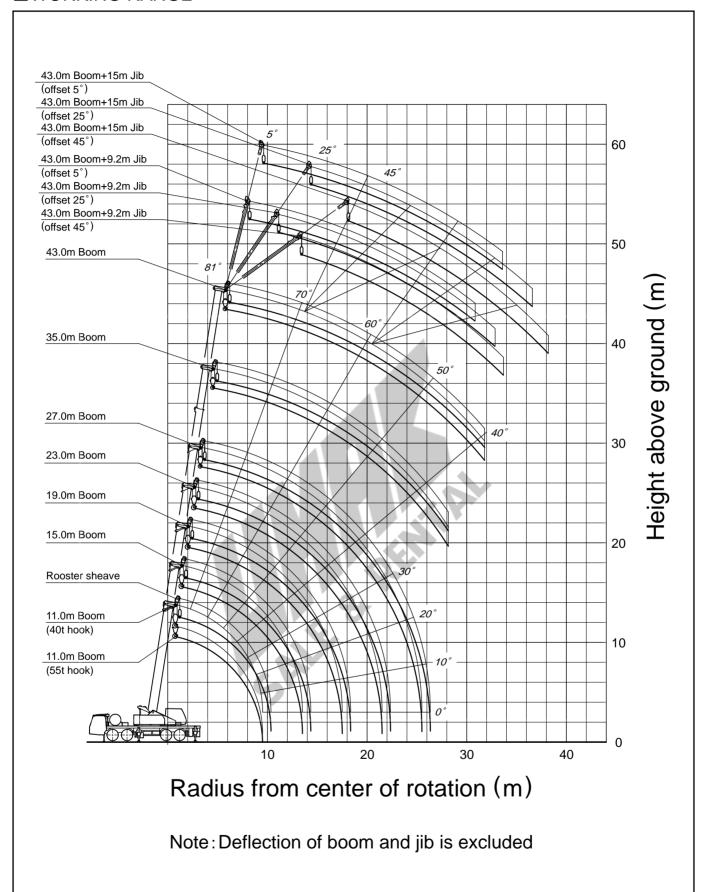
■ Notes for the rated lifting capacity chart

Precautions

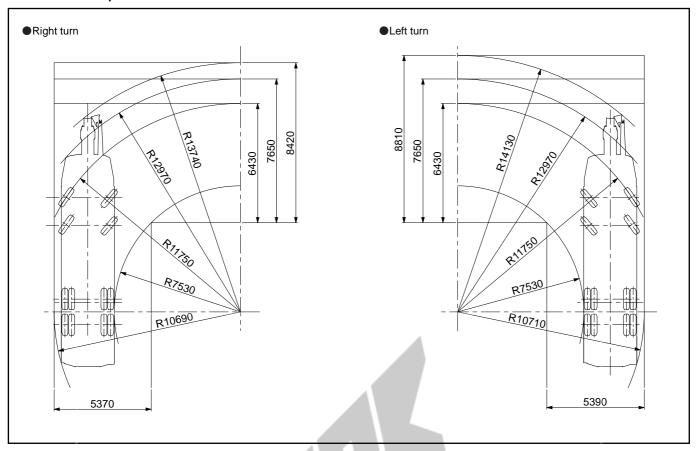
- 1. The rated lifting capacities are the maximum load guaranteed on a firm level ground and include the mass of hook block and other lifting equipment. The capacities enclosed with bold lines are based on the structural strength of machine and the others are based on the stability of machine.
- 2. The working radii as given in the table are the 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 (43 m). 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 4000 kg. At all times the mass 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, 4000 kg plus the mass 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. 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.
- 7. The standard number of parts of line is shown in the rated lifting capacity table.

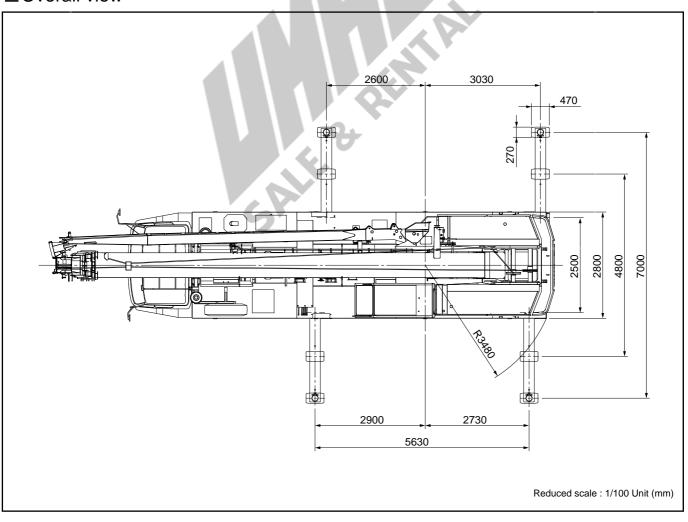
 If you work with a non-standard number of parts of line, take 39.2kN (4tf) as the maximum load on any part of the wire rope.
- 8. Over front lifting performance without front jack is inferior to over side and over rear lifting performance. Great care should be taken when transferring from over side to over front since there is a danger of overloading.
- Crane operation is permissible up to a wind speed of 10m/s.
 Even in relatively light wind conditions, extra care should be taken when handling loads presenting large wind catching areas.
- 10. 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 guaranteed.



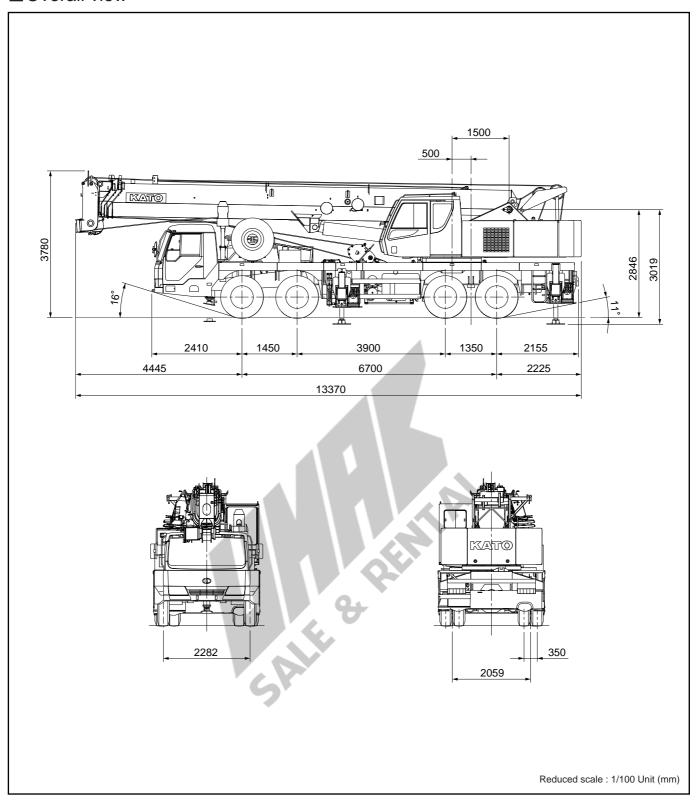
■Minimum path width



■Overall view



■Overall view



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