KATO

FULLY HYDRAULIC TRUCK CRANE MODEL 75



KATO WORKS CO.,LTD.

HERE'S BIG OUTPUT FROM JUMBO LIFTCRANE

KATO NK-75

FULLY-HYDRAULIC TRUCK CRANE



Time-proven exclusive features of the broad KATO line of materials handling equipments and construction machines have been combined in this all-new, world's biggest **KATO** Hydraulic Truck Crane Model **NK-75** It is designed to give you unsurpassed performance... performance that will give you higher production and lower maintenance costs for a far greater profit on any type of extra-heavy lifts.

FEATURES THAT MAKE THE KATO NK-75 A BETTER INVESTMENT FOR EVER OWNER

EXTRA-HEAVY LIFTS AT ALL RADII GREATER STABILITY!





UPPER MACHINERY

DIESEL ENGINES

200 and 330 net horsepower diesel engines for crane and carrier give smooth power flow with less fuel consumption.

• POWER LOAD LOWERING DEVICE

Power load lowering device provides high and low speeds to permit smooth, safe lowering of load for precise pay-out control.

. BOOM AND JIS EXTENSION

Boom made in four sections and jib extension are all-welded, low-stress steel frames of full box construction. They are hydraulically extended and retracted by means of three control levers ... independently of other functions.

OUTRIGGERS

Four outriggers, two on each side of carrier chassis, provide added stability for swinging capacity loads on rough ground.

· FOLDING JIB EXTENSION

Jib extension is folded underneath the boom for moves between jobs. It can readily be set to working position by means of a pin.

· OPERATOR'S CAB.

Cut-back front of the cab permits the operator to see every inch of the boom every minute. All windows use shatter-proof safety glass. All controls are conveniently grouped within easy reach of the operator. Contour seat is comfortably padded for maximum body support all day long.

BOOM OVERHOIST ALARM DEVICE

Boom overhoist alarm device prevents the unit from tipping, as is often possible when the boom is overhoisted.

MAX. ALLOWABLE LOADS

MAX. ALLOWABLE LOADS FOR JIB EXTENSION

UNIT: ton

| Working radius | 13-meter boom | 20-meter boom | 27-meter boom | 33-meter boom | 43-meter boom | |
|----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--|
| (m) | Over side and over rear | |
| 3.5 | 75.0 | 42.0 | | | | |
| 4.0 | 64.0 | 42.0 | | | | |
| 4.5 | 56.0 | 38,3 | 30.0 | | | |
| 5,0 | 48.0 | 35,0 | 30.0 | | | |
| 5.5 | 42.0 | 32.4 | 27.3 | 20.0 | | |
| 6.0 | 38.0 | 29.7 | 25.3 | 20.0 | | |
| 6,5 | 34.8 | 27.4 | 23.5 | 19.0 | | |
| 7.0 | 32.0 | 25.3 | 22.0 | 17.7 | | |
| 8.0 | 27.0 | 22.0 | 19,2 | 16.0 | 11.0 | |
| 9.0 | 23.4 | 19.0 | 16.8 | 14.4 | 11,0 | |
| 10.0 | 20.0 | 16.8 | 15.0 | 13.0 | 11.0 | |
| 10.5 | 18.2 | 15.7 | 14.0 | 12.2 | 10.5 | |
| 11.0 | | 14.6 | 13.2 | 11.7 | 10.0 | |
| 12.0 | | 12.9 | 11,8 | 10.5 | 9,3 | |
| 14.0 | | 10.0 | 9.3 | 8.5 | 7.9 | |
| 16.0 | | 7.5 | 7.2 | 6.7 | 6.6 | |
| 17.0 | | 6.5 | 6.3 | 6.0 | 6.0 | |
| 18.0 | | | 5.5 | 5.3 | 5.5 | |
| 20.0 | | | 4.2 | 4.0 | 4.6 | |
| 22.0 | | | 3.0 | 2.9 | 3.7 | |
| 23.0 | | | 2.5 | 2.4 | 3.3 | |
| 24.0 | THE PARTY | | | 2.0 | 2.9 | |
| 26.0 | | | | 1.3 | 2.2 | |
| 27.0 | | | | 0.9 | 1.9 | |
| 28.0 | | | | | 1,6 | |
| 30.0 | - | | | | 1.1 | |
| 31.0 | | | | | 0.8 | |

| Main boom | 10.2 meter jib offset angle: 5 | 15-meter jib offset angle: 5° | |
|-----------------|---|---|--|
| angle (deg.) | With outriggers Over side and over rear | With outriggers Over side and over rear | |
| 82 | 6.0 | 3.0 | |
| 80 | 5.7 | 3.0 | |
| 78 | 4.9 | 2,6 | |
| 76 | 4,3 | 2,3 | |
| 74 | 3,7 | 2.0 | |
| 72 | 3.2 | 1.7 | |
| 70 | 2.8 | 1,5 | |
| 67 | 2.2 | 1.2 | |
| 64 | 1.6 | 1.0 | |
| 60 | 1.0 | 0,7 | |
| 56 | 0.7 | 0,5 | |

NOTES

1. Max. allowable loads shown above are the guaranteed values with the machine on firm level ground and include the weight of hook. They are based on the use of outriggers fully extended, without using the jib extension. The working radii are the actual values including the deflection of the boom and, hence, it is dangerous to exceed these radii.

Weights of Hooks

| Hook | 75-ton | 45-ton | 26-ton | 13-ton | 6-ton |
|------------|--------|--------|--------|--------|-------|
| | hook | hook | hook | hook | hook |
| Weight(kg) | 700 | 400 | 300 | 230 | 150 |

- When extending or retracting, or raising or lowering the boom, or when swinging the machine, be sure to use the outriggers.
- When using the main boom, do not exceed 31 meter radius.
- 4. When using the 2nd and 3rd booms, manipulate the levers in such a manner as to extend or retract them equally. Do not work with any one of these booms extended and the other retracted.
- When using the 4th boom, extend the boom up to 43 meters
- When the boom length exceeds the specified value, the max, allowable load must not exceed the value specified

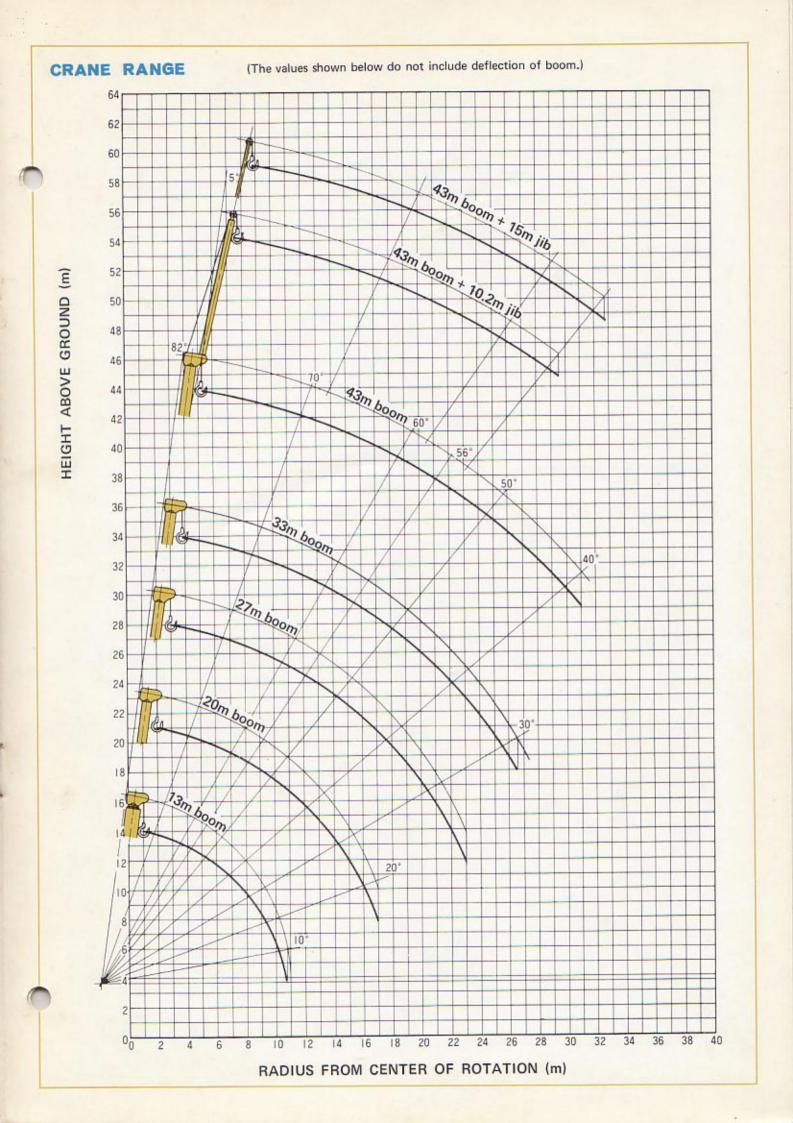
- for the next longer boom. This does not apply when the boom length exceeds 33 meters.
- 7. When using the main hook with the jib extension set at position, deduct 2,500 kg from the max. allowable loads shown above. When the jib extension is folded in position, deduct the weights shown below from the max, allowable loads:

| Boom | 13-meter | 20-meter | 27-meter | 33-meter | 43-meter |
|----------------|----------|----------|----------|----------|----------|
| | boom | boom | boom | boom | boom |
| Weight (kg) | 500 | 400 | 300 | 200 | 100 |

- Do not lower the boom below 40° when it is fully extended, or below 55° when the jib extension is used.
- 9. The number of parts of rope recommended for the respective boom lengths are as follows:

| Boom length(m) | 13 | 13~20 | 20~27 | 27~33 | 43 |
|-------------------------|----|-------|-------|-------|----|
| No. of parts of rope | 12 | 7 | 5 | 4 | 2 |

- Determination of the minimum number of parts of rope must be based on the fact that 6,250 kg load is applied to each rope during operation.
- Any claim due to a failure to work within the max. allowable loads will not be accepted.



CRANE SPECIFICATIONS

KATO NK-75 Model

Performance

Capacities 75t x 3.5m 13m boom

No. of swing motors 11t x 10,0m 43m boom Control valve

With outriggers, over side and

over rear

13m (standard boom) Boom lengths

43m (maximum boom)

Jib length 10.2~15m (adjustable in

two steps)

Hoist rope speeds Main and auxiliary drums

> High speed 50m/min. 25m/min. Low speed (w/power load lowering

> > device)

Heights above ground 43.8m

59m (w/15m jib)

Swing speed 1.5 rpm 57 km/h Travel speed 8 x 4 Propell system Minimum turning radius 12m

Gradeability $0.271 (\sin \theta)$

Dimensions

Overall length 15 210mm Overall width 3.400mm Overall height 3,980mm

Hydraulic system

No. of oil pumps 4 No, of hoist motors

Multiple-spool type, automatic-manual

Cylinder x no. Double-acting x 13

Hydraulic tank capacity 1,300 liters

Prime movers

Crane

Model Mitsubishi 8DC20C

Type Water-cooled, 4-stroke cycle,

V. 8-cylinder diesel

Maximum output

Continuous rated

200 HP/2,000 rpm 170 HP/2,000 rpm

output

Carrier

Model Mitsubishi 8DC2-T

Water-cooled, 4-stroke cycle, Type

V, 8-cylinder diesel

Maximum output

330 HP/2,300 rpm

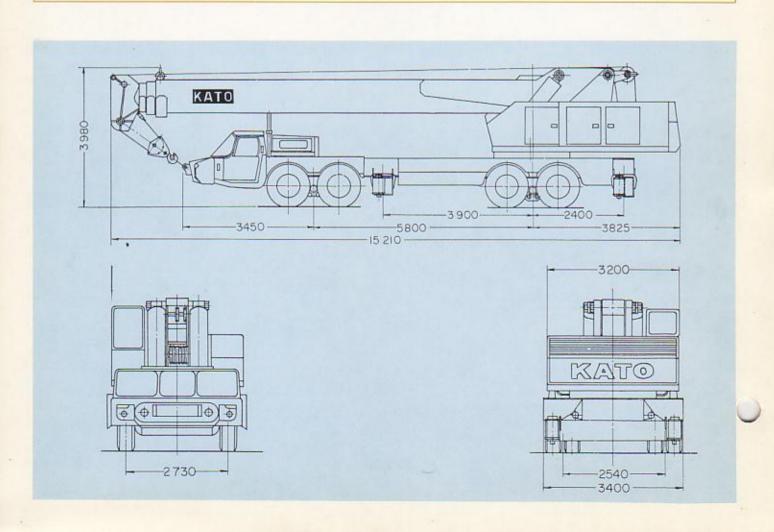
Safety devices Overhoist alarm device, drum

tacho meter, drum lock device, boom angle indicator, outrigger

locking device, oil pressure

safety valve.

These specifications are subject to change without notice.







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