

More Power Than Ever! 20t

NK-200E-v



KATO

Tough New Boom Reduces Vertical Deflection and Lateral Bending During Lifting Operations

KATO'S revolutionary Compuload microcomputer control system monitors the crane's operational status at all times, keeping the operator constantly informed of what is going on through instant numerical readouts in an easy to read digital display.



Advanced Microcomputer Control System

Voice alarm is available as an option



AUTOMATIC SEVEN-POINT DETECTION

The advanced ACS Moment Limiter is a fully automatic overload prevention device incorporating calculation functions based on the latest electronic know-how. It provides precise output on up to seven safety factors: safety level (total moment), boom angle, working radius, boom length, critical load, actual load, and maximum hook lift. These factors are displayed on a graphic display panel. This arrangement permits easy readout without eye fatigue and facilitates a constant and accurate appraisal of changes in the safety factors, thereby enhancing the safety of crane operation.

CONSTANT FIVE-POINT DISPLAY OF OPERATING CONDITION

- In-panel indicators have been replaced by digital displays that show safety level, boom angle, boom length, working radius and critical load at all times, without any troublesome button operations. For further the display of safety level is color-zoned to enable the operator to take in the condition of the load at a glance.

- **Protection against breakdowns and malfunctions . . .** For double protection in the unlikely event of a malfunction in the ACS Moment Limiter or any other problems, a trouble indicator has been provided to generate an emergency signal in the appropriate display to warn the operator.



Photo; Hydraulic front jack and Oil cooler (Option)

3-Stage Jib Offset Extra long reach ideal for close-in, high-lift work

Extra long boom boosts high and remote lift capabilities

- **Boom length** 10.5 ~ 26.2m
- **Jib length** 7.5m (7.5m ~ 12m : option)
- **Jib offset** (3-stage: 5°, 17°, 30°)



Photo: 2 section Fly Jib (Option)



FULL POWER BOOM

- The tough new Fullpower boom utilizes a sequential, synchronized extension/retraction control system that permits single-lever control and speeds up operations at all boom lengths from low lifts at 10.5m (fully retracted) to high lifts at 26.2m (fully extended).
- For greater ease of use, operability and safety, the new boom is of a robust construction that reduces vertical deflection and lateral bending during operations.

FANTASTIC OPERATING RANGE! IDEAL FOR CLOSE-IN OPERATIONS THANKS TO 3-STAGE JIB OFFSET (5°, 17°, 30°)

- In addition to the conventional offset angles of 5° and 30°, the jib on the NK-200E-v can also operate at an extra offset angle of 17°. Selection of the 3 offset angles is simple and the feature is a real boon in close-in work during the construction of high-rise buildings or when performing high-lift operations in restricted spaces.



GREATER EFFICIENCY IN SINGLE-ROPE LIFTING OPERATIONS – CONVENIENT ROOSTER SHEAVE

- This feature greatly enhances operating speed when handling lightweight loads. The rooster sheave is easy to mount at the head of the boom, and the hoisting and lowering of single hook load can be carried out with greater ease and efficiency.

Advanced Electronics Enhance Reliability



**WIDE OPERATING RANGE!
FORWARD-ACTING
DERRICKING CYLINDER
DELIVERS DERRICKING
RANGE FROM -3° TO 80°**

• The powerful forward-acting derricking cylinder and the rearward installation of the derrick cylinder not only give the NK-200E-v a derricking range from -3° to 80° but result in excellent visibility during operations.



**EASY TO MOUNT ON EVEN
THE MOST RESTRICTED
WORKSITE**

• The crane is compactly designed so that the jib folds conveniently under the boom during travelling, and opens out forward and upward when required for use. Mounting requires less space and bother than the horizontal fold-out type, making it ideal for rapid setups in confined sites.



Extra-Large Cabin for Greater Comfort and Ease of Operation



EXTRA-LARGE CABIN FOR GREATER COMFORT AND EASE OF OPERATION

- The spacious cabin is finished in highly relaxing color tones and comes with a sliding door that facilitates ingress and egress and can be left open without getting in the operator's way. A push-up type window is incorporated in the roof for better ventilation. Careful consideration has been given to human engineering for maximum operator comfort; the lengths of the levers can be adjusted and the high-backed seat can be moved forward or backward, raised or lowered to suit any physique. The result is a comfortable, roomy cabin that helps banish fatigue even during extended periods of operation.
- Easy to use pedals have been attached to the winch levers for greater convenience in compound operations.
- **Priority given to safety in operator's cab** . . . For maximum operator comfort and safety all instrumentation utilizes the very latest electronic technology and, together with the various controls and levers, has been located in the optimum position for visibility and ease of operation.



Outriggers Capable of Intermediate Extension for Operations on Narrow Sites



ACS CONTROLS PERFORMANCE ACCORDING TO OUTRIGGER STATUS

- **Sturdy, fully hydraulic outriggers** . . . The outriggers are designed for 2-stage extension, 5.6m at maximum stroke and 3.8m at intermediate stroke for greater stability during operations on restricted sites. Messy float mounting and dismantling operations have been eliminated by incorporating them into a single unit with the vertical cylinders, thus helping to reduce operation times. Ample road clearance permits the simple setting of wooden blocks.
- **Controls on either side of undercarriage for independent, simultaneous outrigger operation** . . . All vertical and horizontal outrigger adjustments can be controlled independently and simultaneously by means of controls located on both sides of the undercarriage. The large stroke of the vertical cylinders permits quick, easy, levelling, even where conditions are poor, such as on sloping or uneven ground.

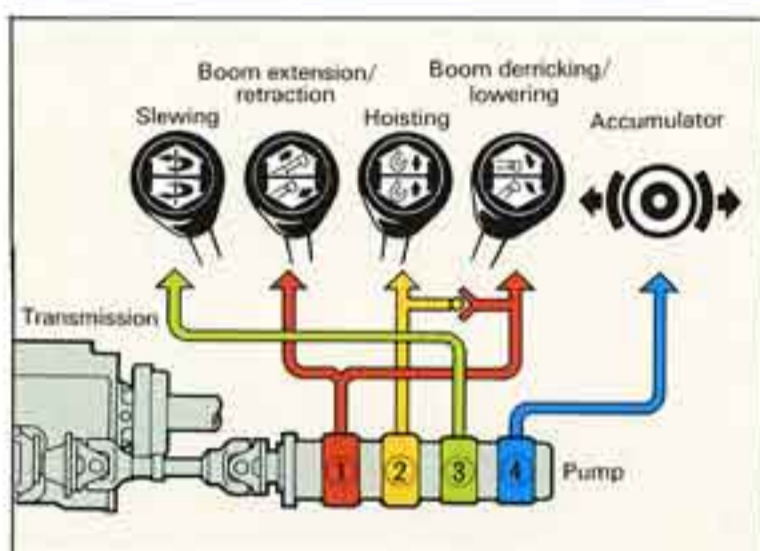
Hydraulic Front Jack Makes 360° Lifting Possible

- A Hydraulic jack installed under the front extremity of the carrier chassis enables the crane to offer the same lifting performance in all directions. This means that there are fewer limitations caused by the orientation of the crane when it enters a site, boosts its operational range.



•Hydraulic front jack (Option)

Independent Winches with Automatic Brakes for Greater Power, Speed and Operational Efficiency



FOR TOTAL PEACE OF MIND... CAREFULLY DESIGNED SAFETY DEVICES

• Safety was a prime consideration during the design of the NK-200E-v, which is equipped with numerous safety devices, including the ACS Moment Limiter, an overhoisting prevention device, a slewing lock device, a boom derricking safety device, automatic brakes, an outrigger locking mechanism and hydraulic relief valves. All cylinders mounted in the boom, outriggers and so on are fitted with specially designed safety valves.

CONVENIENT SLEWING SYSTEM WITH FREE-LOCK SWITCHING

• The slewing system can be locked for operations involving delicate slewing during high or heavy lifting or left free for simple back-and-forth work. The result is safe, efficient operation in a wide range of applications.



A SPECIAL HYDRAULIC SYSTEM COMPRISING 4 POWERFUL PUMPS PERMITS

• The use of 4 separate pumps enables the NK-200E-V to perform 3 operations such as winch (hoisting, lowering), boom (derricking, telescoping) and slewing simultaneously and with outstanding speed and efficiency.



JUST THE JOB FOR COMPOUND OPERATIONS!

• The NK-200E-v features 2 independently-driven winches equipped with powerful automatic brakes. This feature is particularly useful in compound operations because the main and auxiliary winches are controlled by separate levers that permit them to perform hoisting and lowering operations independently yet at the same time. The result is faster operations and greater efficiency.

• The automatic brake prevents accidents resulting from incorrect operation, while the elimination of tiring pedal operations for the main and auxiliary winches represents a big reduction in operator workload.

2-stage winch speed control

• For greater operational versatility, combined dual hydraulic circuits permit 2-stage speed control of the main and auxiliary winches by means of independent levers, enabling the operator to vary the speed of the two winches between high and low without any loss of hoisting power.



TRIPLE SAFETY BACKUP GUARANTEES SURER BRAKING FOR GREATER SAFETY

• The winch mechanism is equipped with three separate safety features: an automatic brake, a counterbalancing valve and a drum lock. These are designed to eliminate the danger arising from operating error and assure safer, more positive operation.

Tried and tested irregular winding prevention device

• The drum is grooved and equipped with a device to prevent irregularities in rope feeding. This not only keeps the rope winding smoothly but also prolongs rope life.

Non-rotating rope eliminates hook torsion

• The use of non-rotating rope prevents tangling during operations and damage to the rope caused by twisting of the hook, resulting in smoother, safer operations.

NK-200E-v

FULLY HYDRAULIC TRUCK CRANE



NOTE: KATO PRODUCTS AND SPECIFICATIONS ARE SUBJECT TO IMPROVEMENTS AND CHANGES WITHOUT NOTICE.



KATO WORKS CO.,LTD.

9-37, Higashi-ohi 1-chome, Shinagawa-ku, Tokyo 140, Japan
Tel. : Head Office. Tokyo (03) 3458-1111
Overseas Marketing Department Tokyo (03)3458-1115
Telex : 222-4519 (CRKATO J)
Fax. : Tokyo (03) 3458-1151
Cable : CRANEKATO TOKYO

MNK200Ev 1-2
E227(Hp)Printed in Japan