



### **KRØLL TOWER CRANES**







Requirement normally is for craneage in the 70 to 400 ton-meter area.

This is the coverage of the latest series.

Designs of cranes for special duties outside the building construction industry are also carried out.

Situated in Denmark, on the outskirts of Copenhagen the company has had over 40 years experience in Tower Crane design and manufacture.





## A LEADER IN TOWER CRANE DESIGN



### TOMORROW'S DESIGN FOR TODAY'S WORK





#### COMPUTER AIDED DESIGN

allows a staff of crane material handling experts together with qualified engineers, to combine standard components in order to cover your requirements.

PROVEN PERFORMANCE and complete documentation in all details, from the first steps of planning, throughout the whole phase of production, gives the customer complete product assurance.

CRANE CONTROL SYSTEMS are PLC-based (Programmable Logical Controller) to secure maximum reliability and safety. Faults are easily located on a cabin fitted display monitor.

CABINS are designed to give the operator optimum survey over the site with a high degree of comfort under all climatic conditions.

SAFETY EQUIPMENT fitted is according to statutory regulations and has as standard indication, instruments for load, moment, trolley position, hook height and wind speed.

QUALITY CONTROL is carried out on purchased material, components and internal processes. Prior to dispatch, mechanical and electrical testing is carried out. SURFACE TREATMENT that is superior to any other method of rust prevention.

KRØLL SERVICE is on call by phone, telex or fax from all areas.

KRØLL PARTS is a service to provide consumable parts at a very short notice - even for older models.

KRØLL CRANES are in every respect a guarantee for a product of the highest standard with a superior lifetime and minimum maintenance.

KRØLL Tower Cranes have been designed and produced up to 10000 ton meters.

### HIGH LOAD CAPACITY -LOW DEAD WEIGHT







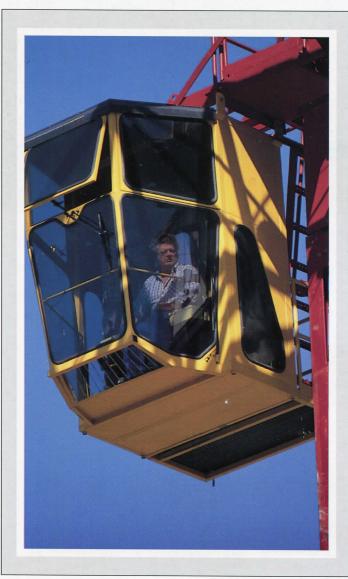
## CONTROL WITH OPERATIONAL SAFETY

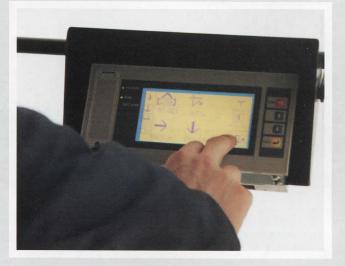
MOTION OPERATION is by joysticks using a PLC system, which on a monitor screen gives the crane operator an immediate readout of hook load, height, radius and load moment. Via "windows" any system faults are shown and at a finger touch the cause and correction can be read off.

POWER / CONTROL electronics and electrics are built into a house which gives protection for work or adjustments to be carried out. CIRCUIT BREAKERS switches etc. are numbered or marked for identification. The cabin monitor is repeated in the electrical house. A large proportion of the internal electrical installation is by multi-plug connections reducing erection time.

CABLE DRUMS or pick-up shoes can be supplied for cranes with travelling bases.

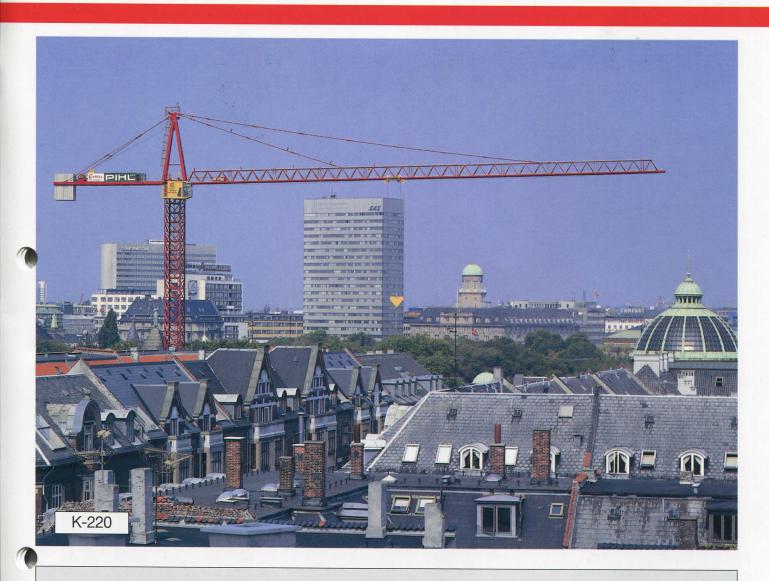
CRANE CABINS are fitted with a fully adjustable, ergonomically correct seat and 200° view windows. They are insulated, lighting and power points and other items are fitted. The crane operator is given an assurance of maximum control over the work being carried out. Type K-1 is for an operator only, type K-3 is similar but extended to include the housing for the power/control electronics and electrics.







# ELECTRICAL RELIABILITY AND INSTANT RESPONSE







## MAX. PRODUCTIVITY FOR MIN. OUTLAY



TOWER CRANES are relatively heavy structures and it takes advanced technology to manufacture each component. The use of killed steel is a major factor in Krøll basic design.

WELDED JOINTS demand steel quality which has good resistance to fracture under conditions of high loading and low temperatures. STEEL used is mill certified to German DIN Standard.

WELDING CONTROL in steel fabrication is one of the most important operations. Strict inspection is carried out using both ultrasonic and magnaflux test methods.

FABRICATED PARTS are given a three part surface treatment consisting of shotblasting, followed by aluminium/zinc metal spraying and a final paint spray coating.





HOT DIP GALVANIZING or electroplating and chrome dip finish are used on other parts - axles, pins etc.

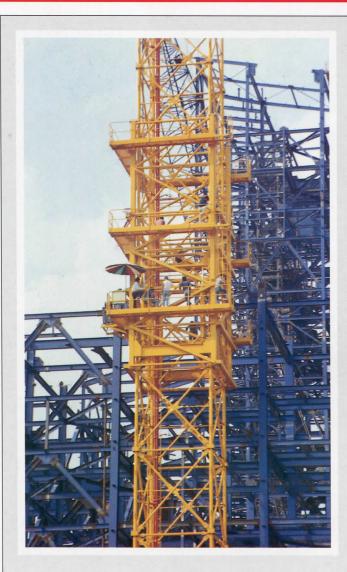
SURFACE TREATMENT that keeps a Krøll Crane in good condition with minimum maintenance.



## A GUARANTEE FOR RELIABILITY



## STANDARDS FOR WORLDWIDE ACCEPTANCE







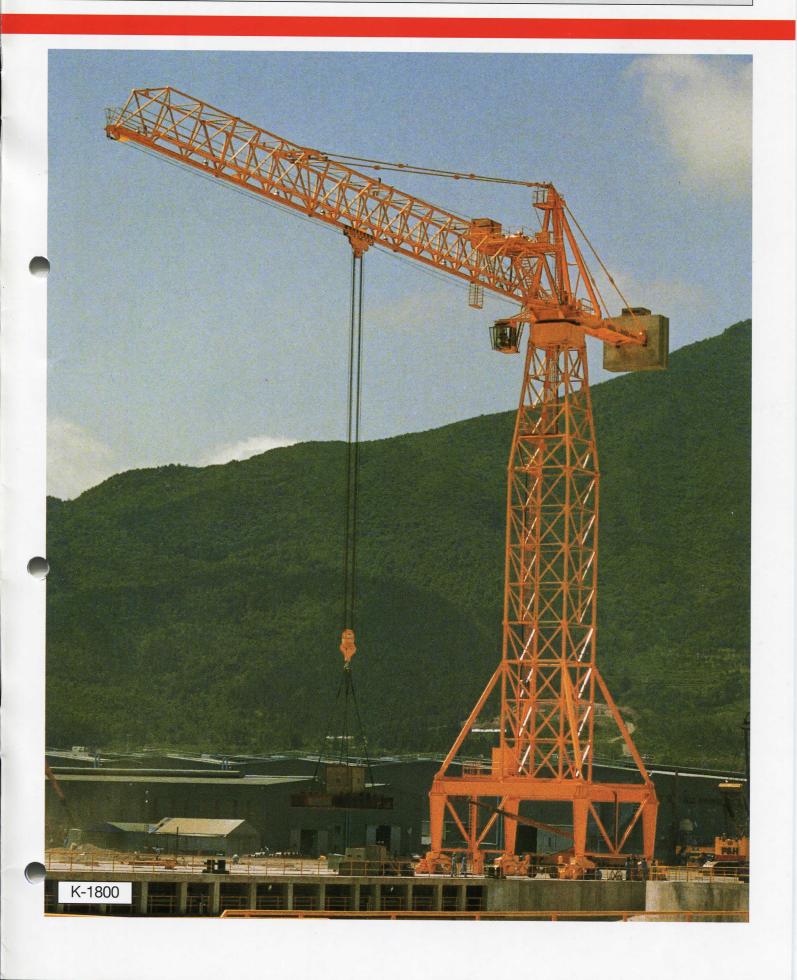
TELESCOPING EQUIPMENT is used when a crane is increased in its height-under-hook by inserting extra mast sections, as a building progresses, or it can be used on initial erection to take a crane to its full height. The equipment can be removed after use. Wall tie frames are also supplied. Climbing and telescoping are carried out hydraulically using fail-safe equipment.

CLIMBING EQUIPMENT is used when cranes climb within a building. For this type of operation a special bottom section to the mast is required.

HOIST WINCH DRUMS are supplied to accommodate the wire rope length required to cover the final known height-under-hook when either type of equipment is ordered.

CRANES can be supplied with a range of bases to suit varying site conditions. These cover expendable (cast-in) bases or base feet units, tie-bolted down base cross units, or rail-going travel bases, including portals. Rail bases can be for straight, 90° turn or for curve running or, if required, in certain circumstances, a combination of both.

## **CUSTOMER SATISFACTION**



#### **LOW SERVICE COST**





KRØLL SERVICE is at your call by phone, telex or telefax from anywhere in the world. Krøll Service provides on-site technical assistance for erection or dismantling, employee training in crane operation, mechanical / electrical maintenance and other services. Service personnel are out-stationed in certain areas and keep agents staff upto-date with latest developments.

CRANES may also be hired on short or long term contract. The hire fleet cranes are of all capacities up to 400 ton-meters. The fleet is constantly changing, as a buying option can be taken out, or cranes are changed for up-dated models. For any contractor who has a crane requirement for a short period only, this is an advantageous solution. All hire fleet cranes are to the safety requirements of the country, and they are kept fully maintained through agreement with Krøll Service.

KRØLL PARTS carries stocks of consumable spares so that immediate needs can be attended to. Dispatch by airfreight is standard.

INSTRUCTION MATERIAL is written in English but translation is arranged for and made when required, for non-English speaking personnel. The material also includes listed recommended spare parts, to enable contractors to minimise any down-time.

#### FOR YOUR NEXT TOWER CRANE CONSULT -



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