



# LCL 500

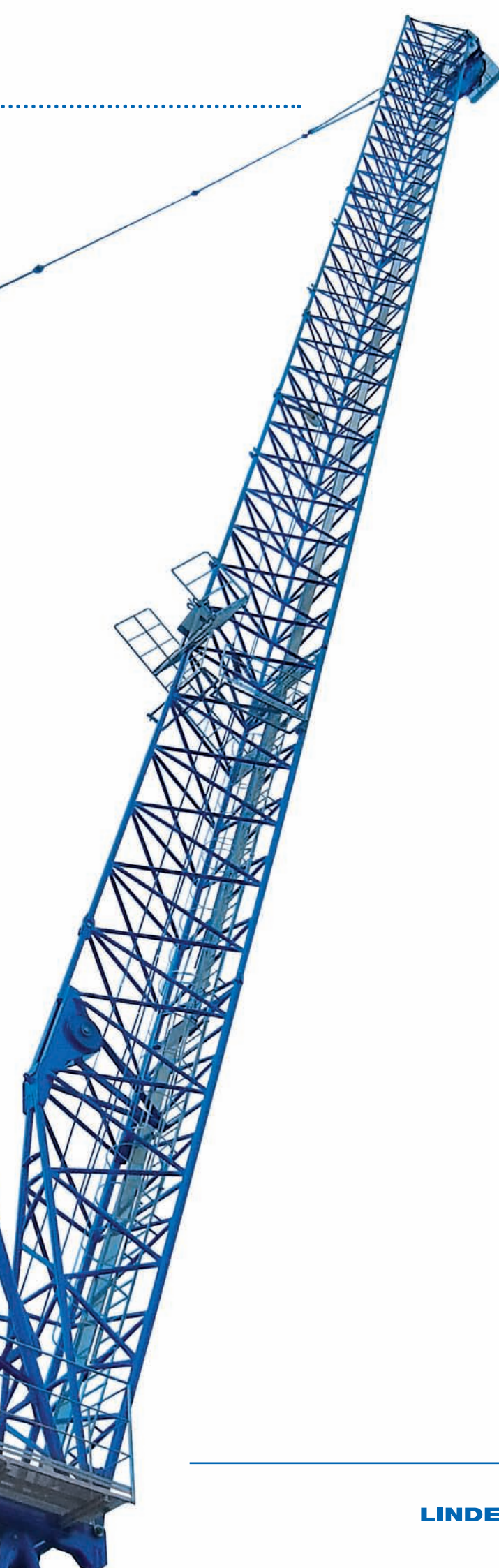
Luffing-jib crane

## LCL-500 LUFFING-JIB CRANE

As time has progressed, construction projects have required larger and heavier lifting loads. Due to this increased demand, Linden Comansa has introduced the brand new LCL-500 Luffing Jib crane.

LCL  
500





## HIGH PERFORMANCE

Comansa luffing-jib cranes are in demand, for high rise buildings on congested sites. To obtain the necessary high performance in material handling for high rise buildings, the new LCL-500 uses frequency controlled drives rated at 110 kW on both luffing and hoist movement.

With the Comansa frequency control, not only the maximum speed with any permissible load is possible, but also ultra-low speeds in the positioning mode. In this mode the frequency controlled system can drive thru the zero point, without applying the brake. Furthermore, for more efficiency of the system and a comfortable “feel” of the load, the control lever will adapt automatically its full control range to the given loads.

For high-rise buildings, the drum of our new 110 kW hoist winch has a standard cable capacity of 940m (3,083ft.). Optionally under consultation, a bigger drum is available with a cable capacity of 1,400m (4,593ft.). This capacity drum has been engineered for special high projects.

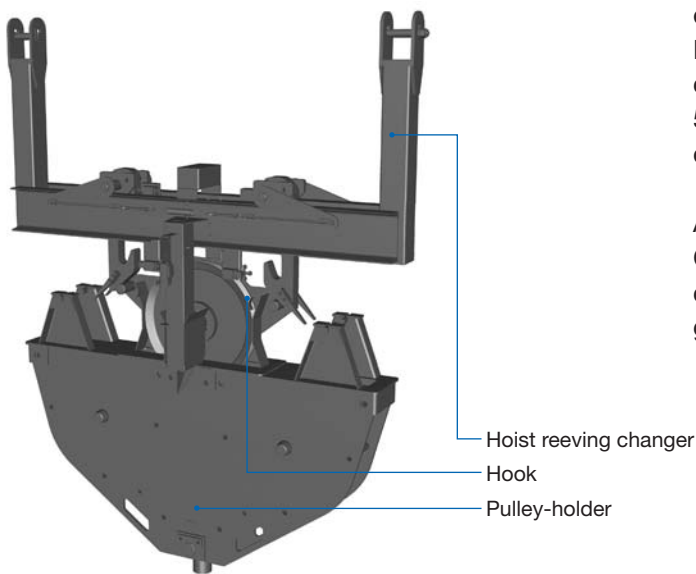
## EASY ASSEMBLY WITH FAST CONNECTIONS

To speed up installation, special attention was given to the design of the unions of the LCL-500 luffing jib crane. The unions of the cabin platform, access platforms and structural elements have now guiding and support elements for ease of installation. These fast connections guide and centre themselves. Only after the crane component is located in position and rests on its own structure, the final fastening element is inserted. This increases work-safety during the installation and dismantling of the crane.



## AUTOMATIC CHANGE FROM 12 TO 24 T MAXIMUM LOAD

The automatic reeving change, from the cabin, will allow the driver to change the crane's maximum load capacity, from 12 to 24 t (26,450 to 52,900lbs.), in a matter of seconds, adapting the crane drive to the varying construction site conditions efficiently and fast. This will ultimately improve material handling cycles and save valuable working time.



## TRANSPORT AND INSTALLATION

All crane parts can be dismantled and separated in light components of less than 9t (19,840lbs.), which are transport friendly, in HQ 40 containers. The low assembly weights allow use of smaller mobile cranes for erection and dismantling, with correspondingly reduced costs.

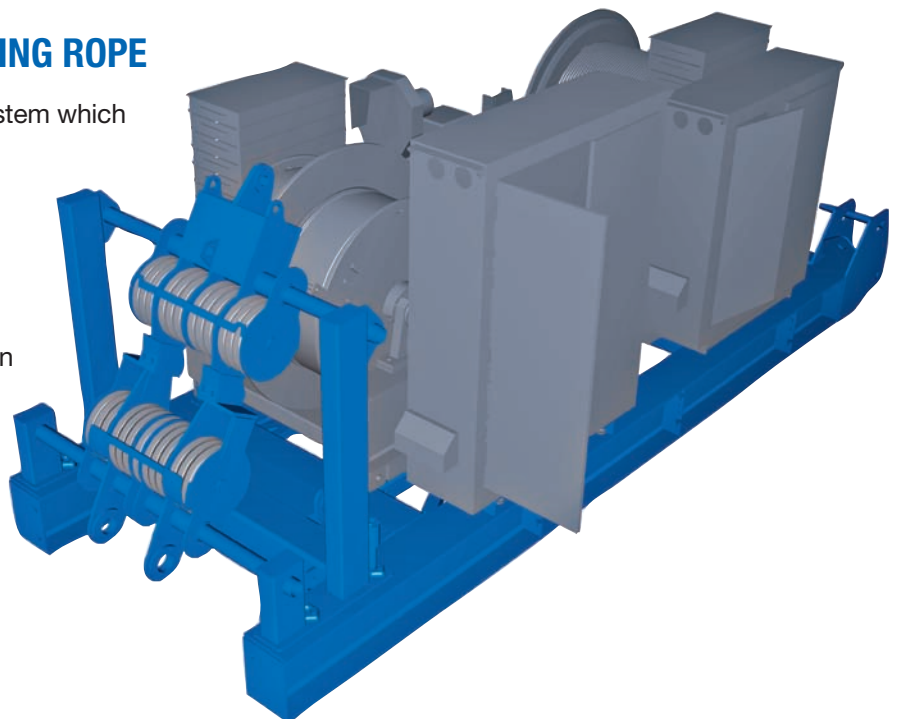
For congested sites, Comansa has designed the LCL-500 crane with a counter-jib radius of 8.3m, (27.2ft.), using aerial counterweights made of concrete. For extremely narrow spaces the counter-jib radius of the LCL-500 can be reduced to 7.4m (24.3ft.), using steel counterweights. In out-of-service condition the LCL-500 can be parked at a very reduced jib radius (See data sheet).

As with previous models of luffing-jib cranes, Comansa has followed its design philosophy of fixed counterweights for simpler, faster installation, and greater crane safety.

## PRE-INSTALLATION OF THE LUFFING ROPE

For this crane, Comansa has designed a system which allows the pre-installation of the luffing rope reeving. The crane is delivered from the factory with all the reeving from the luffing mechanism mounted on the pulley blocks (See picture below).

The great advantage is the fast installation of the luffing rope, as everything arrives at the job site already mounted. During dismantling of the crane, the reeving of the luffing mechanism remains assembled, saving time and improving profitability for our customers' next installation.



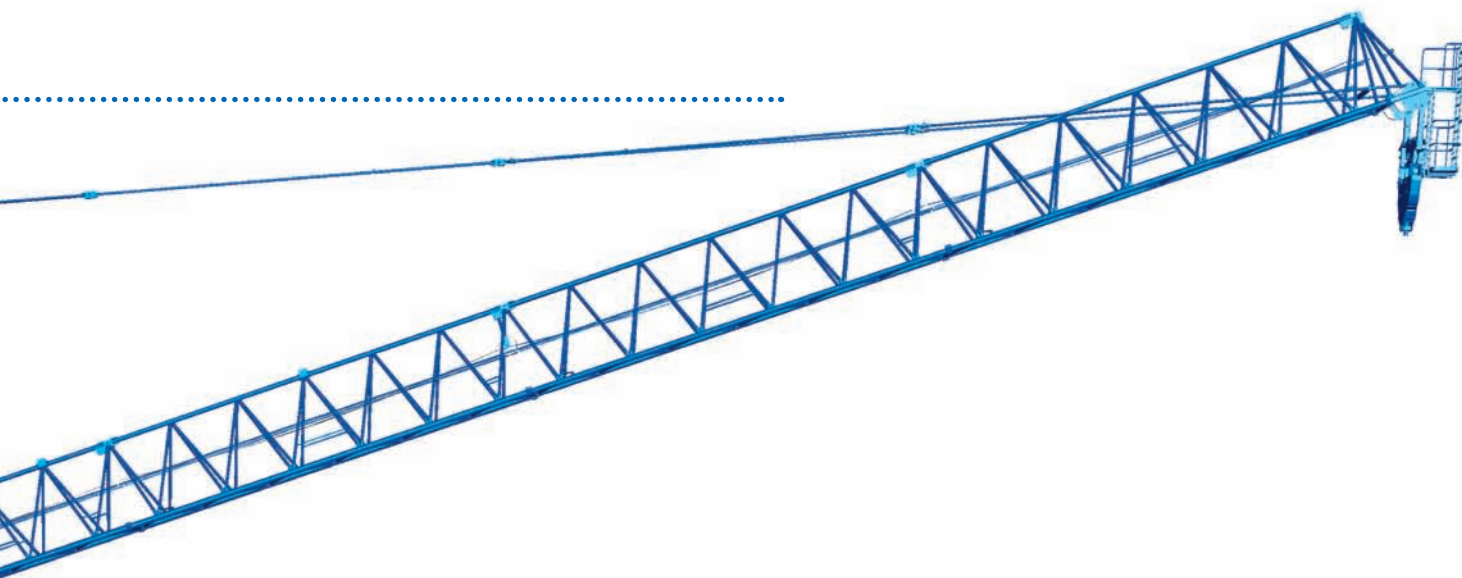


## NEW, REINFORCED 2.5m TOWER SECTIONS

For the LCL-500 crane Linden Comansa has designed a new 2.5m (8.2ft.) mast section with denomination D36. With this mast section the LCL-500 crane will have a maximum freestanding mast height of 68.3m (224ft.).

The new Linden Comansa D36 mast section is manufactured on modern numerical controlled machining centres. The precision of these new machines provide sufficiently small manufacturing tolerances to permit the weight of the crane to rest on the corner angles of the mast, rather than on the pins. This ensures long-life in addition to fast and safe installation.

For economical transport, the new Linden Comansa D36 mast sections are dismantlable in panels.



## NEW 10 M FOLDING CROSS BASE ON SCREWS-JACKS

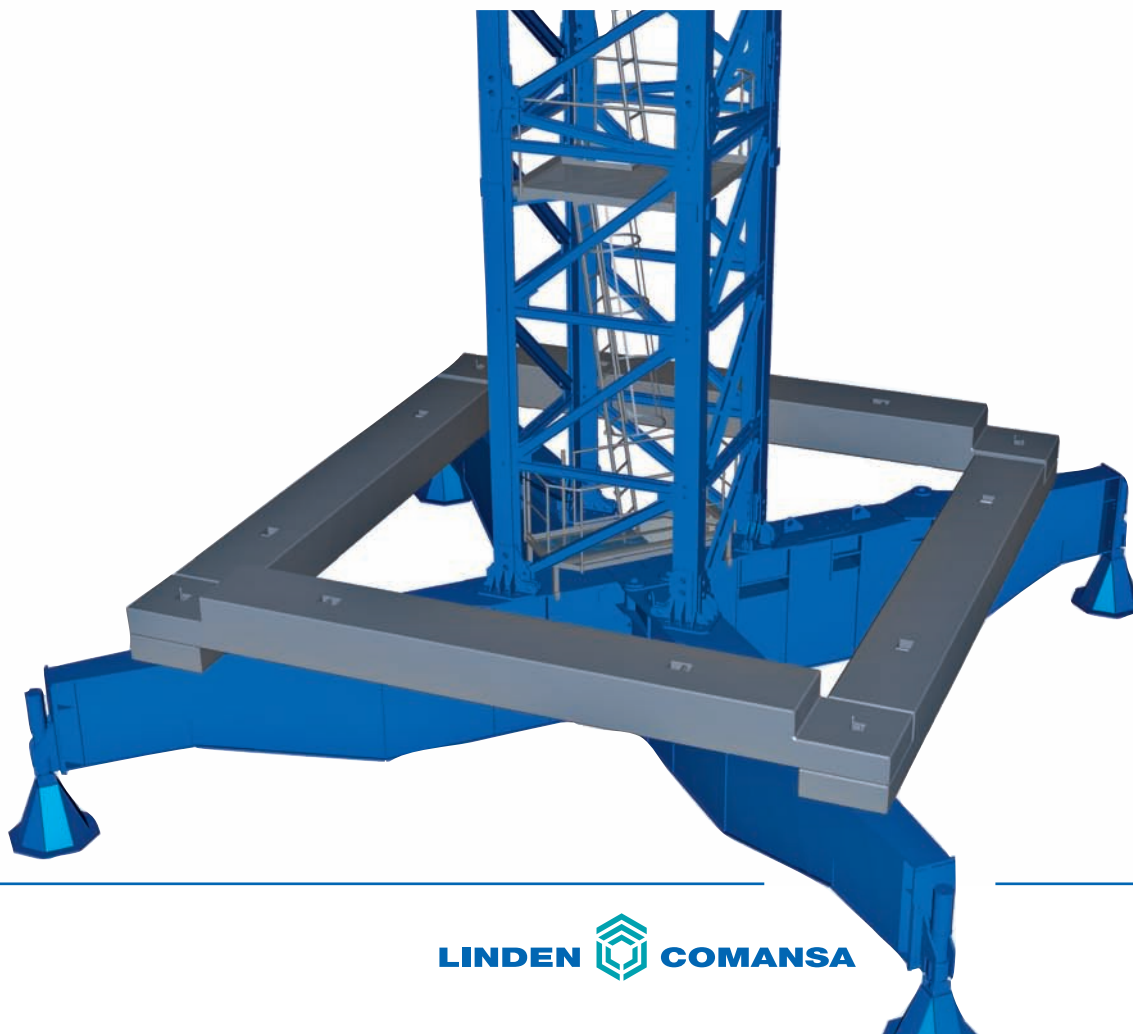
Following the great success of our 6m (19.7ft.) folding cross-base, which can be levelled in a minimum of time, Comansa has designed a new, 10m (32.8ft.) foldable cross-base on screw-jacks.

This base is transportable in one single bundle or easily dismantlable in parts depending on the needs of the site. With this cross base the LCL-500 crane will have a maximum freestanding mast height of 68.3m (224ft.).

## A DOUBLE SECURITY SYSTEM

Extra safety of the LCL-500 is provided by a new double security system which works both electronically and mechanically. The load and moment limitation of the crane incorporates, in addition to the standard electronic safety system, independent mechanical limitation devices.

Once the moment of the crane is adjusted at one selected radius, the new mechanical limitation system, patented by Linden Comansa, reproduces the permissible moment for all jib positions.



# LCL 500



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