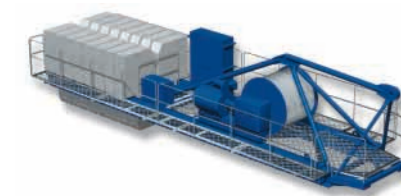


▲ With the original **LINDEN 8000** modular series Flat-Top Cranes, a new way of thinking was introduced into the world of cranes. The brilliant concept which enabled different capacity cranes to be erected using a standard system of modules, opened up a degree of flexibility not available previously.

Since then, **COMANSA** has developed the modular concept into a complete programme of modular cranes. With the **LINDEN 2100 Series**, **COMANSA** introduces the latest development in

Flat-Top cranes, designed to incorporate all the well-proven advantages of the existing models, plus important innovations. The **LINDEN 2100 Series** consists of four new Flat-Top models: **21LC170**, **21LC210**, **21LC290**, **21LC400** and **21LC550**, from 170 to 550 meter tons.

The **21LC550** is the largest crane of the **2100 Series**. All models of this series are available with 12 t (26,455 lbs.) or 18 t (39,682 lbs.) max. load in 4-part line.



BM 215: 37- 45- 65- 110 kW



FM 215



FM 218

CM 218



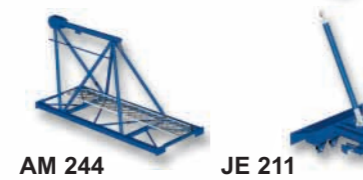
AM 262 A



AM 272 A



AM 240



AM 244

JE 211



AM 298



AM 299



AM 282 A



AM 250 A

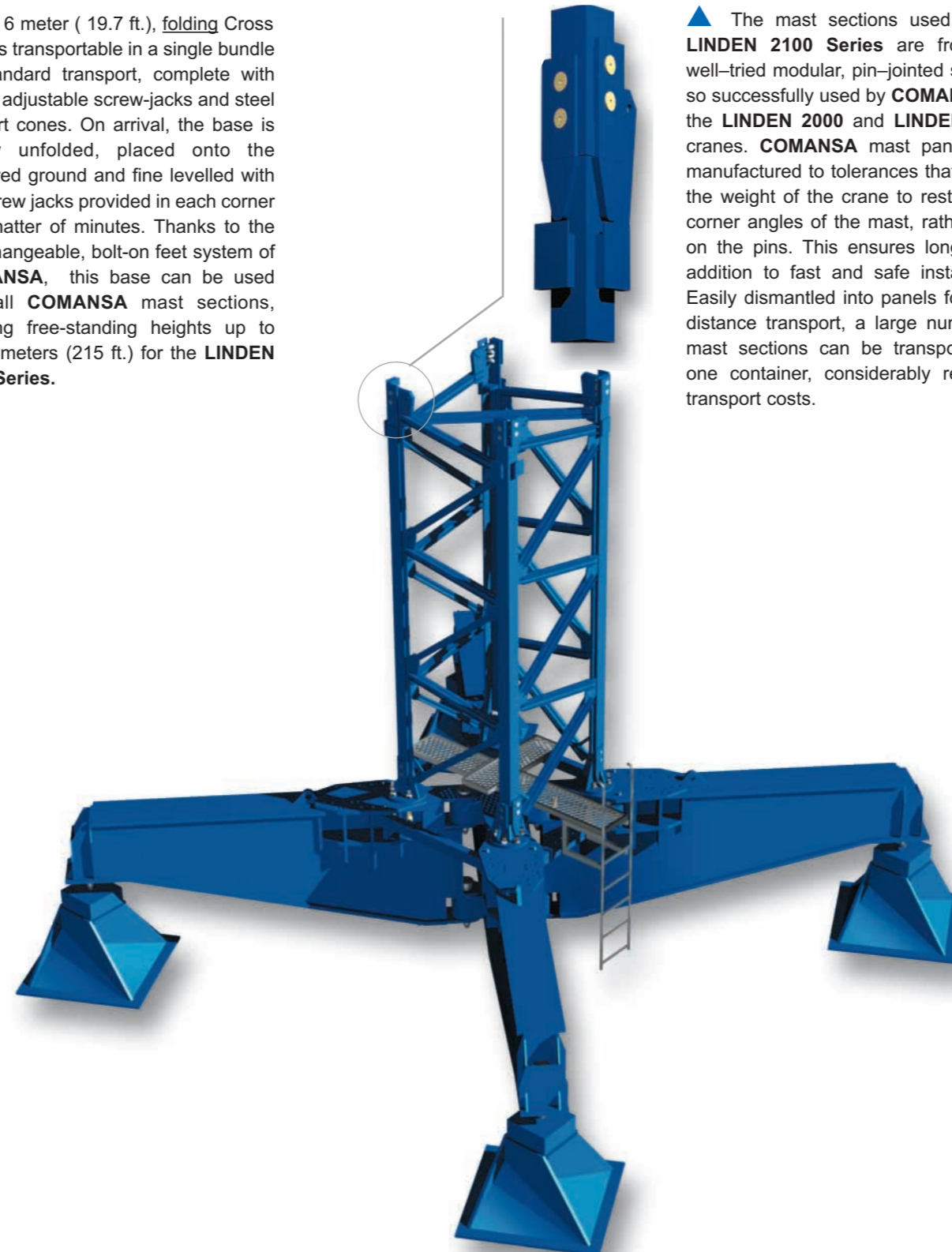


AM 230



AM 220

▲ A 6 meter (19.7 ft.), folding Cross Base is transportable in a single bundle on standard transport, complete with height adjustable screw-jacks and steel support cones. On arrival, the base is simply unfolded, placed onto the prepared ground and fine levelled with the screw jacks provided in each corner in a matter of minutes. Thanks to the interchangeable, bolt-on feet system of **COMANSA**, this base can be used with all **COMANSA** mast sections, allowing free-standing heights up to 65,50 meters (215 ft.) for the **LINDEN 2100 Series**.

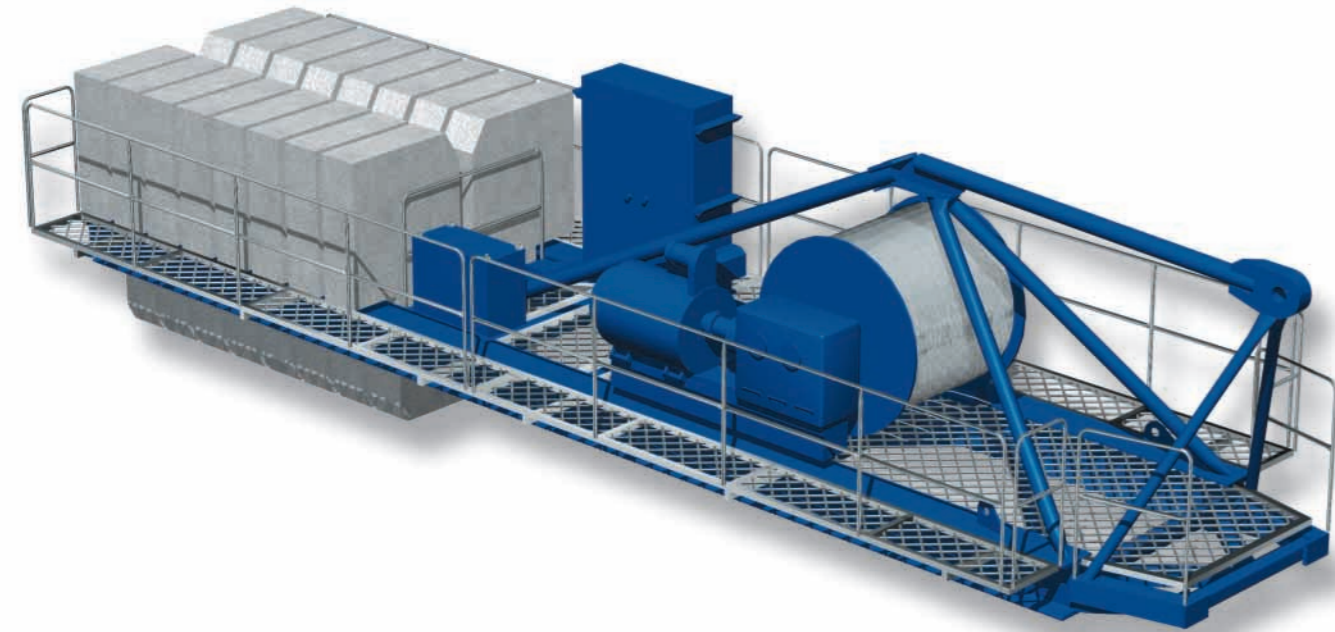


▲ The mast sections used in the **LINDEN 2100 Series** are from the well-tried modular, pin-jointed system, so successfully used by **COMANSA** on the **LINDEN 2000** and **LINDEN 8000** cranes. **COMANSA** mast panels are manufactured to tolerances that permit the weight of the crane to rest on the corner angles of the mast, rather than on the pins. This ensures long-life in addition to fast and safe installation. Easily dismantled into panels for long-distance transport, a large number of mast sections can be transported in one container, considerably reducing transport costs.

▲ The **LINDEN 2100 Series**, incorporates all the well-known and proven advantages of the existing models from **COMANSA**. With the elimination of the "traditional" cat-head and pendant lines the **LINDEN Flat-Tops** have many important advantages, which have undoubtedly made this crane a most interesting alternative for a fast-growing number of users and rental companies:

- Fast, simple and safe erection of small, light individual modules.
- Components can be erected directly from truck to crane.
- Smaller mobile crane required for lifting light components at a lower height.
- No complicated pendant-lines to be erected.
- Excellent choice for narrow sites in the city as there is no need to pre-assemble the whole jib on the ground.
- Simple connection of jib sections with **LINDEN 8000** union system.
- Frequently only a **LINDEN Flat-Top** crane will be the right solution, due to limitations of conventional cranes with the extra height of their cat-head.
- With the **LINDEN Flat-Top** you get the maximum height under hook with minimum overall height of the crane.
- On congested sites, additional **LINDEN Flat-Top** cranes can overlap each other adding only one mast section, thus keeping all cranes at lowest possible height, with correspondent costs saving. In addition to minimisation of mast sections, use of wall ties is often avoided.
- Strong design, without alternating stresses in the jib, virtually eliminates fatigue in this structure.





▲ A new counter-jib for the **LINDEN 2100 Series** has been designed to achieve a better crane performance.

- The wire rope capacity on the hoisting drums has been substantially increased to 810 or 620 meters (2,657 or 2,033 ft.) with 3 layers on the drum for the 12 t and 18 t winch, respectively.

- The **LINDEN 2100** cranes have a shorter counter-jib.

- The new counterweights are mounted from above and self-blocked with their own weight

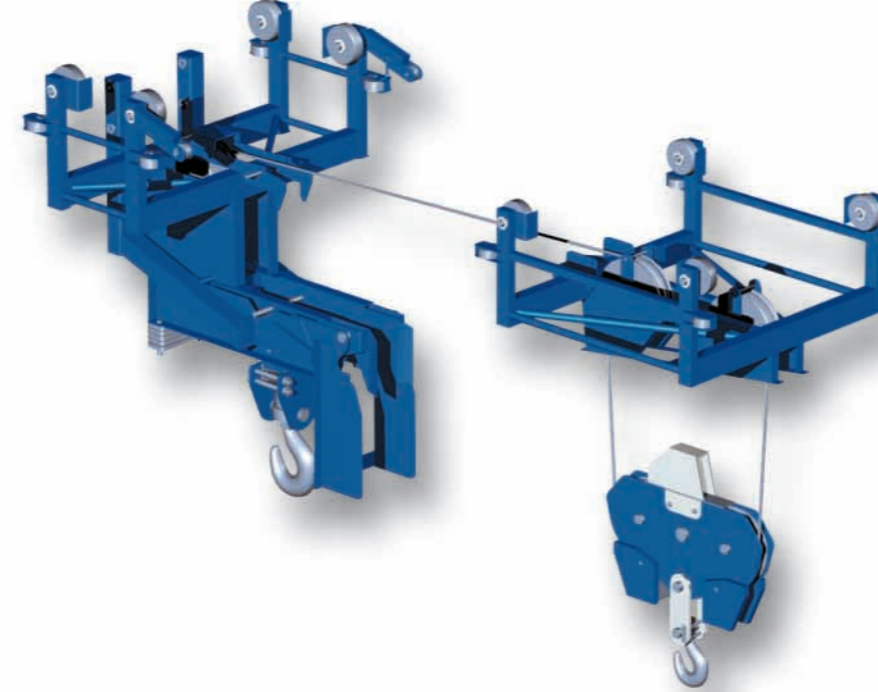
- For installation and dismantling the counterweights are easily turned from their horizontal transport position to the vertical assembly position and vice-versa as the single lifting point is placed at their centre of gravity.

- With the new counter-jib, the **LINDEN 2100** cranes have the optional oscillation absorber.

▲ The latest generation of frequency-controlled drive systems for hoist and trolley movements can be fitted on the **LINDEN 2100 Flat-Top cranes** to provide step-less, smooth and accurate placing of all loads. The "positioning mode" also allows extremely slow speeds and extra-accurate placing of loads. The new 65 kW and 110 kW (*) frequency-controlled hoisting mechanisms, specifically designed for the **LINDEN 2100 cranes**, comfortably improve on the already excellent performance of previous generations of hoist winches. (* Under development).

▲ All **LINDEN 2100** cranes have a new reeving system with two trolleys, which improves their load chart in two different ways. With one trolley working in simple reeving or two-part line, the crane gains load capacity at the front of the jib and a bigger maximum load up to 18 t is reached with two trolleys in double reeving operation (four-part line). Changeover from two trolleys to one trolley or vice-versa is done by remote control from the cabin and the trolley rope is automatically tensioned with every hoist movement.

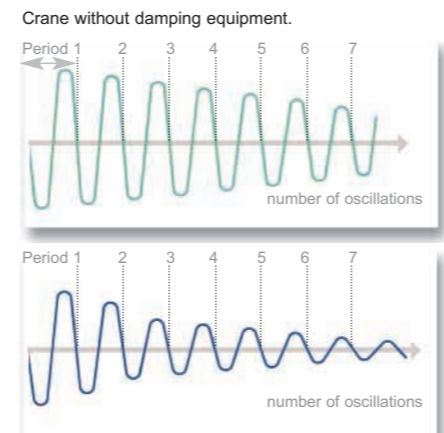
In simple trolley operation (two-part line), the primary trolley, together with the hook for double reeving operation, rests on a steel structure at the foot of the jib, permitting completely independent movements of the two-part-line trolley.



▲ Oscillations occurring in a crane are comparable to those you would find in a car without shock absorbers. A sudden pull during loading or unloading will make the crane oscillate. This applies to all cranes, regardless of the brand.

LINDEN 2100 series cranes may, optionally, include the BM16 oscillation absorber, with which the oscillations of

the crane are absorbed much faster, improving work quality and performance on site. The working principle of **COMANSA's** patented oscillation absorber is similar to those dampers mounted at the top of some skyscrapers. The counterweight is freely suspended in a pendant basket, which is laterally connected to the steel structure by shock absorbers.



LINDEN modular system 8000 with oscillation absorber.



COMANSA

Construcciones Metálicas COMANSA S.A.

Tel: +34.948.335020
 Fax: +34.948.330810
 E-mail: export@comansa.com
www.comansa.com

Polígono Industrial de Areta
 E-31620 HUARTE-PAMPLONA (SPAIN)

LINDEN 2100



21 LC 550

