



LC2100 series

5 models with maximum loads between **12 and 48 t (26,450 and 105,820 lb)**
Flat-Top® modular system
Effi-Plus high-speed hoisting mechanisms

LINDEN  **COMANSA**



LC2100 series

In the 70s, the launch of the **LINDEN 8000** modular series introduced to the market a new focus in the world of cranes. This ingenious concept allows the installation of cranes with different loading capacities using the same standard system, providing up to now inconceivable flexibility.

LINDEN COMANSA has since developed the **Flat-Top®** modular system, applying it to its entire range of tower cranes, which includes the **LC2100 series**. This family of cranes is currently made up of five models between **335 and 750 metric tons**, with different versions according to their maximum load. These are high-capacity load cranes (from 12 to 48 tons / 26,450 to 105,820 lb), highly efficient for any type of construction, particularly mining, infrastructure, industry and civil engineering works.

MODEL	JIB LENGTH	JIB-END LOAD		MAXIMUM LOAD
		Normal	Powerlift	
21 LC 335 12t	74 m	2,700 Kg	2,970 Kg	12,000 Kg
	242.8 ft	5,950 lb	6,550 lb	26,450 lb
21 LC 335 20t	74 m	2,700 Kg	2,970 Kg	20,000 Kg
	242.8 ft	5,950 lb	6,550 lb	44,090 lb
21 LC 450 20t	80 m	3,000 Kg	3,300 Kg	20,000 Kg
	262.5 ft	6,610 lb	7,280 lb	44,090 lb
21 LC 450 25t	80 m	2,600 Kg	2,860 Kg	25,000 Kg
	262.5 ft	7,730 lb	6,310 lb	55,120 lb
21 LC 550 20t	80 m	4,000 Kg	4,400 Kg	20,000 Kg
	262.5 ft	8,820 lb	9,700 lb	44,090 lb
21 LC 550 25t	80 m	3,600 Kg	3,960 Kg	25,000 Kg
	262.5 ft	7,940 lb	8,730 lb	55,120 lb
21 LC 660 20t	84 m	5,300 Kg	5,830 Kg	20,000 Kg
	275.6 ft	11,680 lb	12,850 lb	44,090 lb
21 LC 660 24t	84 m	4,500 Kg	4,950 Kg	24,000 Kg
	275.6 ft	9,920 lb	10,910 lb	52,910 lb
21 LC 660 32t	84 m	4,500 Kg	4,950 Kg	36,000 Kg
	275.6 ft	9,920 lb	10,910 lb	79,360 lb
21 LC 660 48t	84 m	4,000 Kg	4,400 Kg	48,000 Kg
	275.6 ft	8,820 lb	9,700 lb	105,820 lb
21 LC 750 24t	80 m	7,000 Kg	7,700 Kg	24,000 Kg
	262.5 ft	15,430 lb	16,970 lb	52,910 lb
21 LC 750 36t	80 m	7,000 Kg	7,700 Kg	36,000 Kg
	262.5 ft	15,430 lb	16,970 lb	79,360 lb
21 LC 750 48t	80 m	6,500 Kg	7,150 Kg	48,000 Kg
	262.5 ft	14,320 lb	15,760 lb	105,820 lb





FLAT-TOP® MODULAR SYSTEM

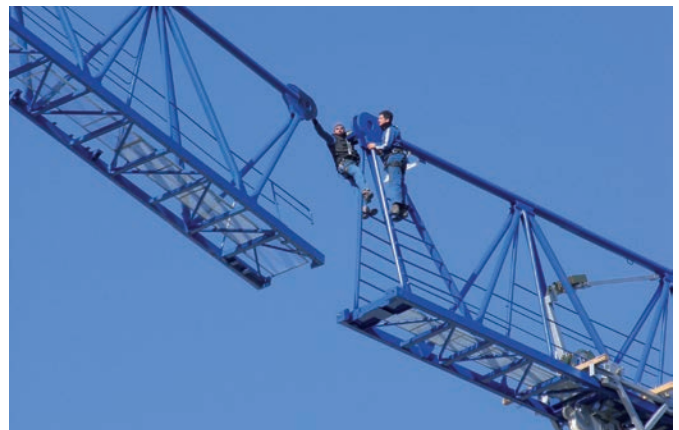
By removing the cat-head and the pendant-lines, **LINDEN COMANSA Flat-Top®** cranes offer considerable advantages that make their models a very interesting alternative for a large number of users and rental companies:

- **Quick, easy and safe installation** of light parts and of larger pre-assembled units.
- The complication of installing pendant-lines is **eliminated**.
- The jib sections are **easily assembled** using the same system as the LINDEN 8000: pin on the top strut and screws on the bottom strut.
- The application of the **Flat-Top®** modular system for the design of the **LC2100** series makes many of their tower and jib elements compatible and interchangeable between the cranes in the series, and even with other models of different series.



All **LINDEN COMANSA** sections have a transition between them, either directly or by means of a frame, offering owners of fleets of cranes great versatility for making multiple tower combinations. Combining different sections, the cranes of the LC2100 series achieve free-standing heights that exceed 115 meters (377 ft).

Transport by panels considerably reduces the size of the package, and therefore the cost, which is a noteworthy advantage in long-distance freight operations. In fact, all the components of cranes in the LC 2100 series fit in HQ containers, apart from some jib sections which would be transported in an Open-Top container.



CAB AND DIGITAL INDICATORS

The panoramic cab is included as standard in the LC2100 series. It offers maximum visibility of the work area and includes a seat with integrated controls and other ergonomic features that improve the worker's comfort: Thermal and acoustic insulation, fire extinguisher, tinted windows, CD and MP3 player, etc.

The more spacious and larger Panoramic XL cab is also available as an optional extra. It is more ergonomic, allows more accessories such as a mini fridge and includes space for a microwave or any other small electrical household appliance.

All LC2100 series are equipped with the digital indicators system as standard, offering the crane operator all information required to improve crane control and safety: span, hook height, momentum, maximum load, data log, etc.

This user-friendly and intuitive system is compatible with the Anti-Collision System and it also offers the possibility of including a Prohibited Area function. This option restricts jib and load access to areas previously programmed as "Prohibited areas", as well as gradually stopping the movement of the jib when it comes close to one of these areas.



CROSS-SHAPED BASES AND PORTALS

All the cranes of the series have a folding cross-shaped base (4.5 m, 6 m, 8 m or 10 m), which can be transported as a **single item**. For assembly, the base is unfolded and leveled using guide screws in a straightforward manner.

By means of the versatile **LINDEN COMANSA** coupling system with anchoring feet, these bases can be adapted to the different tower sections, in some cases allowing to obtain free-standing heights of more than 100 m (328 ft).

For special applications that need to avoid highways or railways, the LC2100 series has three optional portals with a width of 6, 8 and 10 meters respectively. Furthermore, the R&D department of **LINDEN COMANSA** can study other portal sizes on demand.





MECHANISMS

All cranes of the **LC2100** series are equipped with the **LINDEN COMANSA** double trolley system, which improves their load diagram in two ways:

- With a single trolley, working with single reeving, the capacity of the crane increases towards the end of the boom, with faster working speeds.
- The two trolleys and double reeving ensure maximum load capacity.

The switch from double to single reeving or vice-versa is automatic. When working with single reeving, the rear trolley is stored in a receptor at the base of the jib, allowing completely independent movements of the single reeving trolley.

The crane's main lifting, trolley and slewing maneuvers have frequency variation, allowing the loads to be distributed precisely and smoothly.

During the slewing movement, the frequency variation helps control the starts and stops of the jib, providing the operator with smooth and precise load handling maneuver. The slewing motors, which are very efficient and compact

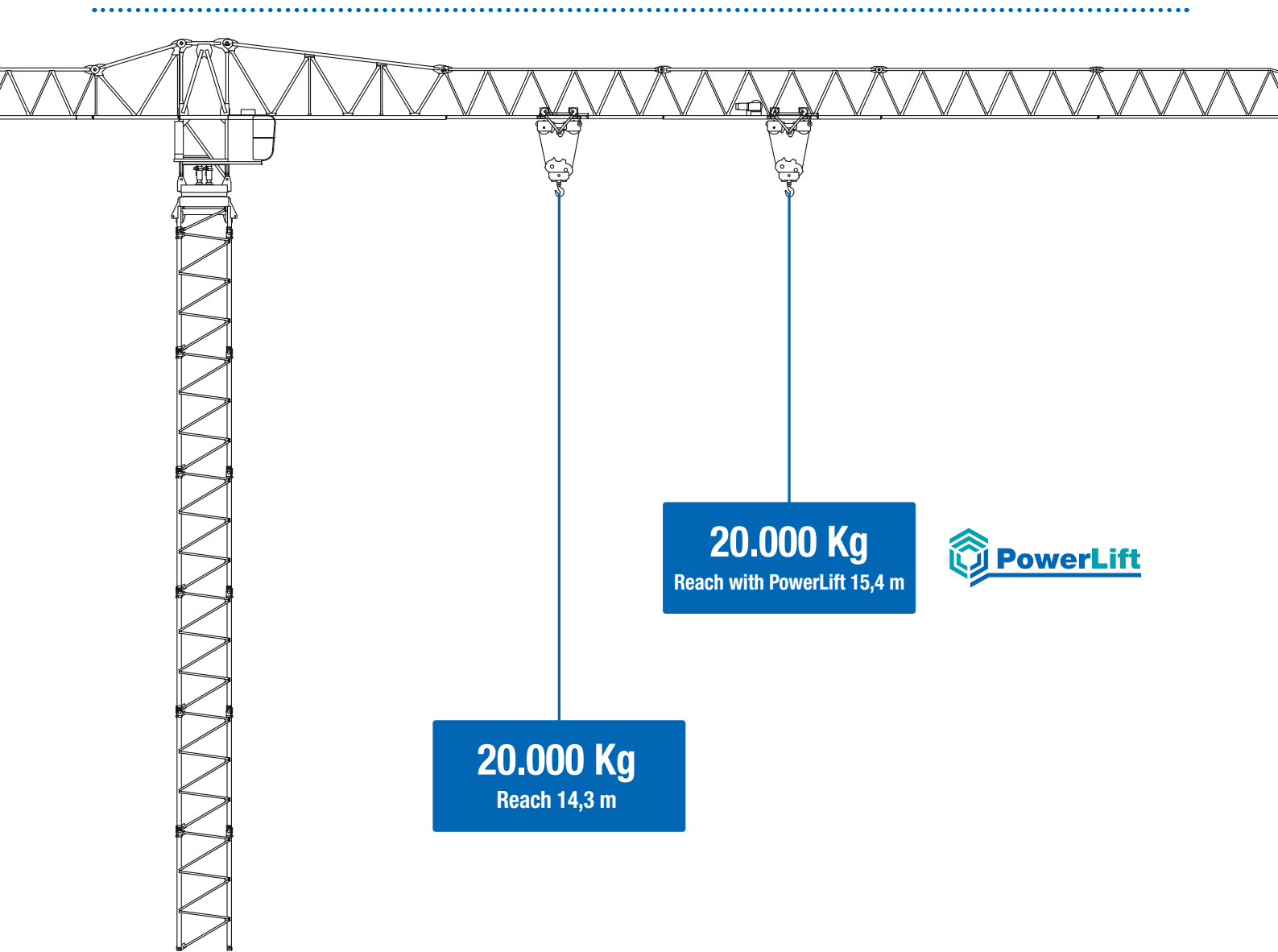
because they do not need a fan, are connected through rapid connections, with their noise emission being noticeably reduced thanks to their efficiency.

There are several advantages during lifting:

- The “positioning mode” supports operation at micro-speeds, achieving total control of the maneuver.
- The series includes in its hoist mechanisms the Effi-Plus system, which improves the lifting and lowering speed of light loads by up to 70%. Compared to a motor with the same power but without this system, Effi-Plus increases the productivity of lifting operations by up to 27% without increasing the power or energy consumption of the crane.
- The new mechanisms also allow the optional use of large-capacity Lebus drums, with up to 1,450 meters of cable (4,755 ft), resulting in a great range of hook heights.

Most of the principal crane maneuvers are integrated in a single electrical cabinet, situated on the platform, which simplifies crane maintenance and communication with the operator during these maneuvers.





20.000 Kg
Reach with PowerLift 15,4 m



20.000 Kg
Reach 14,3 m

POWERLIFT SYSTEM

LC2100 series cranes include **PowerLift**, a momentum control and limiting method which improves the load diagram by 10% at reduced speeds. With PowerLift, the crane can move the nominal load shown in the diagram over greater distances.

Example: The 21 LC 400 / 20t crane, with an 80 meter jib (262.5 ft), can suspend its maximum load (20,000 kg – 44,090 lb) over a jib length of up to 14.3 meters (46.9 ft).

Thanks to the **PowerLift system**, it can load those same 20,000 kg over a span of 15.4 meters (50.5 ft). And if this crane has a jib-end load of up to 3,000 kg (6,610 lb), with the **PowerLift system** it can load up to 3,300 kg (7,280 lb), i.e., 10% more.

SPECIAL APPLICATIONS

Based on the standard designs, **LINDEN COMANSA** also deals with increasingly specific requests, designing developments for special applications: the jibs for the partial disassembly of the jib and counterweights, vital in the construction of hyperbolic cooling towers, plus the incorporation of electrical connection points at crane hook level for handling auxiliary gear, are just some of the examples of essential applications in the LC2100 series.



LC2100 series

GENERAL CHARACTERISTICS

- **Five models**, with maximum loads of between 12 and 48 tons (26,450 and 105,820 lb).
- High modularity among cranes of the same series, thanks to the **Flat-Top®** system.
- **Double trolley** system with automatic reeving change.
- **Quick**, easy and safe installation of light modules.
- **High-speed mechanisms** with large cable capacity.



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