



LC1600 series

Flat-Top System®
Maximum loads of 8, 10 and 12 tonnes
Effi-Plus high-speed lifting mechanisms



LC1600 series



LC1600 SERIES

Modularity and ease of both assembly and transport. These are two main characteristics of the **Flat-Top** system, which Linden Comansa always adopts in the design of its cranes, with the LC1600 series as a new example of this.

For its **8 to 12 tonne loading capacity**, this series occupies the space between the LC1100 (5 to 8 tonnes / 11,020 to 17,640 lbs.) and LC2100 (12 to 48 tonnes / 26,450 to 105,820 lbs.) families. What's more, the LC1600 family combines the advantages of both series, sharing numerous elements with them.



The series comprises the 16 LC 185, 16 LC 220 and 16 LC 260 models having different maximum load versions:

Model	Version (Máx. load)	Max. jib length	Jib-end load		Max. free standing height
			Normal	Powerlift	
16 LC 185	8 tons 17,650 lbs.	65 m 213 ft.	1.950 Kg 4,299 lbs.	2.140 Kg 4,718 lbs.	65 m 213 ft.
	10 tons 22,040 lbs.	65 m 213 ft.	1.800 Kg 3,968 lbs.	1.980 Kg 4,365 lbs.	64,5 m 213 ft.
	12 tons 26,450 lbs.	65 m 213 ft.	1.800 Kg 3,968 lbs.	1.980 Kg 4,365 lbs.	64,5 m 213 ft.
16 LC 220	10 tons 22,040 lbs.	65 m 213 ft.	2.150 Kg 4,740 lbs.	2.360 Kg 5,205 lbs.	64,5 m 213 ft.
	12 tons 26,450 lbs.	65 m 213 ft.	2.150 Kg 4,740 lbs.	2.360 Kg 5,205 lbs.	64,5 m 213 ft.
16 LC 260	10 tons 22,040 lbs.	70 m 229.7 ft.	2.150 Kg 4,740 lbs.	2.360 Kg 5,205 lbs.	64,5 m 213 ft.
	12 tons 26,450 lbs.	70 m 229.7 ft.	2.150 Kg 4,740 lbs.	2.360 Kg 5,205 lbs.	64,5 m 213 ft.

MAXIMUM COMPATIBILITY

The jib sections and counterweights of the LC1600 series are the same as those of the LC1100. The more compact counter-jib of the LC1600 is compatible with that of the LC1100 series, helping to **reduce its counter-jib radius**.

In addition, the trolley and lifting mechanisms and the trolley-hook unit of the 8t cranes of the LC1100 series can be used in the 8t cranes of the LC1600 series, which is a great advantage to those customers who have cranes of both series.

The LC1600 series has the same 2-metre wide tower sections as the LC2100, as well as the climbing cage,

and the 4, 5 and 6 metre folding cross bases. With a transition section, LC1600 series cranes can be mounted on 2.5 metre wide tower sections, achieving free-standing heights of **over 100 metres (325 ft)**.

The double trolley system on these cranes is similar to that successfully used in the LC1100 and LC2100 series, although adapted to maximum loads of 12 tonnes. The trolley-hook unit, with pre-installed reevings, comes in a frame enabling its assembly, transport and storage.





SIMPLE ASSEMBLY AND TRANSPORT

The innovative design of the 21 LC 750 and its numerous advantages have also been applied to the LC1600 series. The main difference is that these cranes **do not have an apex element** as such. The first counter-jib section is installed on the rotating part; once assembled, the first jib section is joined to one end and the rest of the counter-jib to the other.

This first counter-jib section, which also houses the lifting mechanism, is more compact than the usual apex elements. As a result, transport is easier,

avoiding unloading manoeuvres before assembly, achieving cost savings on accessory equipment and streamlining assembly work.

The jib sections are narrow and the tower sections come in a panel structure, which facilitates the transport of the crane. Moreover, the parts of the LC1600 have been designed with light assembly weights (the heaviest is the slewing part, which is under 6 tonnes / 13,230 lbs.), enabling **faster and more secure assembly**.

HIGH-SPEED LIFTING MECHANISMS

The lifting mechanisms include the Linden Comansa **Effi-Plus system**, which improves the lifting and lowering speed of light loads by up to 70%. This helps increase the productivity of lifting operations by up to 29%, without any increase in power or greater energy consumption.

Together with the standard lifting mechanism (24 or 37 kW / 32 or 50 hp, depending on the model), the LC 1600 series offers two optional mechanisms of 50 and 65 kW / 67 and 87 hp, with which lifting speeds of **up to 320 metres (1,050 ft) /minute** can be attained. The 65 kW mechanism also offers the possibility of including a Lebus drum with capacity for 1,320 metres of cable (4,330 ft).

The lifting, trolley and slewing manoeuvres have frequency variation, allowing the loads to be distributed **precisely and smoothly**.

During the slewing movement, the frequency variation helps control the jib start-up and stopping procedures, providing the operator with smooth and precise load handling manoeuvres. The smaller size and heating of the motor and use of the same brake and weathervane employed in most of the Linden Comansa cranes means fewer potential maintenance problems and the need for spare parts.



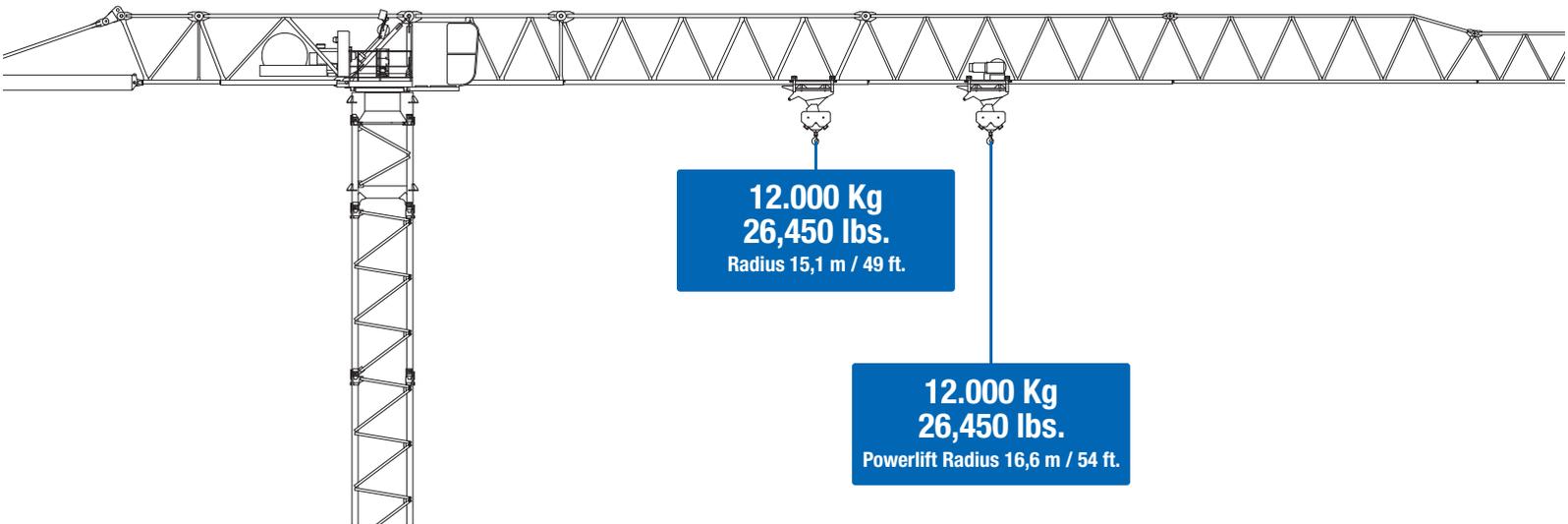
POWERLIFT SYSTEM

LC1600 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 16 LC 260 / 12 t crane, with a 70 metre jib (230 ft), can suspend its maximum load (12,000 kg / 26,450 lbs) over a radius of up to 15.1 metres (49 ft). Thanks to the **PowerLift** system, it can load those



12,000 kg over a radius of 16.6 metres (54 ft). And if this crane has a jib-end load of up to 2,150 kg (4,740 lbs), with the **PowerLift** system it can load up to **2,360 kg (5,205 lbs)**, i.e., 10% more.



PANORAMIC CAB

The **panoramic** cab is included as standard in the LC1600 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.

Both cabs may include optional features such as air-conditioning, the **Lincomatic** digital indicator system and Anti-Collision and Prohibited Areas indicators too.

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GENERAL CHARACTERISTICS

Cranes with **Flat-Top** design, and jib length of up to 70 m (229 ft).

Three models with different versions according to their maximum load:

- 16 LC 185 8t
- 16 LC 185 10t
- 16 LC 185 12t
- 16 LC 220 10t
- 16 LC 220 12t
- 16 LC 260 10t
- 16 LC 260 12t

Design without apex element, which speeds up the assembly.

Effi-Plus high-speed mechanisms which improve productivity by up to 70%.

PowerLift system which helps improve the load diagram by 10% at reduced speeds.

Indicator system and **Panoramic XL** cab as optional features.



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