

EN

FCC 500 E

www.liebherr.com

LIEBHERR

Port and transshipment solutions



Maximum lifting capacity
105 t (hook operation)
90 t (grab operation)



Maximum outreach
50 m

Technical data

Speeds

Hoisting/lowering (SWL on rope)	
Maximum hoisting/lowering up to 32t SWL	0 m/min - 140 m/min
Maximum hoisting/lowering with 50t SWL	0 m/min - 110 m/min
Maximum hoisting/lowering with 65t SWL	0 m/min - 85 m/min
Maximum hoisting/lowering with 75t SWL	0 m/min - 74 m/min
Maximum hoisting/lowering with 90t SWL	0 m/min - 61 m/min
Maximum hoisting/lowering with 105t SWL	0 m/min - 53 m/min
Slewing	
Speed	0 rpm - 1.6 rpm
Range	360° unlimited
Luffing	
Maximum luffing	0 - 85 m/min

Design conditions

Maximum admissible	
Ambient working temperature	-20°C to +45°C
Humidity maximum	93%
Maximum wind speed	
Working condition	20 m/sec
Parking condition	63 m/sec

Electric motor

Type of motors	three phase squirrel cage
Starting	frequency controlled
Main power supply (standard)	690V (60Hz), 3 ph
Auxiliary power supply (standard)	440V (60Hz), 3 ph+N

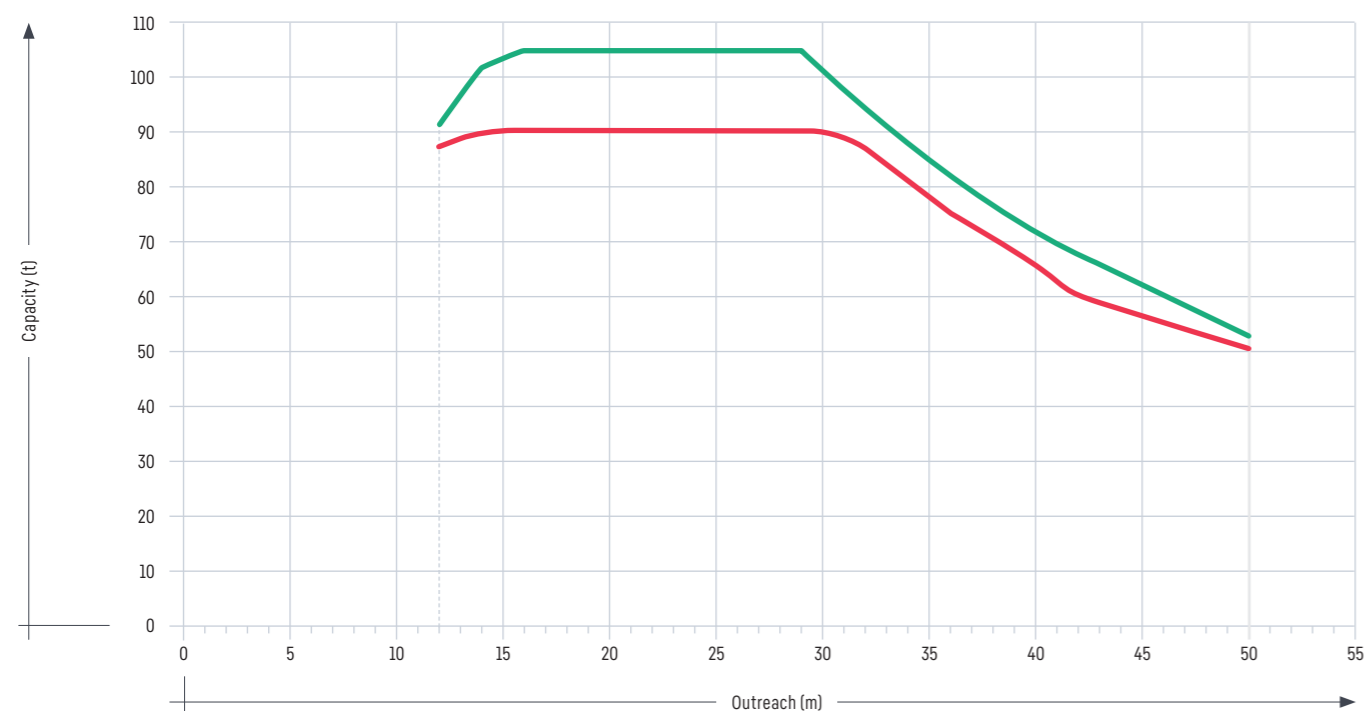
Crane classification

The maximum group classification according to FEM 1.001 (latest edition) relates to full load cycles and is as follows:

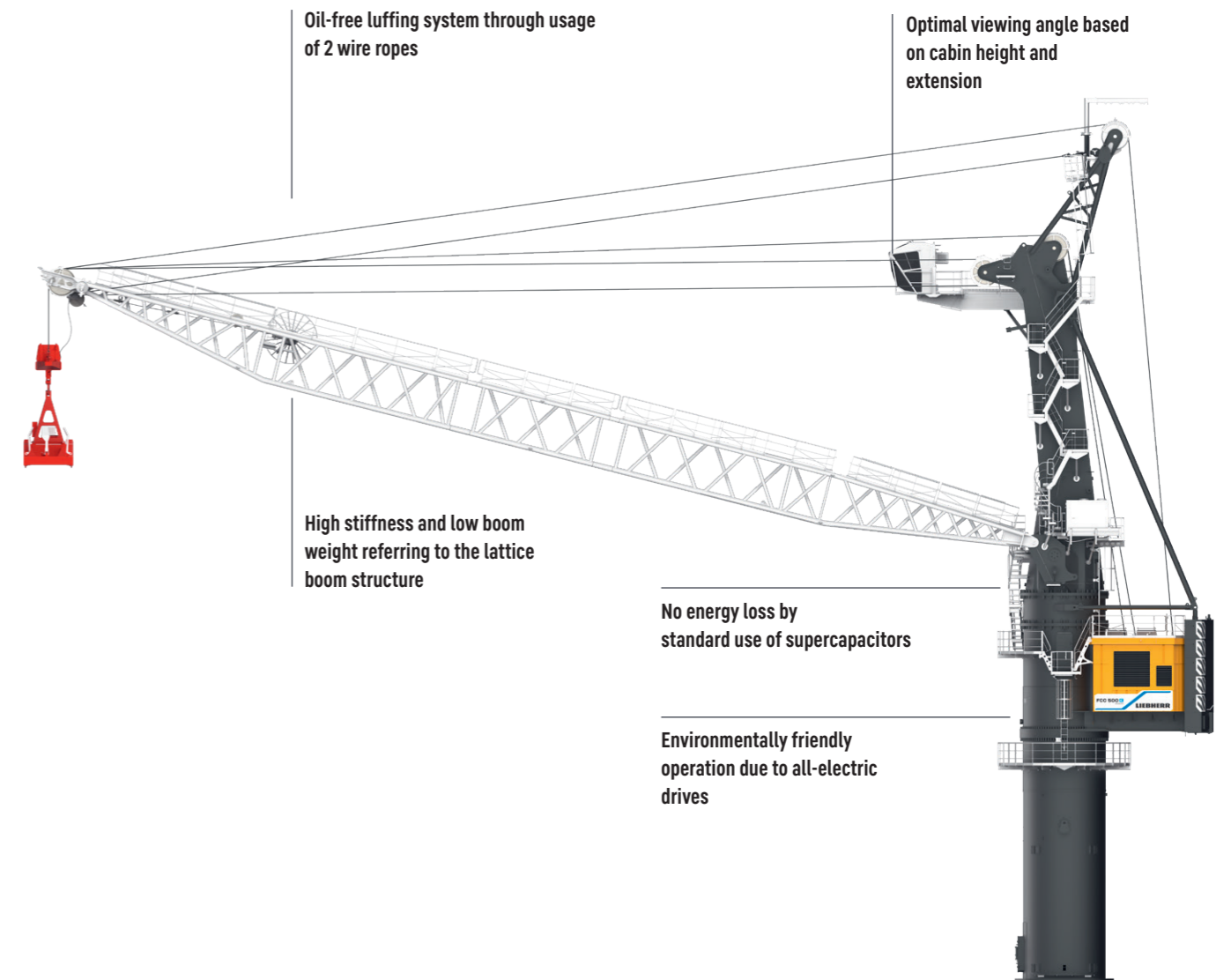
	≤ 65t	≤ 90t
Crane as a whole	A8/Q3/U7	A6/Q3/U5

Load diagram 50 m

■ grab operation ■ hook operation



General arrangement

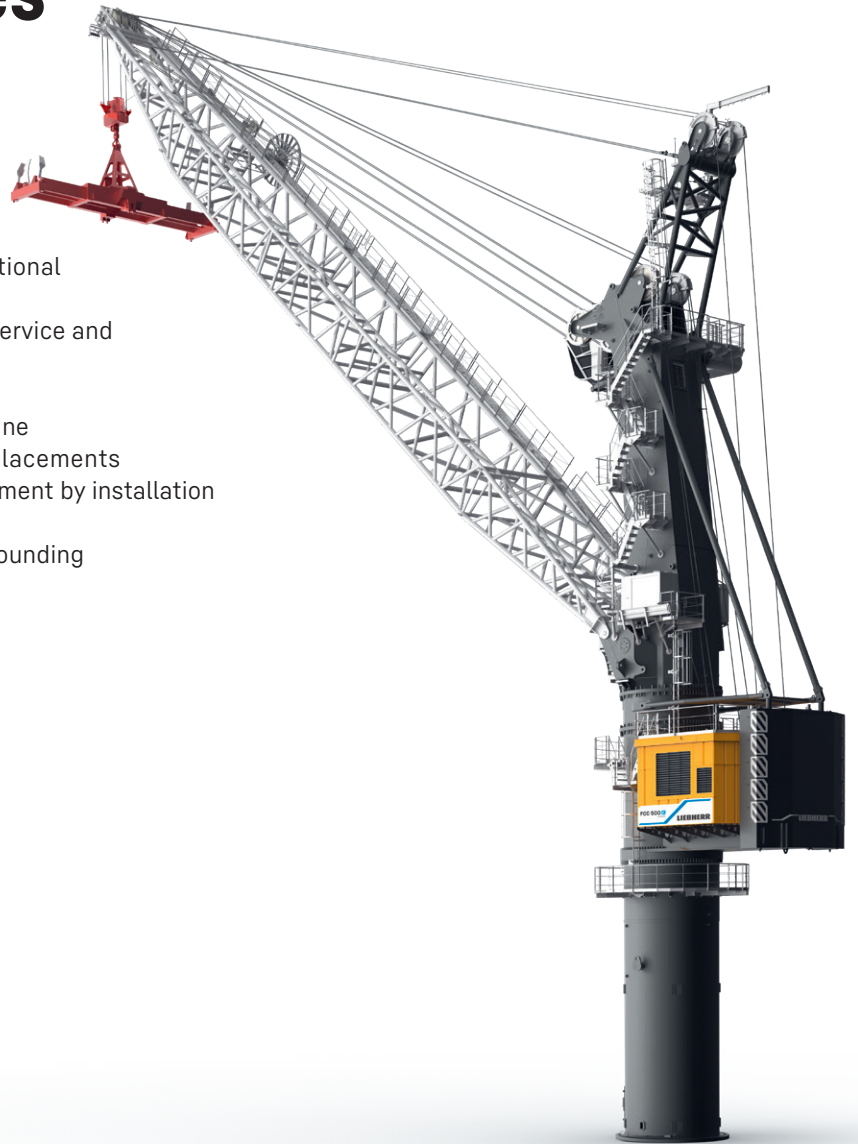


Advantages

- All-electric driven crane
- Precise and reliable crane control system Litronic – made by Liebherr
- Simplified maintenance of electrical components
- Energy-efficient system due to energy recovery system by Liebherr
- Closed water cooling system for power electronics
- Fulfilment of customer-specific requirements through a variety of crane configurations and options
- Turnover performance up to 2,000 t per hour in dry bulk handling

Optional features

- Spacious 10m³ cabin
- Comfort ascent to crane driver's cabin
- Increased stability and load charts with optional 130 t counterweight
- Additional platforms and boom walkway for service and maintenance purposes
- Intelligent automatic greasing systems
- Camera systems for different areas of the crane
- Optional service devices for component replacements
- Operational flexibility for special lifting equipment by installation of electrical cable drum
- Illumination of boom walkway and crane surrounding



SmartGrip®

The SmartGrip technology is capable of optimising the filling rate of the grab in a self-learning manner. In this way, SmartGrip learns after only a few lifting cycles how to maximise capacity utilisation of the grab even for less experienced crane operators.

LiCAS

Liebherr cranes can be equipped with the Liebherr Collision Alert System (LiCAS). This additional assistance system sets new levels in operational safety between other Liebherr cranes during heavy-duty cargo handling. LiCAS supports the crane driver by permanently detecting the distances and warns of potential unsafe conditions.

LiDAT smartApp

With LiDAT smartApp, it is possible to analyse your crane (operating and performance) data and get answers from it almost immediately. That leads to direct decisions. The ability to work faster gives operators a competitive edge they did not have before. The data analytics helps to detect bottlenecks and to identify new opportunities.

LiSIM®

Liebherr simulator increases port safety and productivity by providing a cost-effective and highly efficient crane operator training solution. The development of this sophisticated training tool was prompted by Liebherr's extensive experience in crane operator training. Based on the original Litronic crane control system, LiSIM is the only realistic virtual solution available on the market for the training of the precise and innovative control system of Liebherr cranes.