FCC 310

LIEBHERR

Port and transshipment solutions

Maximum lifting capacity
45 t (hook operation)
30 t (grab operation)

Maximum outreach
32 m

Technical data

Speeds

Hoisting/lowering (SWL on rope)

Hoisting/lowering up to 10t SWL	0m/min–130m/min
Hoisting/lowering with 30t SWL	0m/min–64m/min
Hoisting/lowering with 45t SWL	0m/min–43m/min

Slewing

Speed	0rpm–1.2rpm
Range	360° unlimited

Luffing time (from 5.5–32m)

Maximum luffing time (jib length 32m)	approx. 49sec

Design conditions

Maximum admissible

Ambient working temperature	-20°C to +45°C
Humidity maximum	93%

Maximum wind speed

Working condition	20m/sec
Parking condition	63m/sec

Electric motor

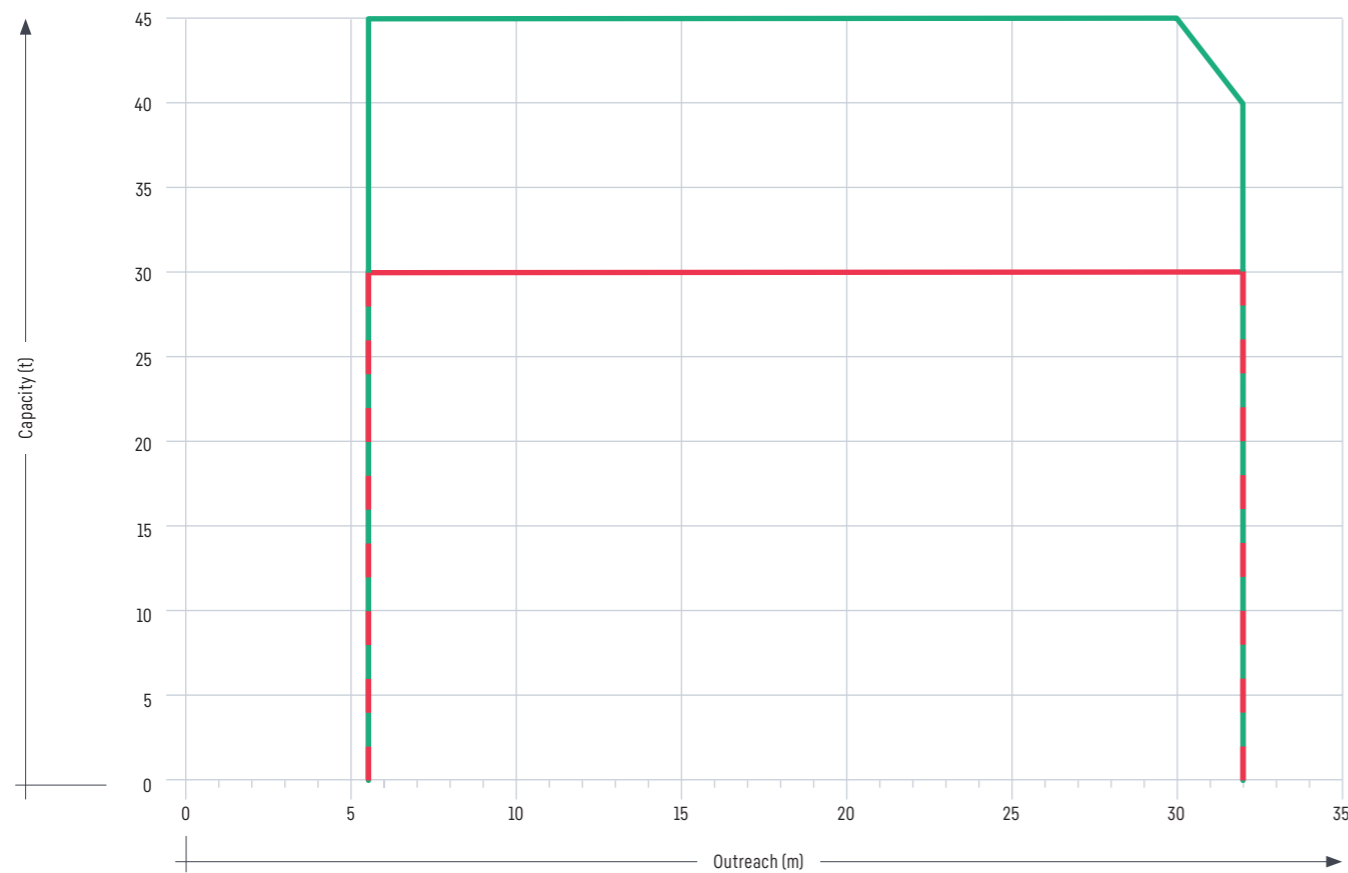|	
Type of motor	three phase squirrel cage
Class of protection	IP 55
Starting	star delta
Nominal output	470kW (50Hz) / 540kW (60Hz) S6–40% ED
Main power supply	400V (50Hz)/440V (60Hz)
Auxiliary power supply	400V, 3ph+N

Crane classification

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

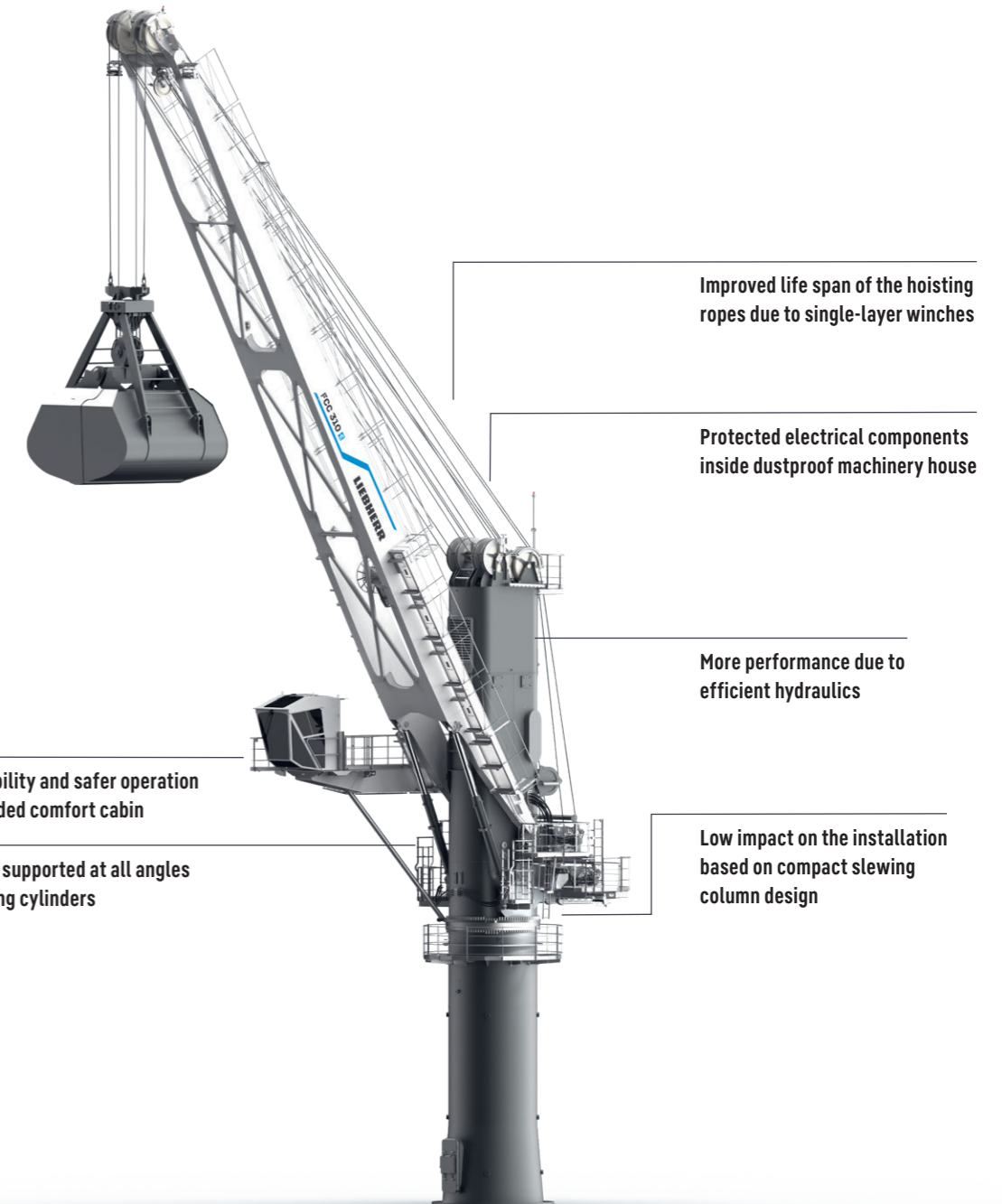|	≤30t	≤45t
The crane as a whole	A8 / Q3 / U7	A6 / Q3 / U5

Load diagram 32m

■ grab operation ■ hook operation

Configuration with 30m outreach available

General arrangement

Improved life span of the hoisting ropes due to single-layer winches

Protected electrical components inside dustproof machinery house

More performance due to efficient hydraulics

Maximum visibility and safer operation through extended comfort cabin

Low impact on the installation based on compact slewing column design

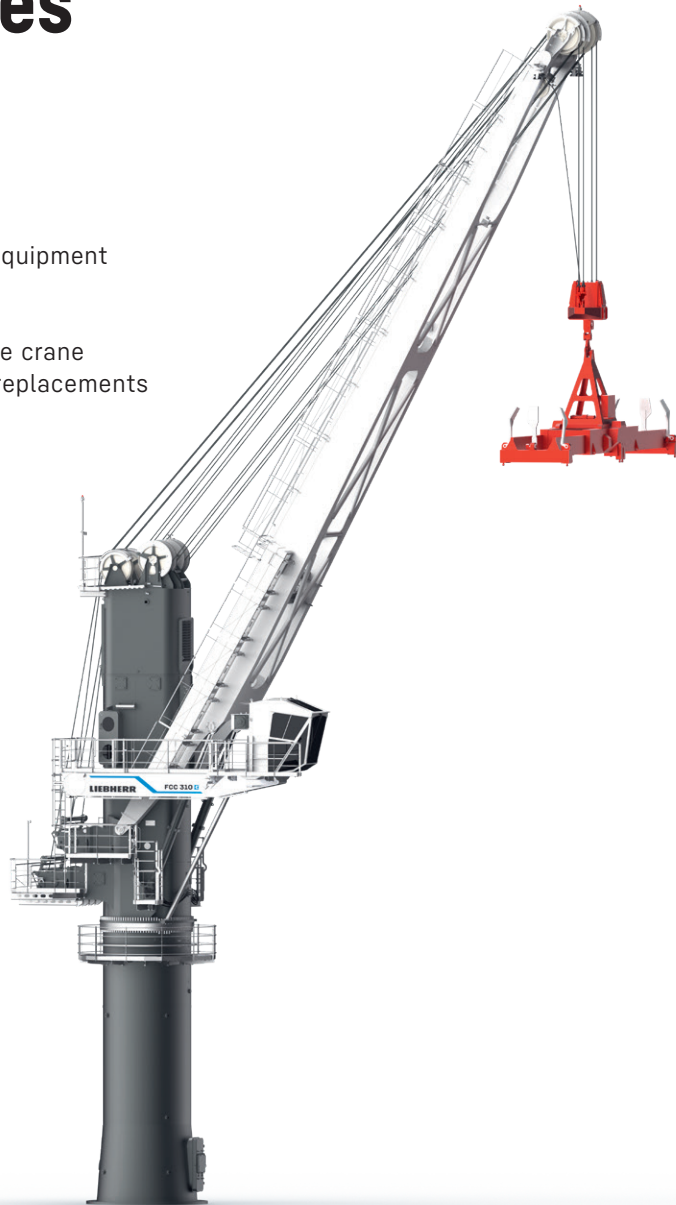Boom is firmly supported at all angles by double acting cylinders

Advantages

– Precise and reliable crane control system Litronic – made by Liebherr
– Components tested and proven for extreme conditions and performance
– Long life hydraulic luffing cylinders and hydraulic tubes
– Service friendly access to all components due to the maintenance platforms
– Less maintenance due to use of hydraulic tubes instead of hoses
– Turnover performance up to 1,000t per hour in dry bulk handling

Optional features

- Side-mounted 3m³ cabin
- Operational flexibility for special lifting equipment by installation of electrical cable drum
- Intelligent automatic greasing systems
- Camera systems for different areas of the crane
- Optional service devices for component replacements

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 during heavy-duty cargo handling. LiCAS supports the crane driver by permanently detecting the distances between other Liebherr cranes 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.