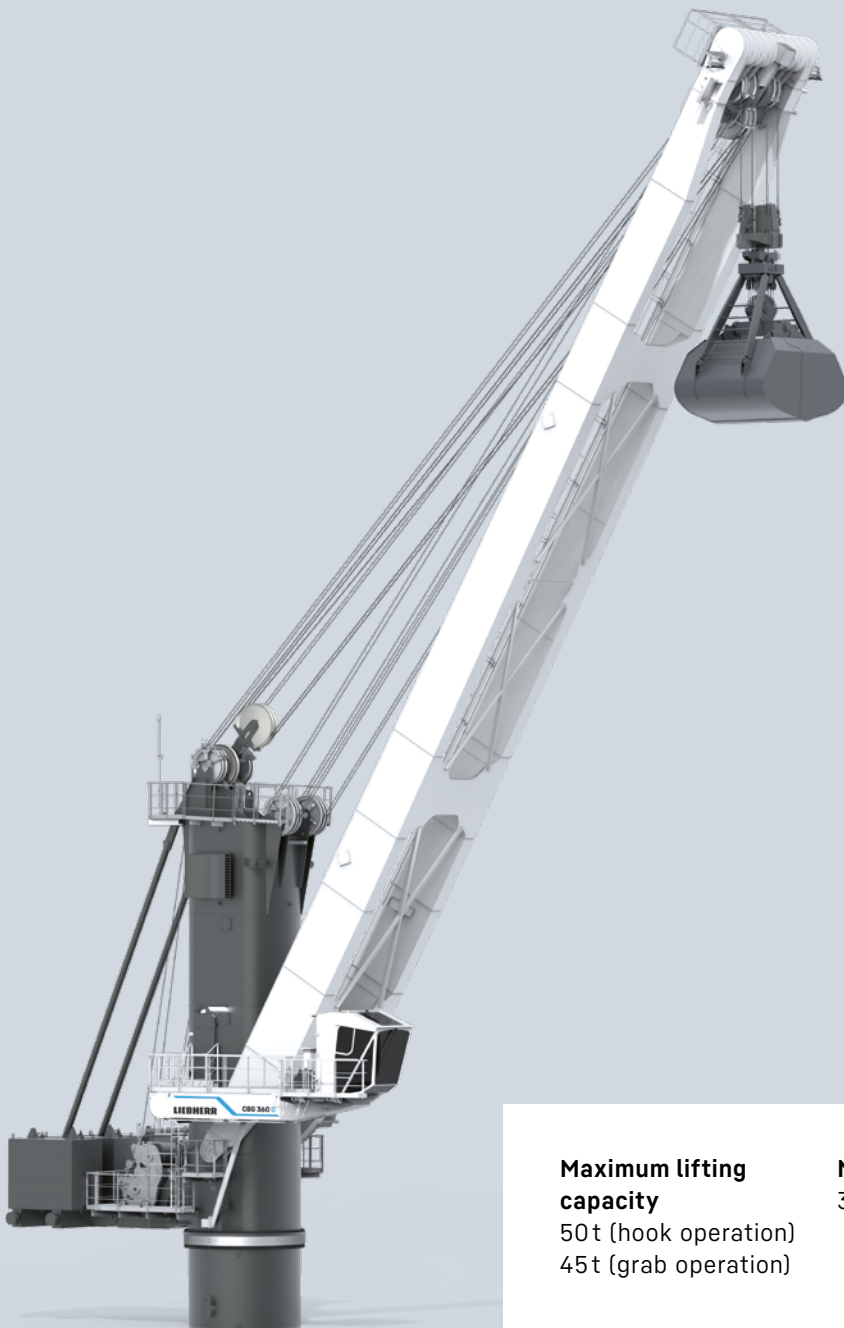# CBG 360

www.liebherr.com

LIEBHERR

Port and transshipment solutions

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

Maximum outreach
36 m

Ship size
Up to capesize

Technical data

Speeds

Hoisting/lowering	
Maximum hoisting/lowering up to 15 t SWL	0 m/min - 130 m/min
Maximum hoisting/lowering with 30 t SWL	0 m/min - 71 m/min
Maximum hoisting/lowering with 36 t SWL	0 m/min - 61 m/min
Maximum hoisting/lowering with 45 t SWL	0 m/min - 47 m/min
Maximum hoisting/lowering with 50 t SWL	0 m/min - 42 m/min
Slewing	
Speed	0 rpm - 1.4 rpm
Range	360° unlimited
Luffing time (12 m – 36 m)	
Maximum luffing time (jib length 36 m)	approx. 55 sec

Design conditions

Maximum admissible	
Heel/trim	5°/2° or 2°/5°
Ambient working temperature	-20°C to +45°C
Humidity maximum	93%
Maximum wind speed	
Working condition	20 m/sec (0,245 kN/m²)
Parking condition	63 m/sec

Electric motor

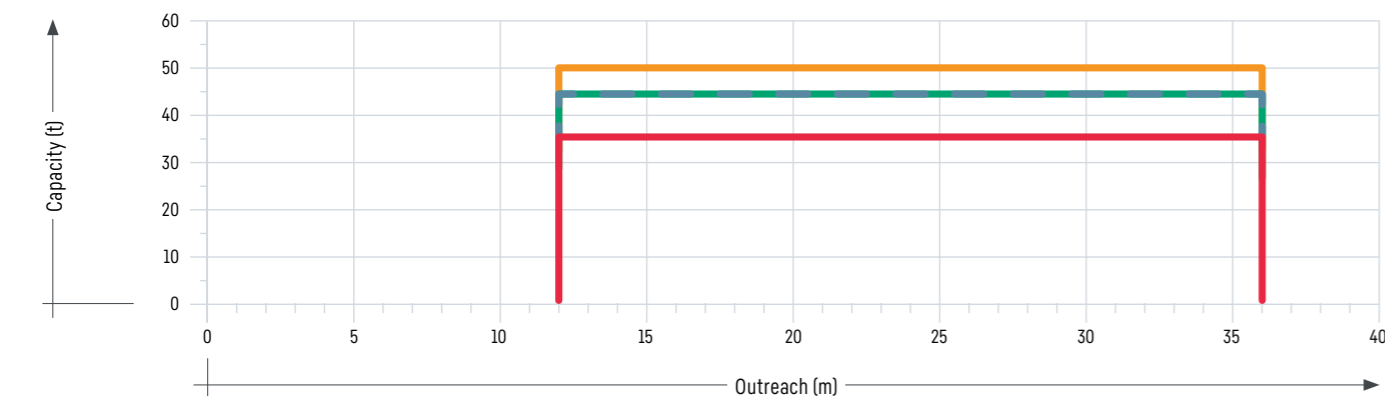| Type of motor	three phase squirrel cage
Class of protection	IP 55
Class of insulation	F
Starting	star delta
Nominal output	295 - 345 kW
	S6 - 40% ED
Main power supply range	400 V - 690 V
Auxiliary power supply	230 V, 3 ph

Crane classification

The maximum group classification according to FEM 1.001 (latest edition) of the CBG crane relates to full load cycles in grab operation and is as follows:

	≤ 36 t	≤ 45 t
The crane as a whole	A8 / Q3 / U7	A7 / Q3 / U6

Load diagram 32 m*

Legend: ■ Grab operation (open water) ■ Grab operation (sheltered water) ■ Hook operation (open water) ■ Hook operation (sheltered water)

Load diagram 36 m*

Legend: ■ Grab operation (open water) ■ Grab operation (sheltered water) ■ Hook operation (open water) ■ Hook operation (sheltered water)
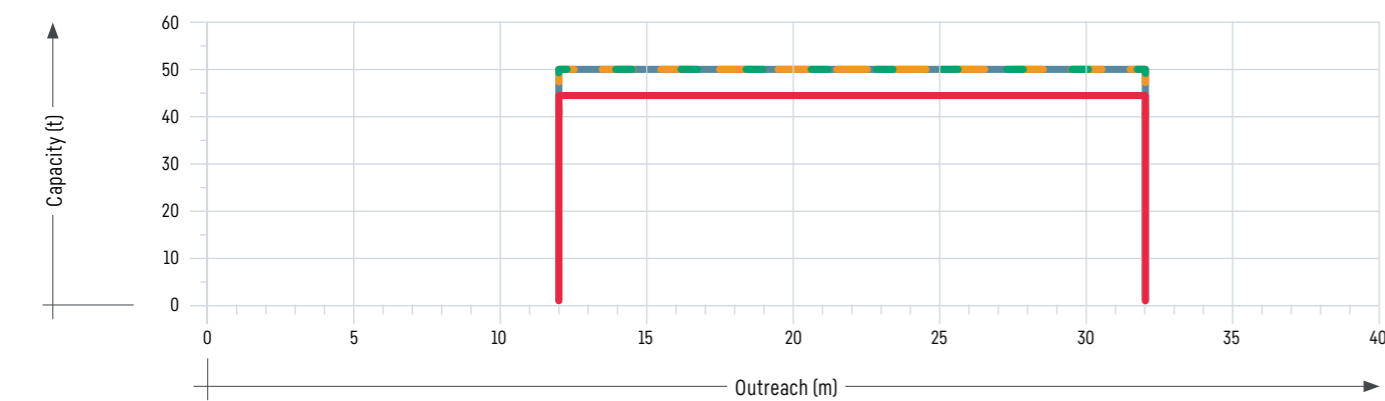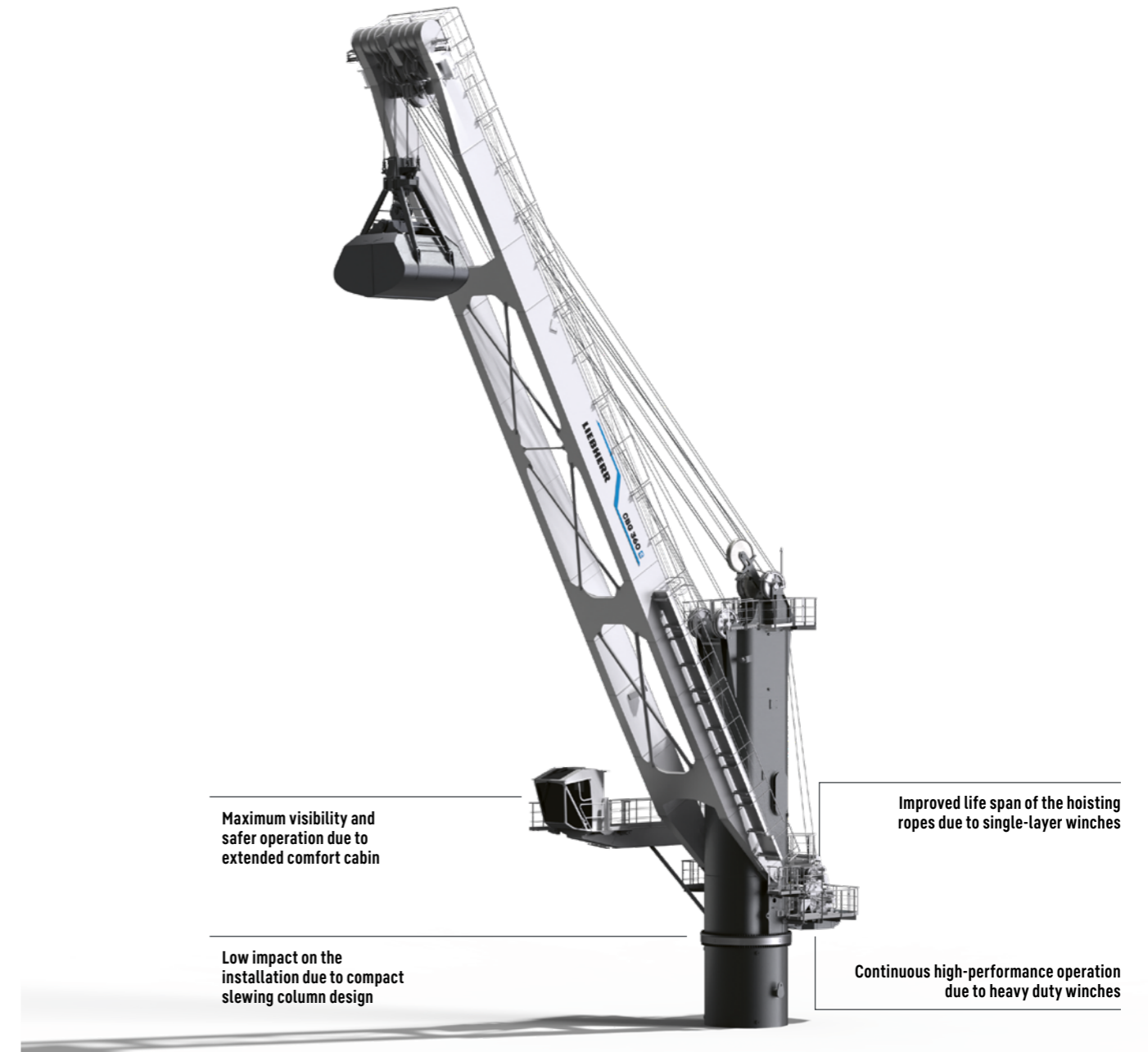

*RINA: "Rules for Loading and Unloading Arrangements and for other Lifting Appliances on Board Ships" (edition 2021)

General arrangement

Maximum visibility and safer operation due to extended comfort cabin

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

Low impact on the installation due to compact slewing column design

Continuous high-performance operation due to heavy duty winches

Advantages

– Speed with empty hook up to 130 m/min (<15 t)
– Energy-efficient hydraulic system
– Larger and strengthened pulleys for increased life span of wire ropes and reduction of abrasion
– Strengthened ropes with increased lifetime
– Ergonomic driver's seat and control layout

Optional features

- Extended working radius via eccentric platform up to 12 m
- Heavy-lift winch configuration: 80 t (hook operation), 65 t (grab operation)
- Increased stability and load charts with counterweight
- Additional platforms and boom walkway for service and maintenance purposes
- Intelligent automatic greasing systems
- Complementary service devices
- Operational flexibility for special lifting equipment by installation of electrical cable drum

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 maximize 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 several 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 bottle necks and to identify new opportunities.

LiSIM®
LiSIM for the CBG series 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.