Mobile Harbour Crane

LHM 600

High Rise Version

Maximum lifting capacity
144 t

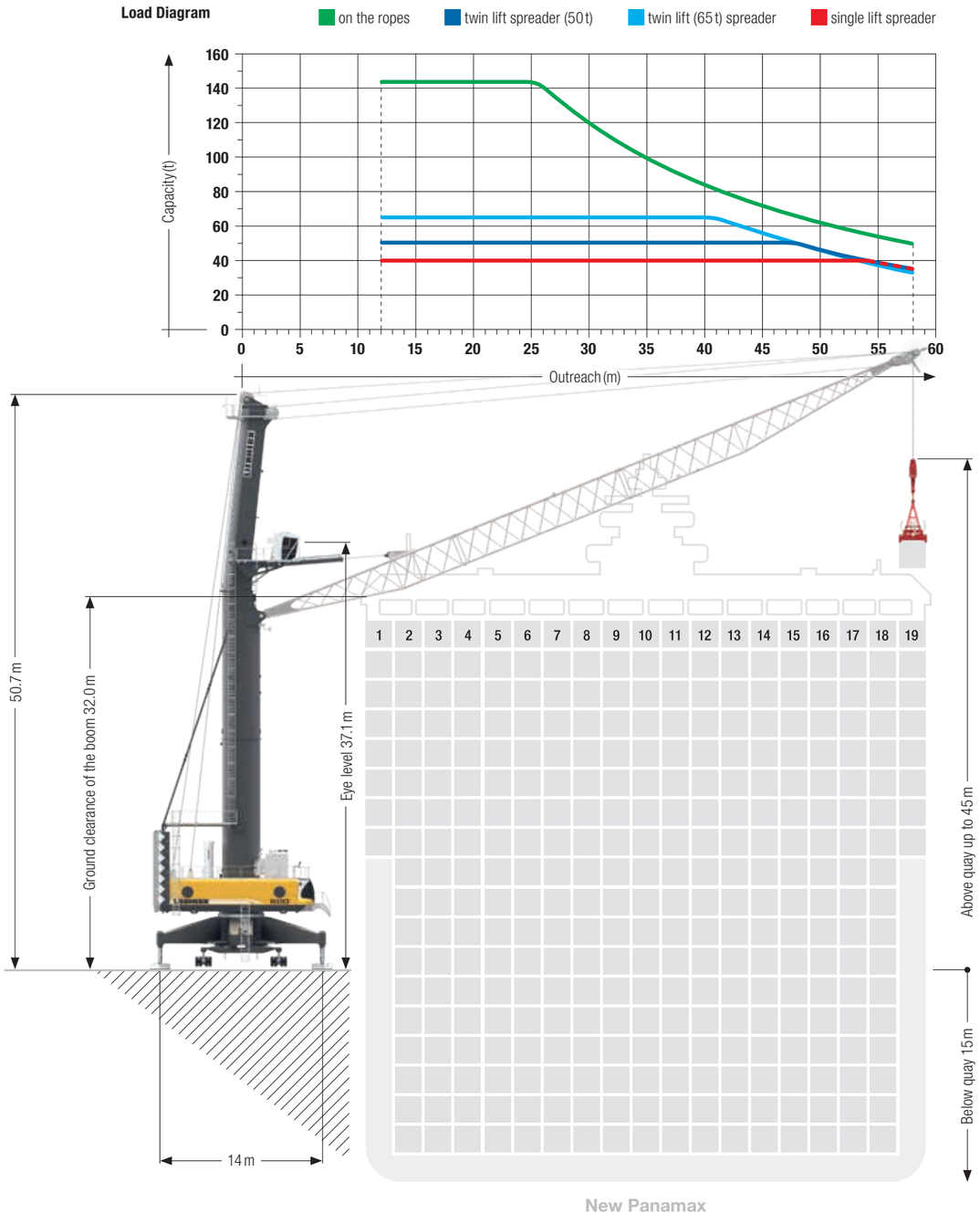
Maximum outreach
58 m

Ship size
New Panamax
Ultra Large Container Vessel

LIEBHERR

Main Dimensions

Container Operation



New Panamax

Lifting Capacities

Container Operation

Maximum crane capacity 104 t

	Spreader operation under			Hook operation on the ropes
Outreach	Single lift	Twin lift (50 t)	Twin lift (65 t)	Standard
(m)	(t)	(t)	(t)	(t)
12	41.0	50.0	65.0	104.0
14	41.0	50.0	65.0	104.0
16	41.0	50.0	65.0	104.0
18	41.0	50.0	65.0	104.0
20	41.0	50.0	65.0	104.0
22	41.0	50.0	65.0	104.0
24	41.0	50.0	65.0	104.0
26	41.0	50.0	65.0	104.0
28	41.0	50.0	65.0	104.0
30	41.0	50.0	65.0	104.0
33	41.0	50.0	65.0	104.0
34	41.0	50.0	65.0	102.0
36	41.0	50.0	65.0	94.8
38	41.0	50.0	65.0	88.6
40	41.0	50.0	65.0	82.7
42	41.0	50.0	62.8	77.3
44	41.0	50.0	57.7	72.2
47	41.0	50.0	50.9	65.4
48	41.0	49.3	49.0	63.5
50	41.0	45.4	45.1	59.6
52	41.0	41.9	41.6	56.1
53	41.0	40.3	40.0	54.5
54	40.5	38.8	38.5	53.0
56	37.7	36.0	35.7	50.2
58	35.3	33.6	33.3	47.8

Weight rotator 3.5 t; Weight fully automatic (telescopic) spreader 9 t
Weight (50 t) twin lift spreader 10.7 t; Weight (65 t) twin lift spreader 11.0 t

Maximum crane capacity 144 t

	Spreader operation under			Hook operation on the ropes
Outreach	Single lift	Twin lift (50 t)	Twin lift (65 t)	Standard
(m)	(t)	(t)	(t)	(t)
12	41.0	50.0	65.0	144.0
14	41.0	50.0	65.0	144.0
16	41.0	50.0	65.0	144.0
18	41.0	50.0	65.0	144.0
20	41.0	50.0	65.0	144.0
22	41.0	50.0	65.0	144.0
24	41.0	50.0	65.0	144.0
25	41.0	50.0	65.0	144.0
28	41.0	50.0	65.0	130.4
30	41.0	50.0	65.0	120.0
33	41.0	50.0	65.0	106.1
34	41.0	50.0	65.0	102.0
36	41.0	50.0	65.0	94.8
38	41.0	50.0	65.0	88.6
40	41.0	50.0	65.0	82.7
42	41.0	50.0	62.3	77.3
44	41.0	50.0	57.2	72.2
47	41.0	50.0	52.6	65.4
48	41.0	48.8	48.5	63.5
50	41.0	44.9	44.6	59.6
52	41.0	41.4	41.1	56.1
53	41.0	39.8	39.5	54.5
54	40.0	38.3	38.0	53.0
56	37.2	35.5	35.2	50.2
58	34.8	33.1	32.8	47.8

Weight rotator 4.0 t; Weight fully automatic (telescopic) spreader 9 t
Weight (50 t) twin lift spreader 10.7 t; Weight (65 t) twin lift spreader 11.0 t

Standard Configuration / Turnover up to 32 Cycles per Hour
Pactronic® / Turnover up to 38 Cycles per Hour

Precision to perfection: With incredibly short acceleration times for all crane motions, Liebherr is the top performer in container handling.

- The Pactronic® Hybrid Drive System is characterized by an energy storage device, which is added to the drive system as a secondary energy source. This results in substantially higher hoisting and lowering speeds. Not only is the crane's efficiency increased, but also the turnover (+30%). In addition, the crane's energy consumption is significantly reduced (-30%).
- Liebherr Cycoptronic® is an accurate, sway-free load motion control system that uses in-house designed software. Cycoptronic® allows for direct load positioning and aids the crane driver in mastering his task. With Cycoptronic® turnover, safety and the confidence of the operator will be improved.
- When loading/unloading containers, the crane driver needs to slew the crane causing the container to deviate from its parallel position to the vessel. With the Advanced Container Control System the container remains parallel to the vessel which eases the positioning for the crane driver and boosts handling figures.
- The Liebherr hydrostatic drive is the most reliable and highest performing drive system for mobile harbour cranes. Independent closed loop hydraulic systems utilize the minimum number of components to guarantee highly responsive, smooth and precise operation while maximizing operational safety.

Technical Data

Container Operation

Capacity and Classification

	Capacity	Classification
Container operation	≤ 73 t	A8
Standard operation	≤ 73 t	A8

Main Dimensions

Min. to max. outreach	12 — 58 m
Height of boom fulcrum	30.6 m
Tower cabin height (eye level)	37.1 m
Overall height (top of tower)	50.7 m
Overall length of undercarriage	26.7 m
Overall width of undercarriage	8.0 m
Number of axle sets (standard)	26
Number of axle sets (optional)	28

Working Speeds

Hoisting / lowering	0 — 120 m/min
Slewing	0 — 1.6 rpm
Luffing (average horizontal speed)	0 — 58 m/min
Travelling	0 — 5.0 km/h

Propping Arrangements

Standard supporting base	14.0 m x 14.0 m
Standard pad dimension	5.5 m x 1.8 m
Standard supporting area of pads	9.9 m^2

Optional size of supporting pads and bases on request

Quay Load Arrangements

Uniformly distributed load	2.1 t/m^2
Max. load per tyre	5.7 t

Due to a unique undercarriage design the quay loads specified above can even be reduced. Pad sizes, supporting base and the number of axle sets can easily be adapted to comply with the most stringent quay load restrictions.

Weight

Total weight of crane in container version (104 t winch, 58 m boom, 12 m tower extension, Pactronic®)	approx. 598 t

Hoisting Heights

Above quay at minimum radius	45.0 m
Above quay at maximum radius	45.0 m
Below quay level (approx.)	15.0 m

Optional Equipment

Additional products and services

- Pactronic® – power by accumulator and electronics
- SmartGrip – intelligent grabbing
- Cycoptronic® – anti-sway system
- Teach-In – semi-automatic point to point system
- Sycratronic® – synchronizing crane control system
- Vertical Line Finder – diagonal pull preventing system
- Collision alert system
- LiDAT® – smartApp
- Economy software – for optimised fuel consumption
- Video monitoring system
- Radio remote control
- Autopropping undercarriage
- Cyclone air-intake system for the engine
- Low temperature package
- Customer-specific painting & logo
- Additional (driven) axle sets
- Axle sets equipped with foamed tyres
- Different supporting bases and pad sizes
- And many more as per customers' requirements

HM 3508.03.04 MCR-11953288-06.18_en
Subject to change without notice.

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