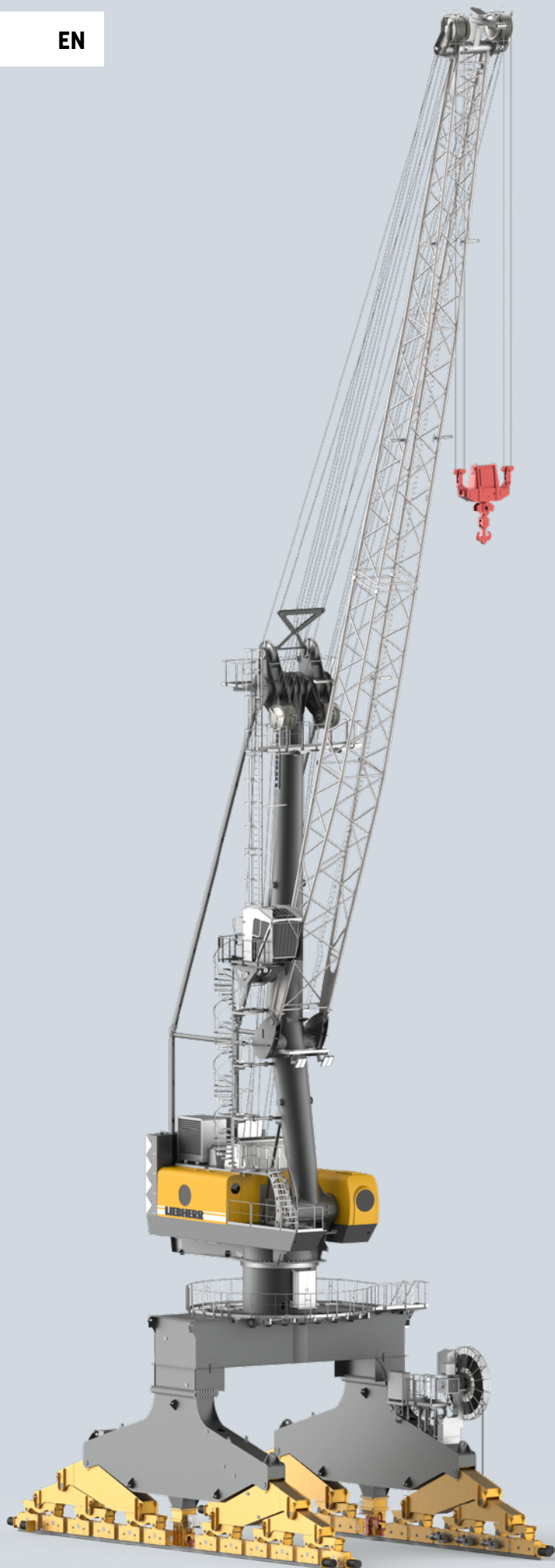


EN



LPS 420 E

www.liebherr.com

LIEBHERR

Mobile harbour crane

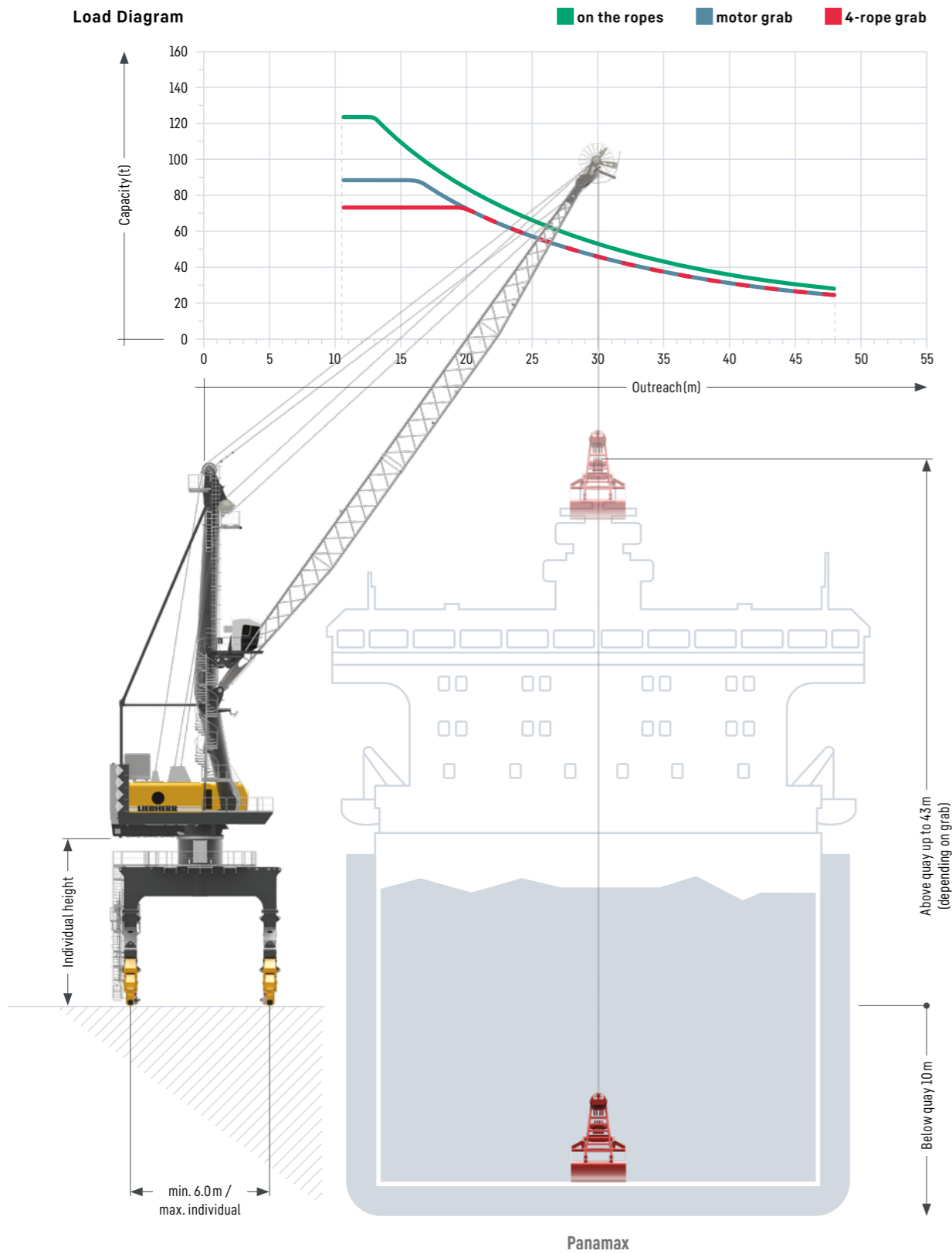
**Maximum
lifting capacity**
124 t

**Maximum
outreach**
48 m

Ship size
Panamax,
Post-Panamax

Main dimensions

Bulk operation



Lifting capacities

Bulk operation

Maximum crane capacity 124 t

Outreach (m)	Hook operation		motor grab (t)
	on the ropes (t)	4-rope grab (t)	
10.5	124.0	75.0	90.0
11	124.0	75.0	90.0
12	124.0	75.0	90.0
13	117.6	75.0	90.0
14	111.5	75.0	90.0
15	105.6	75.0	90.0
16	100.1	75.0	90.0
18	90.0	75.0	81.0
19	85.3	75.0	76.8
20	81.0	72.9	72.9
22	73.1	65.8	65.8
24	66.2	59.6	59.6
26	60.2	54.2	54.2
28	55.1	49.5	49.5
30	50.6	45.5	45.5
32	48.6	42.1	42.1
34	43.4	39.1	39.1
36	40.5	36.5	36.5
38	38.0	34.2	34.2
40	35.7	32.1	32.1
42	33.5	30.2	30.2
44	31.4	28.3	28.3
46	29.3	26.3	26.3
48	27.3	24.5	24.5

Weight ramshorn hook 3.0t
Weight rotator 3.5t

Maximum crane capacity 84 t

Outreach (m)	Hook operation		motor grab (t)
	on the ropes (t)	4-rope grab (t)	
10.5	84.0	45.0	52.0
11	84.0	45.0	52.0
12	84.0	45.0	52.0
13	84.0	45.0	52.0
14	84.0	45.0	52.0
15	84.0	45.0	52.0
16	84.0	45.0	52.0
18	84.0	45.0	52.0
19	84.0	45.0	52.0
20	81.0	45.0	52.0
22	73.1	45.0	52.0
24	66.2	45.0	52.0
26	60.2	45.0	52.0
28	55.1	45.0	48.9
30	50.6	45.0	45.0
32	48.6	41.6	41.6
34	43.4	38.6	38.6
36	40.5	36.0	36.0
38	38.0	33.8	33.8
40	35.7	31.7	31.7
42	33.5	29.8	29.8
44	31.4	27.9	27.9
46	29.3	26.0	26.0
48	27.3	24.2	24.2

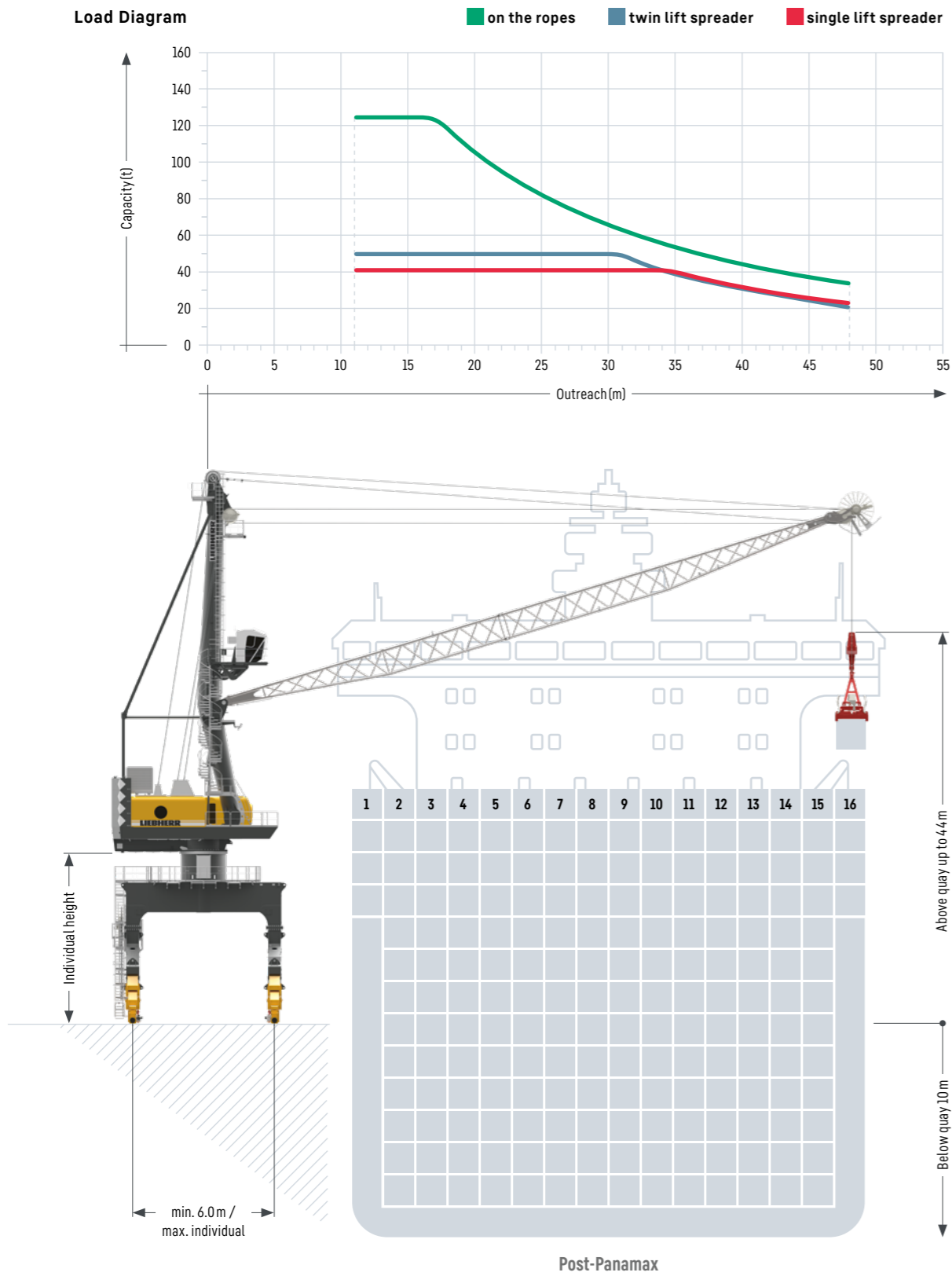
Weight ramshorn hook 3.0t
Weight rotator 2.5t

Turnover up to 1,200 t per hour

The LPS 420 E raises the bar in terms of electrical driven bulk handling performance.

Main dimensions

Container operation



Lifting capacities

Container operation

Maximum crane capacity 124 t

Outreach (m)	Spreader operation under		Hook operation on the ropes
	Single lift (t)	Twin lift (t)	Heavy lift (t)
11	41.0	50.0	124.0
12	41.0	50.0	124.0
13	41.0	50.0	124.0
14	41.0	50.0	124.0
16	41.0	50.0	124.0
18	41.0	50.0	113.9
20	41.0	50.0	102.5
22	41.0	50.0	92.5
24	41.0	50.0	83.8
26	41.0	50.0	76.2
28	41.0	50.0	69.7
30	41.0	49.9	64.1
32	41.0	45.0	59.2
34	41.0	40.8	55.0
35	40.5	38.8	53.0
36	38.8	37.1	51.3
38	35.6	33.9	48.1
40	32.7	31.0	45.2
42	30.0	28.3	42.5
44	27.3	25.6	39.8
46	24.6	22.9	37.1
48	22.0	20.3	34.5

Weight rotator 3.5t
 Weight fully automatic (telescopic) spreader 9t
 Weight twin lift spreader 10.7t

Maximum crane capacity 84 t

Outreach (m)	Spreader operation under		Hook operation on the ropes
	Single lift (t)	Twin lift (t)	Heavy lift (t)
11	41.0	50.0	84.0
12	41.0	50.0	84.0
13	41.0	50.0	84.0
14	41.0	50.0	84.0
16	41.0	50.0	84.0
18	41.0	50.0	84.0
20	41.0	50.0	84.0
23	41.0	50.0	84.0
24	41.0	50.0	83.8
26	41.0	50.0	76.2
28	41.0	50.0	69.7
30	41.0	50.0	64.1
32	41.0	46.0	59.2
34	41.0	41.8	55.0
35	41.0	39.8	53.0
36	39.8	38.1	51.3
38	36.6	34.9	48.1
40	33.7	32.0	45.2
42	31.0	29.3	42.5
44	28.3	26.6	39.8
46	25.6	23.9	37.1
48	23.0	21.3	34.5

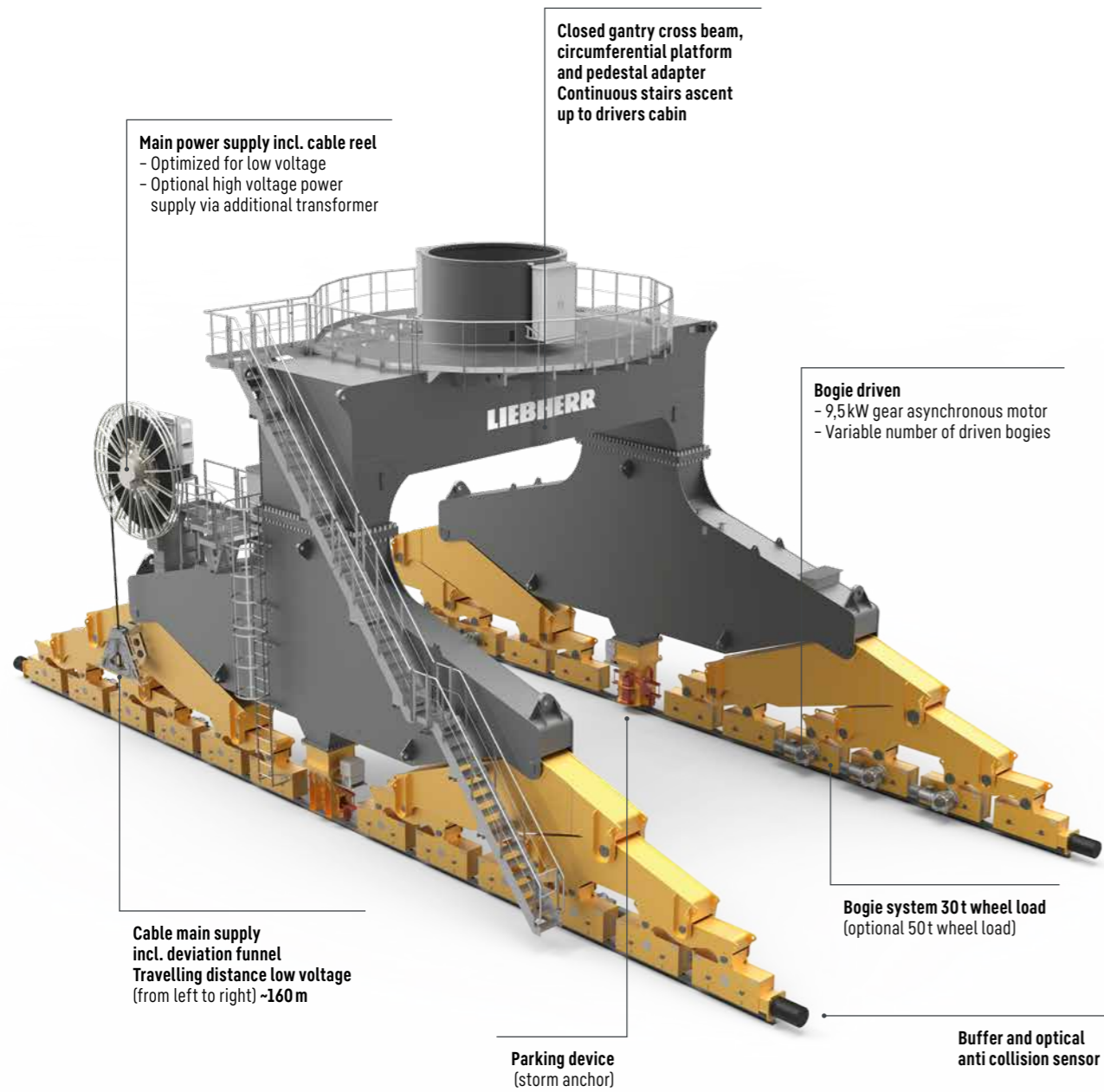
Weight rotator 2.5t
 Weight fully automatic (telescopic) spreader 9t
 Weight twin lift spreader 10.7t

Turnover up to 30 cycles per hour

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

Portal

Technical Data



Features

- Installed power: ~ 8-12 x 9.5kW
- Travelling speed: 30 m/min
- Designed for travelling with load
- Simultaneous operation of travelling, slewing, luffing

Capacity and Classification

	Capacity	Classification
Four rope grab operation	≤ 46t	A8
Four rope grab operation	≤ 57t	A7
Motor grab operation	≤ 46t	A8
Container operation	≤ 57t	A7
Heavy lift operation	≤ 124t	A3
Standard operation	≤ 70t	A6

Working Speeds

Hoisting / lowering	0 – 100 m/min
Slewing	0 – 1.6 rpm
Luffing (20m to 40m)	19 seconds
Travelling	30 m/min

Hoisting Heights*

Above quay at minimum radius	44.0 m
Above quay at maximum radius	29.0 m
Below quay level (approx.)	10.0 m

* Depending on portal height

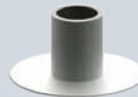
Practical solutions



LPS 420 E



LFS 420 E



LBS 420 E
(for sheltered water only)



Liebherr develops and produces special designs and solutions to meet customer-specific requirements

- The Liebherr Portal Crane (LPS) is an efficient combination of a space-saving portal (mounted on rails) and the proven mobile harbour crane concept. Particularly on narrow quays, individual portal solutions permit (railway) trains and (road) trucks to travel below the portal.
- Liebherr Fixed Slewing Cranes (LFS) are an efficient combination of a mobile harbour crane upper carriage and a fixed pedestal. LFS cranes provide an economical and space-saving solution for the installation on quaysides and jetties, especially where room for manoeuvring is limited and low ground pressure is essential. Additionally LFS solutions are also ideally suited for the installation on crane barges.
- Liebherr floating cranes (LBS) can be used for transshipment and midstream operation between ocean-going vessels and river barges on different types of waterways, including those having no or few quays. In addition, the LBS solution allows direct cargo transfer from ship to shore – especially when quays reach capacity limits. Depending on customer specifications, the LBS range may have varying lifting capacities due to tailor-made design solutions.