

2000 SERIES

E-CRANE®

QUILIBRIUM

Professional Bulk Handling Solutions

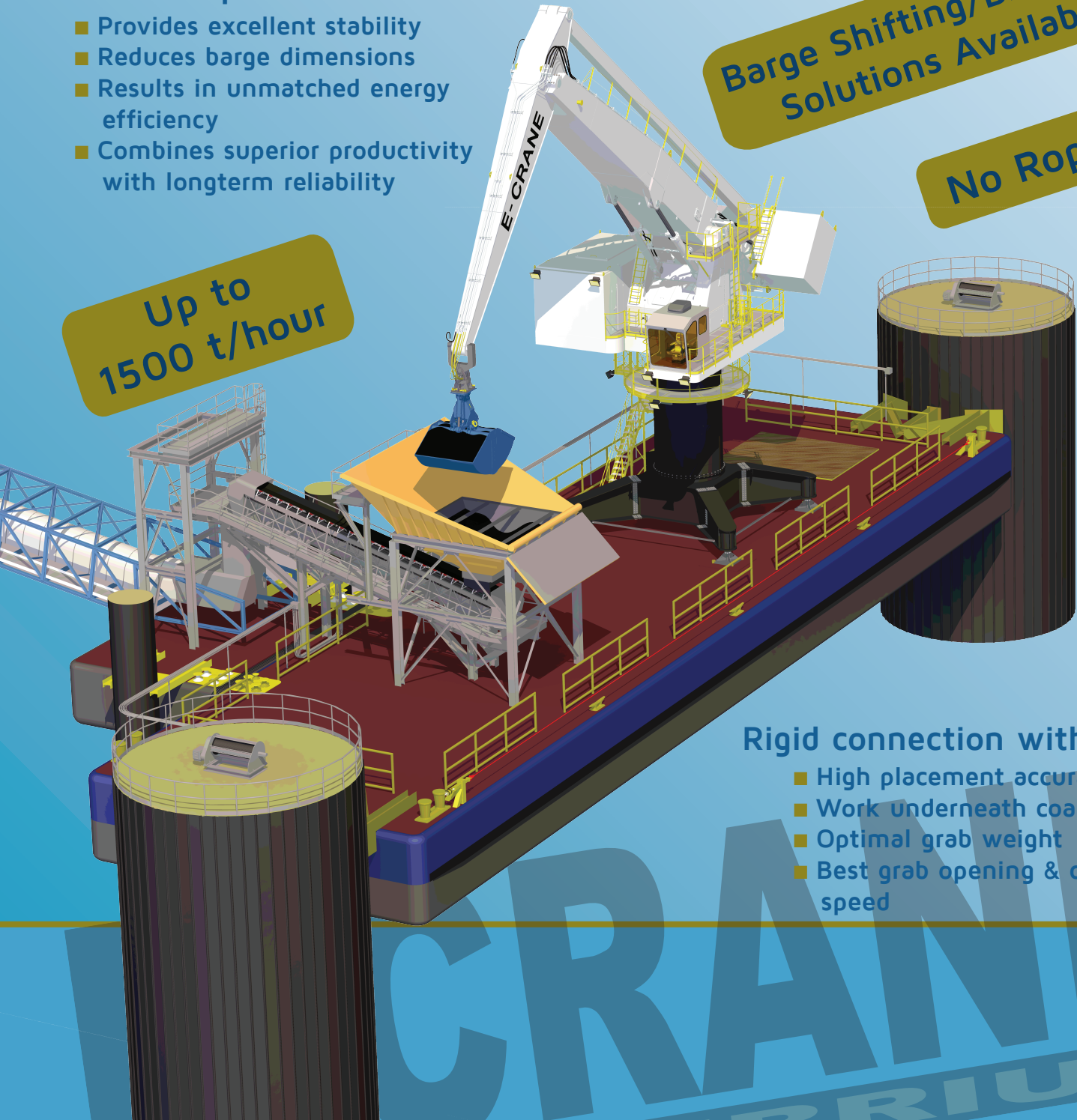
E-Crane's superior crane balance:

- Provides excellent stability
- Reduces barge dimensions
- Results in unmatched energy efficiency
- Combines superior productivity with longterm reliability

Barge Shifting/Breasting Solutions Available

No Ropes

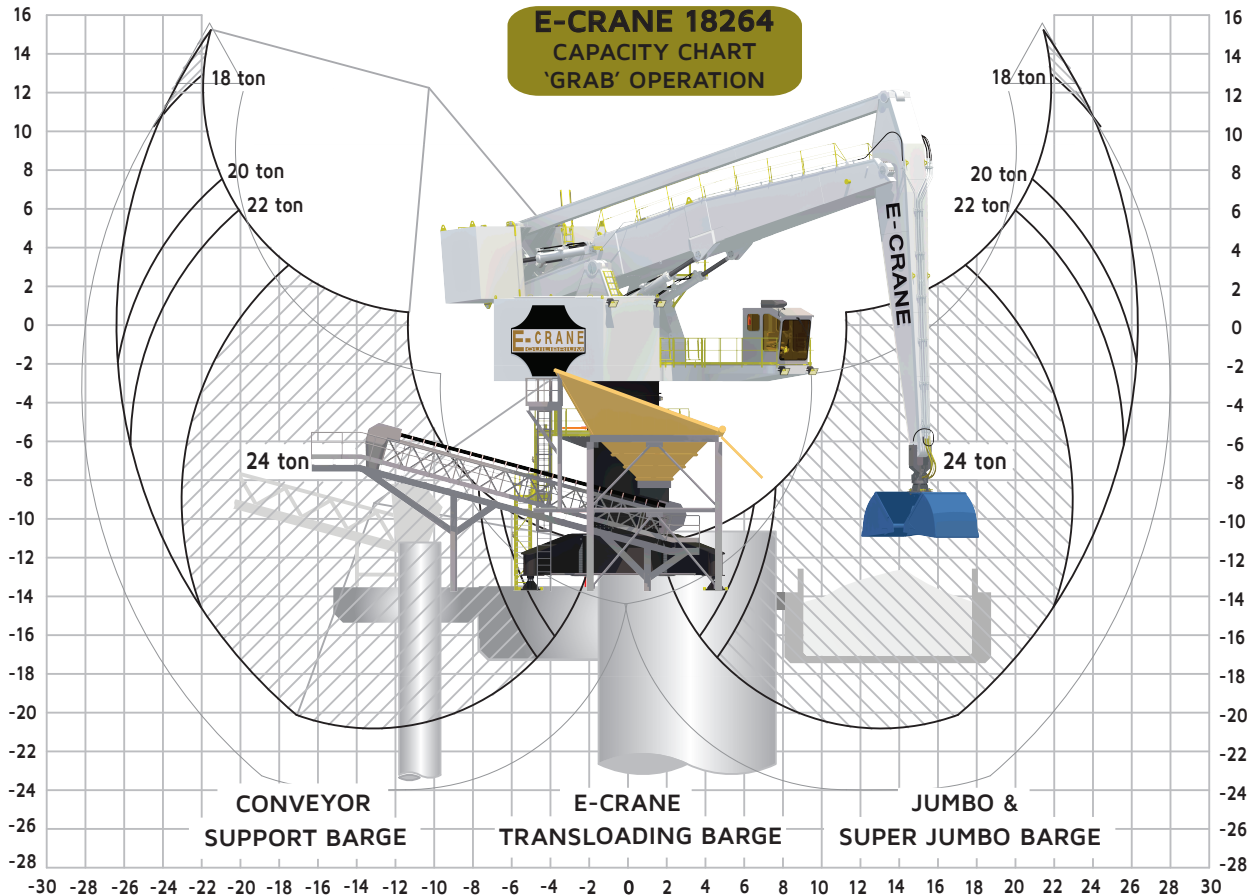
Up to 1500 t/hour



Rigid connection with grab:

- High placement accuracy
- Work underneath coamings
- Optimal grab weight
- Best grab opening & closing speed

Custom Engineered for Superior Productivity



Crane Capacity

Grab Operation	max 24 t
Hook Operation	max 27 t

Main Dimensions

Boom Length	16,0 m + 5,5 m
Stick Length	11,6 m + 3,0 m
Main Pivot Height (typical)	13,3 m above deck

Weight

Crane Upper (Incl. Counterweight)	186 t
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Working Area

Max. Outreach	26,4 m
Min. Outreach	1,7 m
Lifting Height	36,0 m

Transloading Capacity (Grab Operation)

Crane Cycles	Up to 90 cycles/hour
Best Daily Production	Up to 30.000 t/day
Peak Performance	1.500 t/hour

Crane Design Conditions

Max Heel/Trim	3°/2°
Ambient Working Temperature	-25 to 45°C
Max. Windspeed	20 m/s (operating conditions)
.....	63 m/s (parked & stowed position)

Component Selection

Main Electrical Motor

Nominal Output	450 kW/600 hp – 50 Hz/60 Hz
Main Power Supply	400/480 VAC, 3 phase

Load Sensing Hydraulic System

Main Implement Pumps	4x 250 cc, 2x 870 l/min
Swing Pump	Closed-loop, 345 l/min
Capacity Hydraulic Tank	4.000 liter

Hydraulic Cylinders

4 Identical Cylinders	Bore 280 mm/Stroke 2.450 mm
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Swing Bearing

3-Row Roller Bearing	Internal gear
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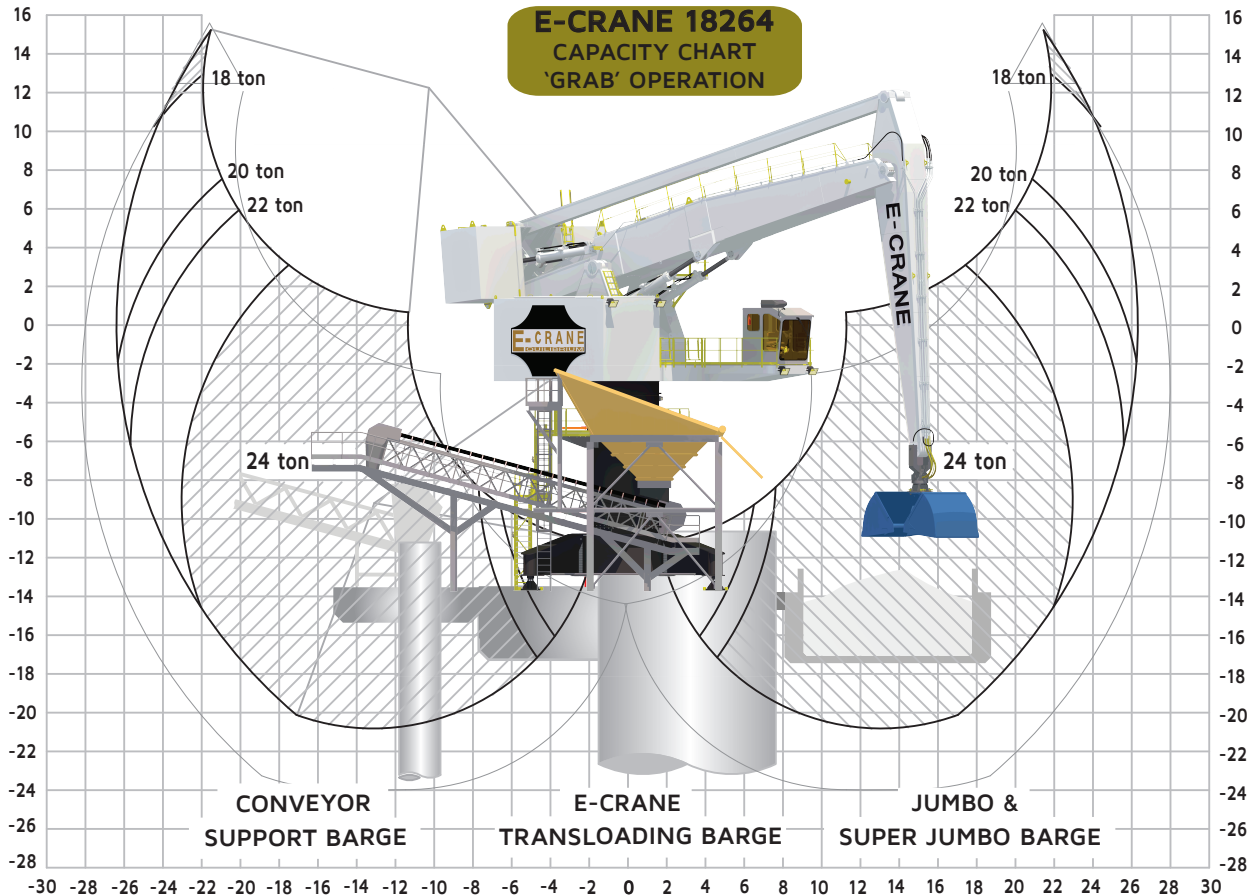
Forces & Moments (reaction @ swing bearing)

Standard Operations (sheltered water) acc. to LRS Load Combination Case 1 (Hoisting Factor: 1.365 / Duty Factor: 1.200)

Overturning Moment	6.600 kNm
Vertical Force	2.625 kN
Horizontal Force	325 kN
Crane Swing Torque	960 kNm

Open Sea Operations

Forces and moments are determined by the detailed design parameters of the barge in combination with the dynamic hoisting factor.



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