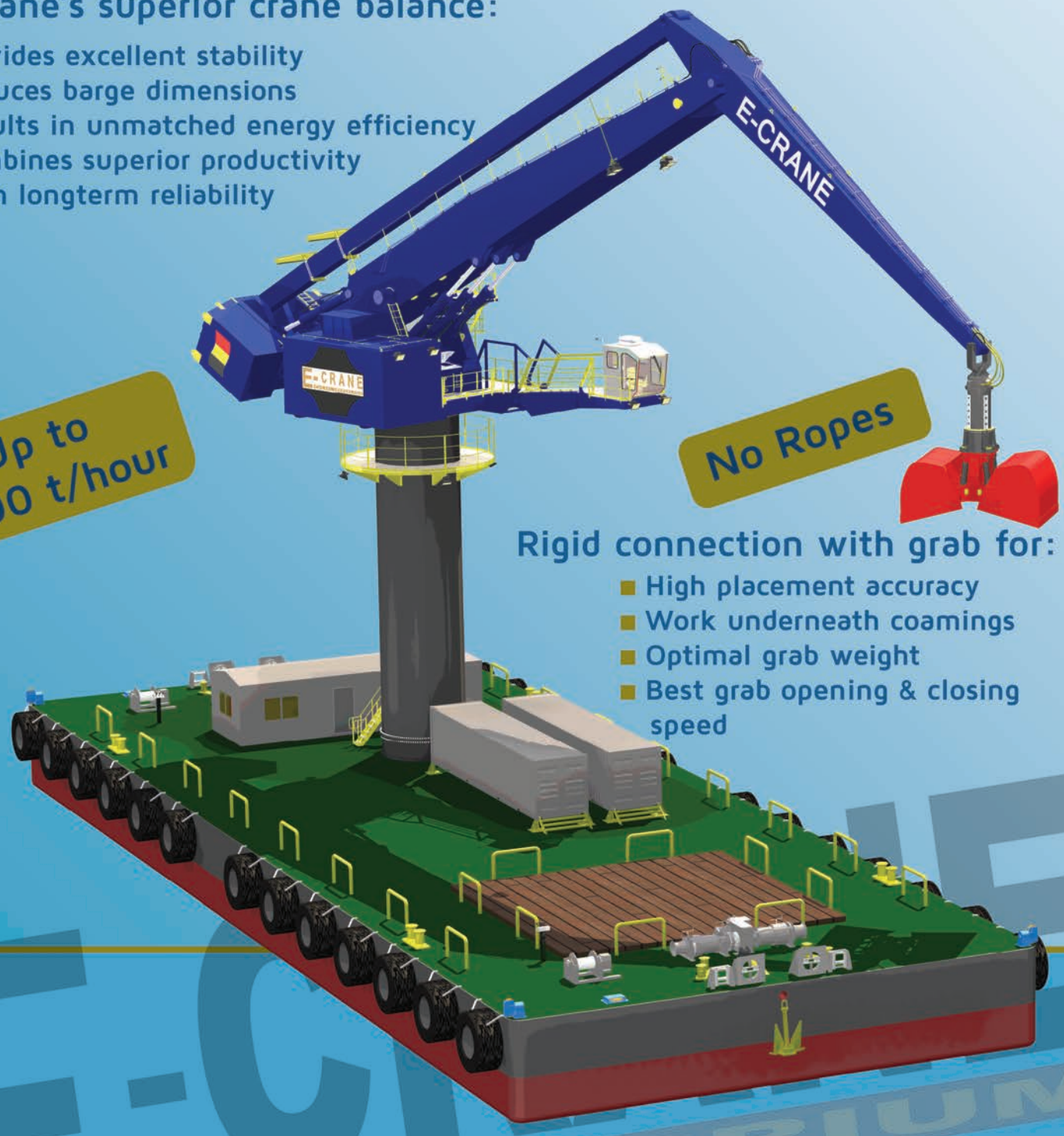
3000 SERIES

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



Up to 2000 t/hour

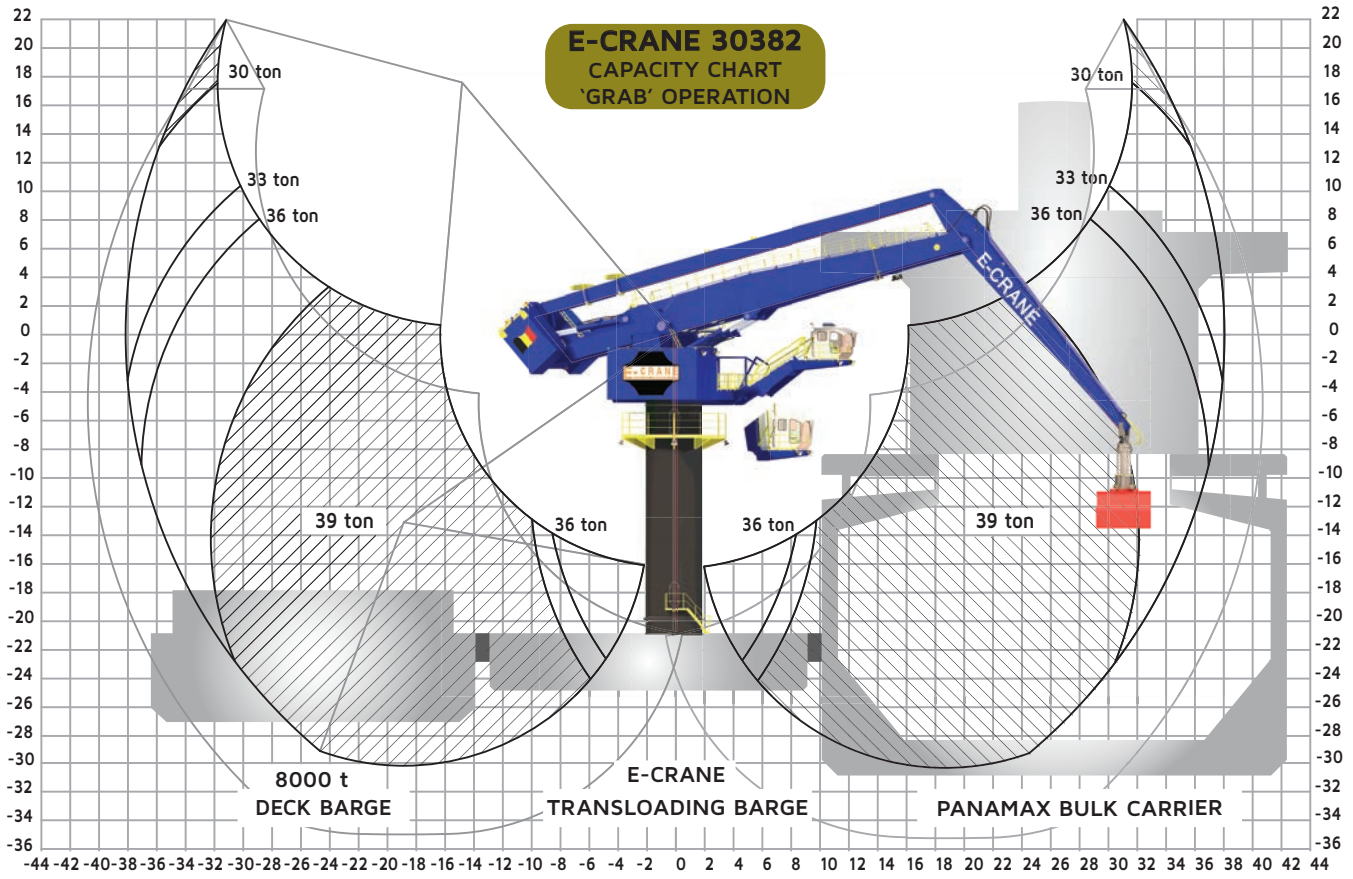
No Ropes

Rigid connection with grab for:

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

Custom Engineered for Superior Productivity

Superior efficiency, productivity... now within reach!



Crane Capacity

Grab Operation .....max 39 t
Hook Operation .....max 45 t

Main Dimensions

Boom Length .....23,0 m + 8,5 m
Stick Length .....17,0 m + 4,0 m
Main Pivot Height (typical) .....21 m above deck

Weight

Crane Upper (Incl. Counterweight) .....393 t

Working Area

Max. Outreach .....38,2 m
Min. Outreach .....2,0 m
Lifting Height .....52,2 m

Transloading Capacity (Grab Operation)

Crane Cycles .....Up to 60 cycles/hour
Best Daily Production .....Up to 30.000 t/day
Peak Performance .....2.000 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 .....630 kW/844 hp – 50 Hz/60 Hz
Main Power Supply .....400/480 VAC, 3 phase

Load Sensing Hydraulic System

Main Implement Pumps .....4x 260 cc, 4x 450 l/min
Swing Pump .....Closed–loop, 430 l/min
Capacity Hydraulic Tank .....4.000 liter

Hydraulic Cylinders

5 Identical Cylinders .....Bore 330 mm/Stroke 2.950 mm

Swing Bearing

3–Row Roller Bearing .....Internal gear

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 .....14.500 kNm
Vertical Force .....5.250 kN
Horizontal Force .....640 kN
Crane Swing Torque .....2.400 kNm

Open Sea Operations

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