

3000 SERIES

# E-CRANE®

QUILIBRIUM

## Professional Bulk Handling Solutions

E-Crane's superior crane balance:

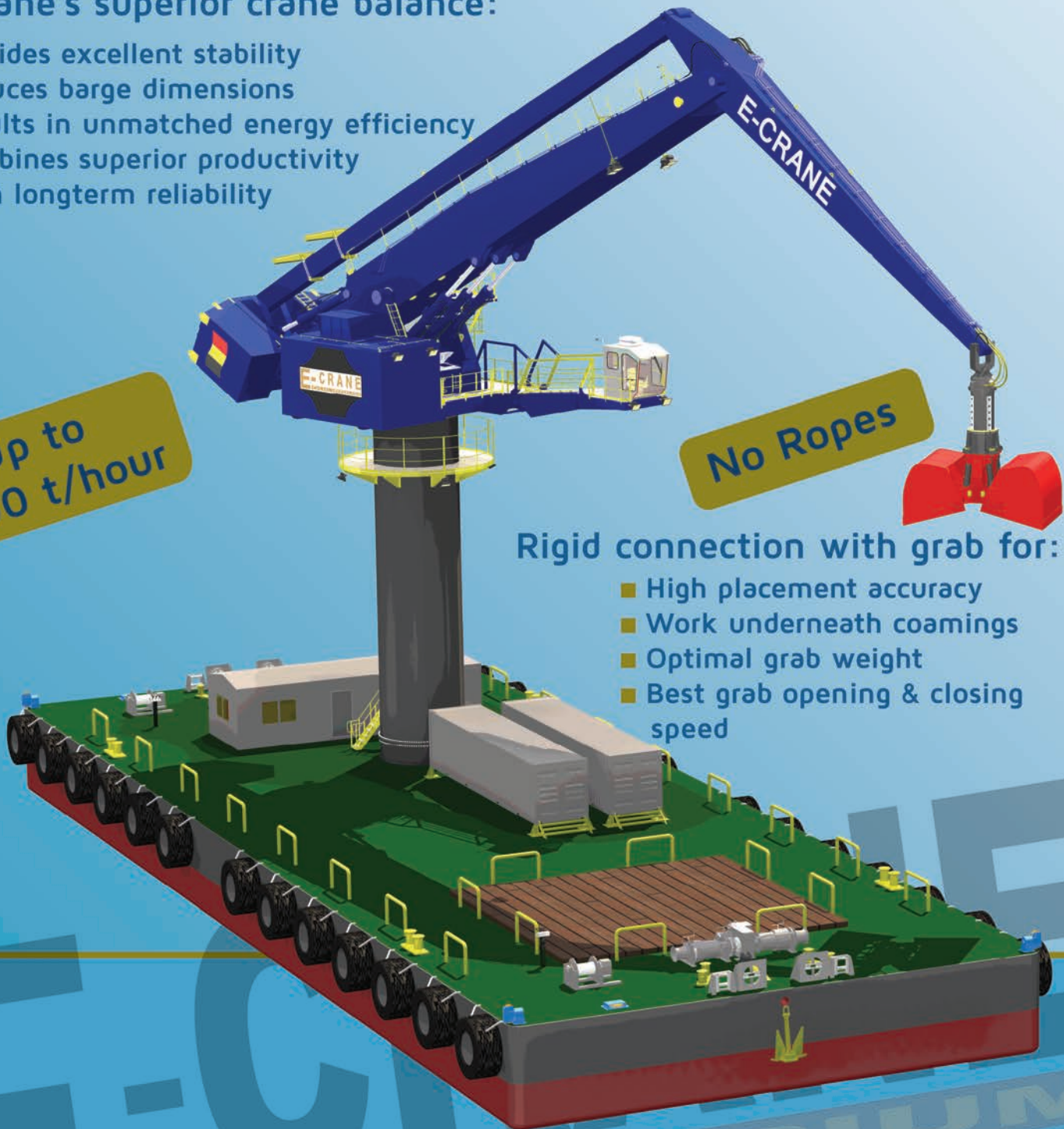
- Provides excellent stability
- Reduces barge dimensions
- Results in unmatched energy efficiency
- Combines superior productivity with longterm reliability

Up to  
2000 t/hour

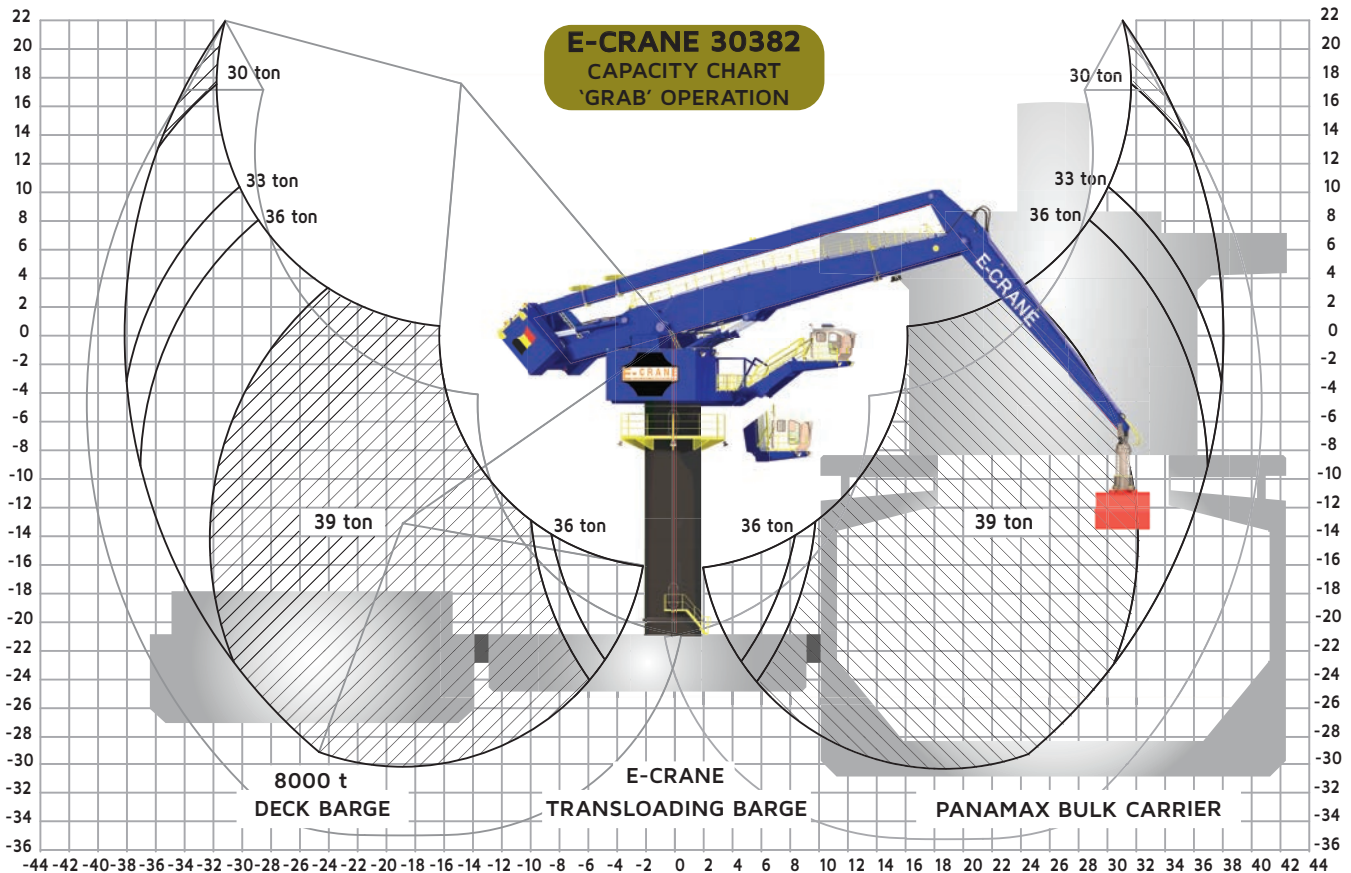
No Ropes

Rigid connection with grab for:

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



Custom Engineered for Superior Productivity



## 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
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## 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
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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 .....	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.