

AS-BUILT CRANE SPECIFICATION

PRODUCT RANGE	-	Knuckle Boom Crane
PRODUCT REFERENCE	-	EHC 200/4300 OS KB



PERFORMANCE

Lifting/Load Capacity (heel/trim - 3°/2°)

Main Hoist	Onboard SWH=0m: 2-fall, 200t @ 20m // 1-fall, 100t @ 37m 100t weight in air / 80t submerged weight, lifting from 3300m water depth
Aux. Hoist	Offboard SWH=2m: 1-fall, 25t @ 47m 25t weight in air / 20t submerged weight, lifting from 100m water depth
Tugger Winch	2-off, 0-10t including constant tension, 1-fall

Hook Speeds Variable load dependent speed, step-less from zero to maximum

	Offboard lifts		Onboard Lifts
Main Hoist			
Fall arrangement	1-fall	2-fall	1-fall & 2-fall
<i>Speed @ max. SWL 1st layer [m/min]</i>	29 m/min	15 m/min	Reduced to 50% of normal speeds
<i>Speed @ max. SWL last layer [m/min]</i>	45 m/min	22.5 m/min	Reduced to 50% of normal speeds
<i>Speed @ empty hook last layer [m/min]</i>	120 m/min	60 m/min	Reduced to 50% of normal speeds

Aux Hoist

<i>Speed with maximum SWL [m/min]</i>	40 m/min
<i>Speed with empty hook [m/min]</i>	100 m/min
Tugger Winch	75m/min constant tension speed

Active Heave Compensation

Main hoist	100t weight in air / 80t submerged weight @ 60 m/min at 3300m water depth Empty hook @ 90 m/min at 3300m water depth
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Slewing Three row roller-bearing

Slewing Range	n x 360°.
Slewing speed	Up to 1.0 rpm

Modes of operation	Deck lift operations Barge lift operations Supply boat operations Personnel lift operations Subsea operations
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DESIGN CRITERIA

Design

<i>Classification by</i>	Lloyds Register					
<i>Main Design Codes</i>	LR CLAME, 2016					
	NMA, DSB regulations concerning deck cranes on mobile offshore units					
Crane Duty-Cycle Classification	according FEM 1.001					
<i>Class of Utilization</i>	U5					
<i>State of loading</i>	Q1					
<i>Group classification for Crane</i>	A4					
Classification of Mechanisms:	Aux. hoist	Main hoist	Slewing	Luffing	Folding	Tuggers
<i>Duration of use</i>	T5	T5	T6	T6	T6	T2
<i>Spectrum class</i>	L1	L1	L1	L1	L1	L3
<i>Group classification for Mechanism</i>	M4	M4	M5	M5	M5	M3

INTERFACE DATA

Weights

<i>Crane gross measured mass</i>	443t (1000m wire, excluding factors)		
<i>Delta 3380m – 1000m wire</i>	64t		
<i>Pedestal</i>	Subject to height, deck interface and access		
Pedestal Dyn. Overturning moment	(at slew bearing level, 88t @ 25m, SWH2m Barge Lift, +/- 5%, factored load incl wind)		
<i>Max. Dyn. Overturning moment</i>	64000kNm		
<i>Max. Dyn. Axial Force</i>	7100kN		
<i>Max. Dyn. Radial Force</i>	1500kN		
<i>Max. Dyn. Slewing Moment</i>	9100kNm		
Power Unit	S1	S6	Starting method
<i>Main Power</i>	3 x 400kW (S1-100%)	3 x 560kW (S6-10%)	Star/Delta
<i>Emergency Power</i>	1 x 100kW (S1-100%)		DOL
Utilities	Power and signals via slip ring		
<i>Main Power</i>	440V / 60Hz, 3-ph (3-off main driver motor)		
<i>Auxiliary Power</i>	440V / 60Hz, 3-ph (for Lighting & heating, Air conditioner and Power socket)		
<i>Emergency Power</i>	440V / 60Hz, 3-ph (for Emergency pump motor and Crane control system)		
<i>UPS</i>	230V / 60Hz, 1-ph (Aircraft warning lights)		
Power consumption			
<i>Main</i>	3 x 680kVA intermittent, 3 x 485kVA continuous		
<i>Auxiliary</i>	21kVA		
<i>Emergency</i>	125kVA		
<i>UPS</i>	72VA		