

DIESEL - HYDRAULIC OFFSHORE PEDESTAL CRANE

TYPE

BOS 2600-25 D LIT

Customer:	PROSAFE OFFSHORE PTE LTD
Project:	Prosafte Bristolia – 52-361
Crane S/N:	170 800

DESIGN CRITERIA	
Design Criteria, Rules, Regulations	API (American Petroleum Institute) – Specification 2C for Offshore Pedestal Mounted Cranes, 7th Ed, 2012
Certifying Authority	ABS
Standards and Norms	DIN, ISO, IEC, EN, FEM
Design temperature	-20 °C
Wind operating conditions	operating: 25 m/sec
Allowable Installation Inclination	3° (heel) / 3° (trim)
HAZARDOUS AREA RATING	
Crane, Pedestal Adapter and Power Pack	safe area
Crane Boom and Aviation Lights on Crane	safe area
MAIN HOISTING GEAR	
Max. winch capacity (line pull)	25 metric tonnes
Reeving	1-fall
Personnel Lift	N/A
Hook Velocity, empty hook	134.0 m/min
Hook Velocity, SWL	32.0 m/min
AUX. HOISTING GEAR	
Max. winch capacity (line pull)	15 metric tonnes
Reeving	1-fall
Personnel lift	4 metric tonnes
Hook Velocity, empty hook	160.0 m/min
Hook Velocity, SWL	55.0 m/min
SLEWING GEAR	
Slewing speed	0 – 0.61 rpm
Slewing range	360° continuous
Brake system	internal spring loaded multi disc brakes
LUFFING GEAR	
Maximum operating radius main hoist/aux. hoist	38 m / 43 m
Minimum operating radius main hoist/aux. hoist	9,6 m / 11,3 m
ELECTRIC SYSTEM	
Electric power transfer	slip ring collector column carrier
Main power supply 1	N/A
Main power supply 2	N/A
Aux. power supply	480V / 60Hz / 3ph
Emergency power pack supply	230V / 60Hz / 3ph
UPS	230V / 60Hz / 1ph
Electric cables	Liebherr standard, marine cables, flame retardant according IEC 331 and 332; armoured cables according LIEBHERR standard
Heating	driver's cabin
Lighting	cabin, slewing column, machinery compartment, access route
Floodlights	2x boom head, 2x LHS and RHS cabin level, 1 x auxiliary boom head
Aircraft warning lights	1x main boom head, 1x aux. boom head, 1x on top of A-frame, 4x boom

PRIME MOVER	
Type	LIEBHERR Diesel Engine (for safe area only)
Power Rating	1x450 kW
Starter	Electric Starter
HYDRAULIC SYSTEM	
Pumps	variable displacement, axial piston type (A4VG)
Motors	fixed displacement, axial piston type (A2FM)
Hydraulic system	closed loop type system, separate loops for hoisting, slewing and luffing
Simultaneity of motions	100% hoisting + 50% slewing or 100% hoisting + 50% luffing or 3 motions at full load and reduced speeds
Hydraulic lines	flexible, steel armoured hoses
Fittings	Stainless Steel (AISI 316) - outside covered with "Denso Tape"
Hydraulic oil tank	Stainless Steel, outside not painted
SAFETY RELATED DEVICE	
Safe Load Indication System	Litronic®
Load limiting device	Litronic®
Load data recorder	Litronic®
Constant Tension System (CT)	Litronic®
Automatic Gross Overload Protection System (AOPS)	Litronic®
Manual Gross Overload Protection System (MOPS)	electric/hydraulic
Emergency Lowering System (ELS)	Hydraulic
Limit Switch System for Hoisting Gear	Electric
Limit Switch System for Luffing Gear	Electric
Limit Switch System for Slewing Gear	Electric
Warning horn	Electric
Slack Rope Protection System	Litronic® (Hoist winches only)
CRANE CONTROL SYSTEM	
Type	LIEBHERR Litronic
DRIVER'S CABIN	
Type	heated, motorised windscreen wiper, A/C unit, reading lamp, dimmable cabin lighting
Noise level	65 dB(A) inside cabin with door and windows closed at full power take off.
Location	left hand side (LHS)
PLATFORMS /WALKWAYS	
Boom	boom walkway with railing on right hand side (RHS)
Circumferential Platform around Pedestal Adapter	yes
PEDESTAL ADAPTER	
Outer diameter, lower interface	3435 mm
Outer diameter, platform interface	2300 mm
Height	6070 mm

WEIGHT OF CRANE COMPONENTS	Preliminary data
Slewing Column + A-frame	67.600 kg
Boom	39.800 kg
Pedestal Adapter	19.000 kg
Main Hoist Hook	1.000 kg
Aux. Hoist Hook	600 kg
Main Hoist Rope	1.471 kg
Aux. Hoist Rope	746 kg
Luffing Rope	3.553 kg
Crane Complete	126.400 kg

- subject to engineering modification -
E. & O. E.