

AS-BUILT CRANE SPECIFICATION

PRODUCT RANGE
PRODUCT REFERENCE
BUILD NR

OFFSHORE PLATFORM CRANES
DHC 60_3000 BH
P119



OFFSHORE PLATFORM CRANES – DHC 60_3000 BH

The P119 is a KENZ DHC 60_3000 BH type crane. This is a Boom Hoist (BH) rope luffing offshore crane which employs hydraulic power for its main functions – Hoisting, Slewing and Luffing. It is built on a mainframe with a 3000mm diameter slewing bearing with a maximum design SWL lifting capacity of 60 tonnes. This DHC version is the Diesel Hydraulic powered version of this size in Kenz’ standard offshore crane range, specifically designed for use on fixed offshore platform installation. Its design has proven itself over the years with an installed base of approximately 120 cranes. This crane is optimised for reliable day-to day operations on offshore platforms.

The P119 is a Diesel Hydraulic drive version, suitable for operations in ATEX zone 2 environment.

The P119 was originally designed according LRS CLAME 1987, chapter 3, section 3 “offshore cranes”. The crane has been removed from its pedestal with valid certification by Lloyd’s Register.

PERFORMANCE

Lifting capacity			
Design height slewbearing	53m		
Main hoist	Platform	4-fall - max SWL=60t	60t@13m
	Platform	2-fall	30t@22m
	Platform	1-fall	15t@33m
	Supply boat up to "Seastate 2-3"	2-fall	30t@18m
	Supply boat up to "Seastate 2-3"	1-fall	15t@33m
	Supply boat up to "Seastate 4"	2-fall	30t@16m
	Supply boat up to "Seastate 4"	1-fall	15t@33m
	Supply boat up to "Seastate 6"	1-fall	12t@21m
	Whip hoist	Platform	1-fall - max SWL=7.5t
Supply boat up to "Seastate 2-3"		1-fall	7.5t@42m
Hook speeds	Variable load dependent speed, step-less from zero to maximum		
	Main Hoist	Main Hoist	Whip Hoist
	60t in 4-fall	10t in 2-fall	7.5t
	0-20 m/min	0-60 m/min	0-100 m/min
Constant tension	0.5-2 tonnes	1-fall operations	
Slewing	3 row ball-bearing with internal gear teeth		
Slewing range	n x 360° - unlimited		
Slewing speed	0-0.75 rpm		
Luffing	8-fall		
Range	-10° to 82° (17°-82° with load)		
Luffing time full load	Approx. 90 sec. min to max working radius @ max. SWL		
Working radius	Minimum	Maximum	
Main hoist	7.0 m	40 m	82° / 15° boomangle, 2-fall
Whip hoist	8.0 m	42 m	
Modes of operation	Platform lift Operations Supply boat Operations		
Simultaneous operation	Three functions can be operated simultaneously under full load at maximum speed.		

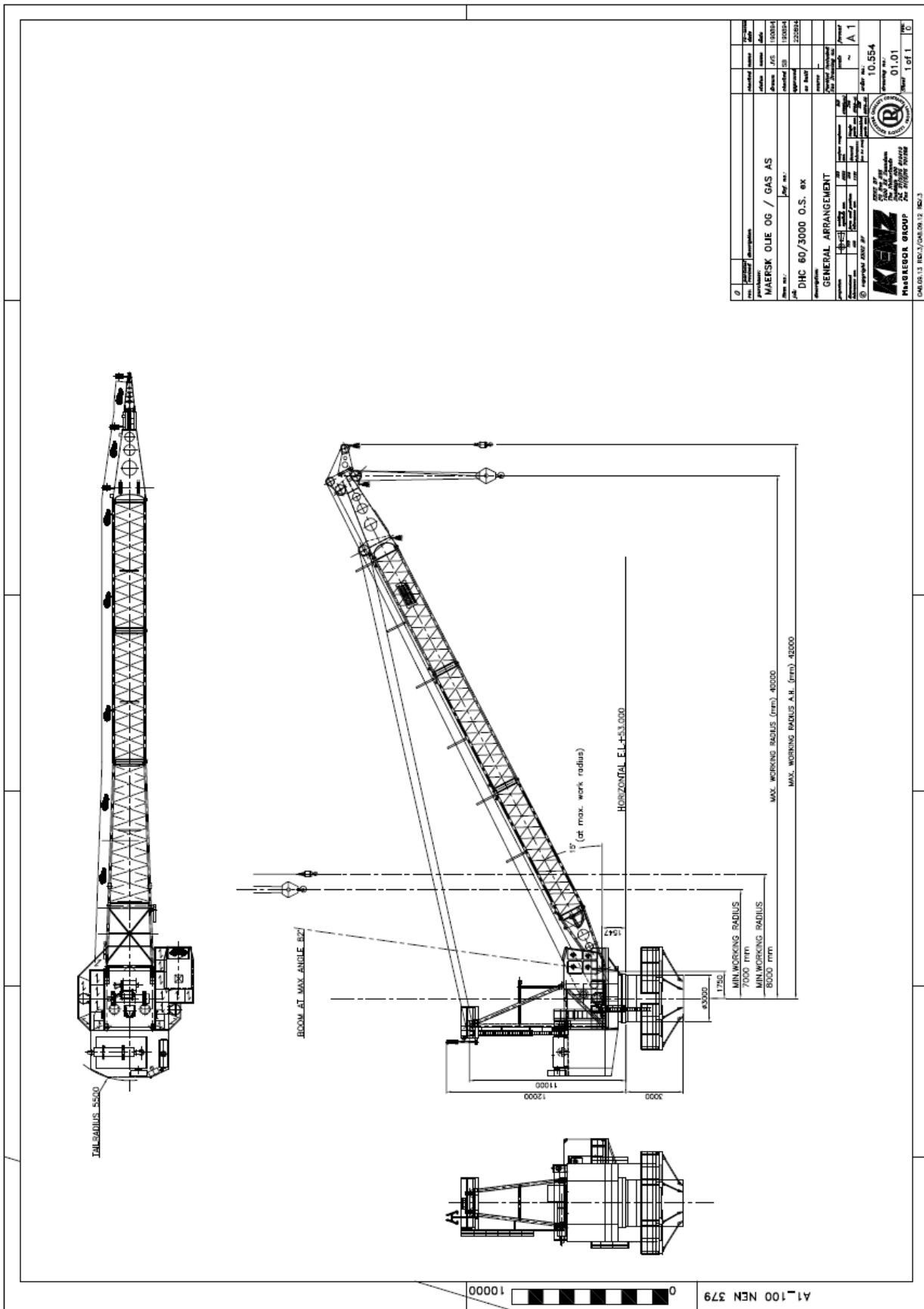
DESIGN CRITERIA

Design	Certification by Lloyd's Register			
Year of build	1995			
Main design code	LRS CLAME 1987, Chapter 3, Section 3 : Offshore Cranes"			
General Design guidelines	* Applicable Danish Rules and Regulations. * DIN 15018 teil I+II			
other	Maersk O&G Engineering specifications			
Ambient working Temperature	-10° C up to +22° C (structural design temperature -10° C)			
Design wind speeds	30 m/s	Operational (platform lifts)		
	20 m/s	Operational (Supply boat lifts)		
	63 m/s	Stored (in boom rest)		
Crane Duty-Cycle Classification	According FEM 1.001			
Class of Utilization	U4			
State of loading	Q2			
Group classification for Crane	A4			
Classification of Mechanisms	Main hoist	Slewing	Luffing	Splitterbox
Spectrum class	T5	T5	T5	T5
Duration of use	L2	L3	L3	L3
Group classification for Mechanism	M5	M6	M6	M6
Hazardous Area Classification	Zone 2, IIB, T3			

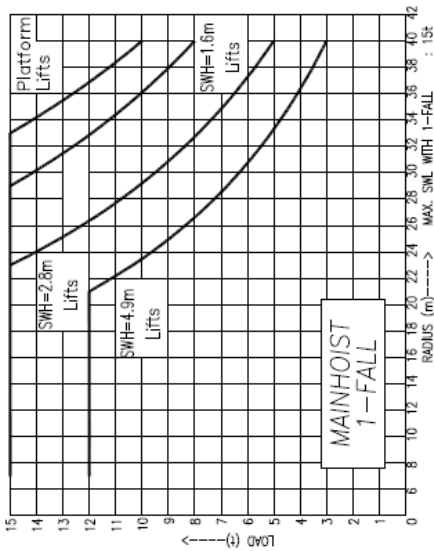
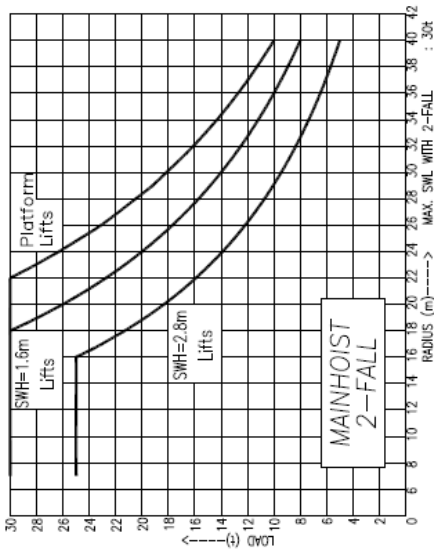
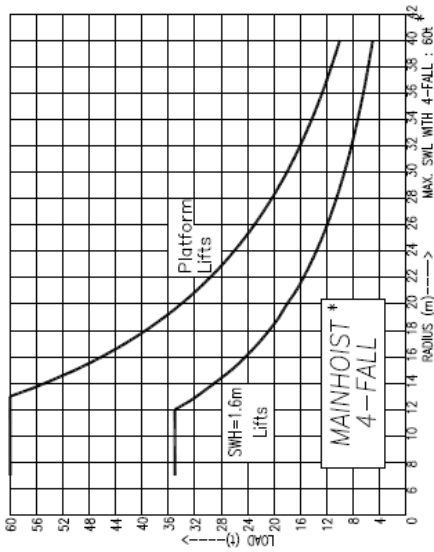
INTERFACE DATA

Crane control	Operator Cabin RHS; Electronic (PLC) operated systems		
Operational Weight	80 t	(excluding pedestal)	
Dynamic overturning moment	(@ underside slewbearing level)		
	Unfactored load	Factored Load (Duty=1.2 / Load=1.51)	
Max. Dyn. Overturning moment	6785 kN.m	13802 kN.m	
Max. Dyn. Axial Force	1017 kN	1403 kN	
Max. Dyn. Radial Force	26 kN	97 kN	
Max. Dyn. Slewing Moment	0 kN.m	512 kN.m	
Main driver	Mercedes OM 444 LA		
Auxiliary Power	Floodlights & Heating	400VAC / 50Hz, 3-ph + N	
UPS	AWL & Small power consumers	230VAC / 50Hz ,1-ph + N	
Power and signals	Power and signals via slipring		

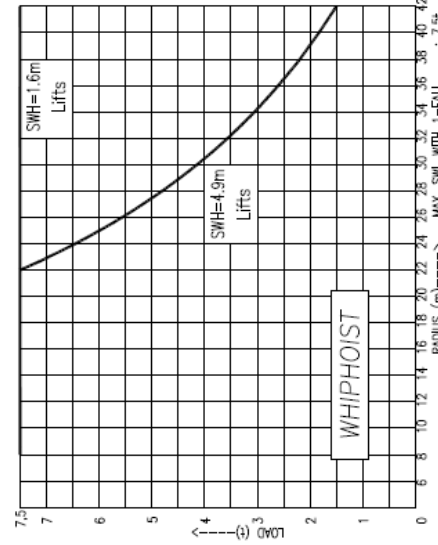
OVERALL DIMENSIONS



LOAD RADIUS CURVES



Whiphoist SWL (t)	
Radius (m)	SWL (t)
7	7.5
22	7.5
23	7.5
24	7.5
25	7.5
26	7.5
27	7.5
28	7.5
29	7.5
30	7.5
31	7.5
32	7.5
33	7.5
34	7.5
35	7.5
36	7.5
37	7.5
38	7.5
39	7.5
40	7.5
41	7.5
42	7.5



Environmental Conditions:
 Ambient temperature : -7° to +24°C
 Relative humidity : 100%
 Operational windspeed : Seallifts 20 m/s
 Platformlifts 30 m/s
 Structural design temp.: -10°



Radius (m)	Mainhoist SWL (t)					
	1-FALL		2-FALL		4-FALL	
7	15.0	15.0	30.0	30.0	60.0	60.0
12	15.0	15.0	30.0	30.0	60.0	60.0
13	15.0	15.0	30.0	30.0	60.0	60.0
14	15.0	15.0	30.0	30.0	60.0	60.0
15	15.0	15.0	30.0	30.0	60.0	60.0
16	15.0	15.0	30.0	30.0	60.0	60.0
17	15.0	15.0	30.0	30.0	60.0	60.0
18	15.0	15.0	30.0	30.0	60.0	60.0
19	15.0	15.0	30.0	30.0	60.0	60.0
20	15.0	15.0	30.0	30.0	60.0	60.0
21	15.0	15.0	30.0	30.0	60.0	60.0
22	15.0	15.0	30.0	30.0	60.0	60.0
23	15.0	15.0	30.0	30.0	60.0	60.0
24	15.0	15.0	30.0	30.0	60.0	60.0
25	15.0	15.0	30.0	30.0	60.0	60.0
26	15.0	15.0	30.0	30.0	60.0	60.0
27	15.0	15.0	30.0	30.0	60.0	60.0
28	15.0	15.0	30.0	30.0	60.0	60.0
29	15.0	15.0	30.0	30.0	60.0	60.0
30	15.0	15.0	30.0	30.0	60.0	60.0
31	15.0	15.0	30.0	30.0	60.0	60.0
32	15.0	15.0	30.0	30.0	60.0	60.0
33	15.0	15.0	30.0	30.0	60.0	60.0
34	15.0	15.0	30.0	30.0	60.0	60.0
35	15.0	15.0	30.0	30.0	60.0	60.0
36	15.0	15.0	30.0	30.0	60.0	60.0
37	15.0	15.0	30.0	30.0	60.0	60.0
38	15.0	15.0	30.0	30.0	60.0	60.0
39	15.0	15.0	30.0	30.0	60.0	60.0
40	15.0	15.0	30.0	30.0	60.0	60.0

* DEADWEIGHT OF HOOKBLOCK (2.9t) INCLUDED IN SWL