Certificate No: LR21213164TA
Issue Date: 21/05/2021
Expiry Date: 20/05/2026

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer **Wartsila Iberica S A**

Address Pol. Industrial Landabaso s/n, Apartado, 137, Bermeo-Vizcaya, 48370, Spain

Type Shafting

Description Main Propulsion Shaft Coupling for ships.

Trade Name OHSN-BX & OHSN-X

Application Marine

Specified Standard Lloyd's Register's Rules and Regulations for the Classification of Ships July 2014, Part 5, Chapter 6.

Ratings

Nominal size (mm)	Max. torque without safety factor (kNm)		Nominal size (mm)	Max. torque without safety factor (kNm)	
	Hollow (BX) type	Solid (X) type		Hollow (BX) type	Solid (X) type
100	38.9	45.99	410	2223.19	2374.21
110	50.28	59.06	420	2407.71	2564.29
120	65.44	67.47	430	2582.87	2738.42
130	83.78	78.47	440	2763.54	2912.9

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Daniel Rodrigues

Senior Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

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140	104.74	96.56	450
2996.89	3143.86		
150	130.48	121.84	460
3169	3340.1		
160	158.98	153.31	470
3395.78	3599.01		
170	182.15	174.07	480
3670.66	3838.42		
180	214.93	211.26	490
3889.58	4029.15		
190	255.15	245.8	500
4276.15	4428.58		
200	278.75	287.49	510
4503.9	4730.41		
210	311.32	321.32	520
4634.21	4996.95		
220	363.3	368.27	530
4939.23	5091.24		
230	419.73	420.75	540
5195.75	5392.35		
240	462.81	476.25	550
5483.81	5726.36		
250	515.47	545.88	560
5796.61	5921.37		
260	571.6	613.14	570
6097.71	6343.09		
270	647.05	691.28	580
6487.39	6667.22		
280	720.05	766.38	590
6772.82	6976.08		
290	783.59	827.08	600
7153.43	7431.77		
300	891.32	945.46	610
7557.9	7696.93		
310	958.21	983.68	620
7933.78	8087.57		

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320	1058.75	1120.53	630
8349.14	8440.13		
330	1182.26	1242.69	640
8827.52	8953.27		
340	1305.75	1343.73	650
9125.73	9257.93		
350	1419.95	1482.33	660
9669.68	9686.16		
360	1574.74	1625.71	670
10093.37	10189.12		
370	1695.64	1743.7	680
10538.99	10540.35		
380	1812.2	1863.57	690
11177.87	11227.95		
390	1947.44	2013.9	700
11675.82	11764.58		
400	2085.93	2171.77	

Other Conditions

1 N.B. when reading the maximum torques given above that safety factors as per the Rules must be applied

2 Final approval is subject to the vibration characteristics of the complete dynamic system and shafting alignment, where applicable, being approved as required by the Rules

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document LR21213164TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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