

Mooring line base design certificate TS CERT 7806 E

General information

Issue date:	09.07.2024	Expiry date:	08.07.2029
Line manufacturer	Wilhelmsen Ships Service	Independent inspection agency:	DNV
Line design designation:	Timm Master 12 SBA™, Timm Master 12	Material type and grade:	B5 (PP+HDPE)/HT PES
Line construction:	12x1 – braided/plaited	Jacketed:	No
Design range:	32mm – 120 mm	DNV Type Approval:	Yes

Base design performance indicators

Performance Indicators	Smallest Diameter		Largest Diameter			
Diameter	Design: 32mm	Measured: 36mm	Design: 120mm	Measured: 170,5mm		
Line Design Break Force (LDBF)	20,7 t		278,4 t			
Line Linear Density (LLD)	0,562 kg/m		8,507 kg/m			
Load Bearing Linear Density (LBLD)	0,540 kg/m		8,307 kg/m			
Line Tenacity (LT)	38,41 t/kg/m		33,51 t/kg/m			
	D/d Ratio: 5		D/d Ratio: 10			
Angled Break Force* (ABF) % Avg NSBF	195,17% / 97,58%		192,22% / 96,10%			
Angled Endurance* (AE) % Avg NSBF	79,81%		68,07%			
	-20 °C	0 °C	20 °C	40 °C	60 °C	80 °C
Temperature (T)** % BF at 20°C (PPPE/PES/PA)	107,6%/109% 115%	108,5%/109% 105%	100%/100% 100%	89,3%/98% 95%	77,5%/92% 90%	55%/88% 82%
Axial Compression Resistance* (ACR)	102,5%					
	%LDBF:10	%LDBF:20	%LDBF:30	%LDBF:40	%LDBF:50	
Average Immediate Strain* (e)	1,06%	2,37%	3,55%	4,66%	5,72%	

Splice type: TM 12 (6x2x5) 2G
Maximum Line Tenacity: 38,41 kN/kg/m

*Performance indicators are tested on samples: 32mm for Timm Master mooring line

**Temperature indicator performed at yarn level

This MLBD Certificate is issued based on DNV Verification Statement no.: N142Y9YN, N142URZ9, N142URZD, N142W8JJ, N142W8V5, N142W0EE, N142WTNN, N142XDBW

Name and address of manufacturing facility:

Wilhelmsen Ships Service
 TIMM SLOVAKIA s.r.o.
 Nozdrkovce 3140/37, 911 04 Trenčín, Slovakia
Independent inspector:

Henrich Illáš

Completion date:

02.07.2024

Address of independent inspector:

DNV, Rolníckej Školy 1519, 94525 Komárno, Slovak Republic

Base design testing information

Name and address of test facility:

Wilhelmsen Ships Service
 TIMM SLOVAKIA s.r.o.
 Nozdrkovce 3140/37, 911 04 Trenčín, Slovakia
Independent inspector:

Henrich Illáš

Completion date:

02.07.2024

Address of independent inspector:

DNV, Rolníckej Školy 1519, 94525 Komárno, Slovak Republic

Base design sample and product documentation reviewed

Independent inspector: Henrich Illáš

Date of review: 09.07.2024

Base design sample manufacturing report <input checked="" type="checkbox"/>	Material test report <input checked="" type="checkbox"/>	Splicing instructions <input checked="" type="checkbox"/>
Base design sample manufacturing ITP <input checked="" type="checkbox"/>	Design specification <input checked="" type="checkbox"/>	Procedures for testing and inspection of retired mooring lines <input checked="" type="checkbox"/>
Base design sample test report <input checked="" type="checkbox"/>	Manufacturer's discard and inspection criteria <input checked="" type="checkbox"/>	

