

## Mooring tail base design certificate TS CERT 7805 E

### General information

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

### Base design performance indicators

Performance Indicators	Smallest Diameter		Largest Diameter		
<b>Diameter</b>	Design: 32mm	Measured: 36mm	Design: 120mm	Measured: 170,5mm	
<b>Tail Design Break Force (TDBF)</b>	20,7 t		278,4 t		
<b>Tail Linear Density (TLD)</b>	0,562 kg		8,507 kg		
<b>Load Bearing Linear Density (LBLD)</b>	0,540 kg		8,307 kg		
<b>Tail Tenacity (TT)</b>	38,41 t/kg/m		33,51 t/kg/m		
<b>Splice type</b>	TM 12 (6x2x5) 2G				
<b>Maximum Line Tenacity (MLT)</b>	38,41 t/kg/m				
<b>Dynamic Stiffness (Ksh, Kex)</b>	Sheltered (Ksh):	18,031xTDBF			
	Exposed (Kex):	22,986xTDBF			
<b>Tension-tension endurance (CTF)</b>	CTF 50%:	205 233 732 cycles			
	CTF 20%:	19 934 162 223 361 cycles			
	<b>%TDBF:10</b>	<b>%TDBF:20</b>	<b>%TDBF:30</b>	<b>%TDBF:40</b>	<b>%TDBF:50</b>
<b>Average Immediate Strain* (e)</b>	1,09%	2,26%	3,36%	4,38%	5,35%

\*Performance indicators are tested on samples: 32 mm for mooring tail

This MTBD Certificate is issued based on DNV Verification Statement no.: N142W8T9, N142WD6S, N142WKDC, N142XDC5

#### 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:

30.05.2024

#### 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:

30.05.2024

#### 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"/>	


