

# PNEUMATIC FENDER

## Inspection Report

Product Name: Pneumatic fender  $\Phi$  2500x4000L

Purchase order: PO-006591-1/ARE-114254

Initial Internal Pressure: 50kPa

Date: 6th, Feb 2026



## **Trelleborg Marine Engineering (Qingdao) Co., Ltd**

No.35, Ronghai 4 Road, Chengyang District, Qingdao 266111, China

The following pneumatic rubber fenders were examined, tested in accordance with ISO17357-1:2014 as follows and considered satisfactory.

- 1) Dimensional Inspection
- 2) Air Leakage Test
- 3) Calibration certificates
- 4) Test report for Pneumatic fender & Certificate of Conformance

1-1 Dimension inspection

## DIMENSIONAL INSPECTION

ITEM	Pneumatic Fender	DATE	2026.01.08-01.15
SIZE	B25405BNTS00	SERIAL NO.	TBIS2540-5-2601-012, 013, 014

Picture:



Item	Specification	Dimensional	Judgement
Length	4000+10%/-5% (3800~4400)	4150, 4150, 4156	Good
Diameter	2500+10%/-5% (2375~2750)	2454, 2458, 2462	Good
Inspected by	Reviewed by	Approved by	
Chengkai Qiu	Helen Peng	Andy Sun	

1-2 Dimension inspection

## DIMENSIONAL INSPECTION

ITEM	Pneumatic Fender	DATE	2026.01.17-01.27
SIZE	B25405BNTS00	SERIAL NO.	TBIS2540-5-2601-015, 016, 017

Picture:



Item	Specification	Dimensional	Judgement
Length	4000+10%/-5% (3800~4400)	4152, 4155, 4160	Good
Diameter	2500+10%/-5% (2375~2750)	2450, 2456, 2458	Good
Inspected by	Reviewed by	Approved by	
Chengkai Qiu	Helen Peng	Andy Sun	

2-1 Air-leakage test

## AIR-LEAKAGE TEST

ITEM	Pneumatic Fender	DATE	2026.01.08-01.15
SIZE	B25405BNTS00	SERIAL NO.	TBIS2540-5-2601-012, 013, 014

Picture



Item	Specification	Result	Judgement
Pneumatic Fender Internal Pressure 50kPa after 30 minutes	No air-leakage	No air-leakage	Good
Inspected by	Reviewed by	Approved by	
Chengkai Qiu	Helen Peng	Andy Sun	

2-2 Air-leakage test

## AIR-LEAKAGE TEST

ITEM	Pneumatic Fender	DATE	2026.01.16-01.23
SIZE	B25405BNTS00	SERIAL NO.	TBIS2540-5-2601-015, 016, 017

Picture



Item	Specification	Result	Judgement
Pneumatic Fender Internal Pressure 50kPa after 30 minutes	No air-leakage	No air-leakage	Good
Inspected by	Reviewed by	Approved by	
Chengkai Qiu	Helen Peng	Andy Sun	



# 苏州申测检验检测中心有限公司

Suzhou Shen Ce Testing Center Co.,Ltd

## 校准证书

CALIBRATION CERTIFICATE

委托单位: 特瑞堡海洋工程(青岛)有限公司  
Customer Trelleborg Marine Engineering (Qingdao) Co., Ltd

单位地址: 山东省青岛市城阳区荣海四路35号  
Address of customer No.35, Ronghai 4 Road, Chengyang District, Qingdao, China

器具名称: 纤维卷尺  
Name of instrument Fiber measuring tape

制造厂: TaJima  
Manufacturer

型号/规格: 20m  
Model/Specification

器具编号: XWJC-027  
Serial NO.

建议下次校准日期: 2026-04-28  
The next calibration date



批准日期: 2025-04-30  
Date for calibrated

批准人: 林洁  
Approved by 林洁

校准日期: 2025-04-29  
Date for calibrated

核验员: 徐雯雯  
Inspected by 徐雯雯

接样日期: 2025-04-29  
Date of Receive

校准员: 魏宝瑞  
Calibrated by 魏宝瑞

地址: 江苏省太仓市昭溪路101号太仓星药港4号楼

电话: 0512-53520063

传真: 0512-53549663

Add:

Tel:

Fax:

网址: www.sctclab.com

邮编: 215400

电子邮件: office@sctclab.com

HTTP

Post code

E-mail



证书编号:  
Certificate No.



# 苏州申测检验检测中心有限公司

Suzhou Shen Ce Testing Center Co.,Ltd

## 校准证书

CALIBRATION CERTIFICATE

委托单位: 特瑞堡海洋工程(青岛)有限公司  
Customer: Trelleborg Marine Engineering (Qingdao) Co., Ltd

单位地址: 山东省青岛市城阳区荣海四路35号  
Address of customer: No.35, Ronghai 4 Road, Chengyang District, Qingdao, China

器具名称: 压力表  
Name of instrument: Pressure Gauge

制造厂: 青岛冠力特种仪器仪表厂  
Manufacturer: Qingdao Guanli Special Instruments & Meters Co., Ltd.

型号/规格: (0~0.1) MPa  
Model/Specification:

器具编号: 07430020  
Serial NO.:

建议下次校准日期: 2026-06-03  
The next calibration date:



批准日期: 2025-12-04  
Date for calibrated:

校准日期: 2025-12-04  
Date for calibrated:

接样日期: 2025-12-02  
Date of Receive:

批准人: 林洁  
Approved by: 林洁

核验员: 杨笛  
Inspected by: 杨笛

校准员: 徐雯雯  
Calibrated by: 徐雯雯

地址: 江苏省太仓市昭溪路101号太仓星药港4号楼  
Add: www.sctclab.com  
网址: www.sctclab.com  
HTTP

电话: 0512-53520063  
Tel: 215400  
邮编: 215400  
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传真: 0512-53549663  
Fax: office@sctclab.com  
电子邮件: office@sctclab.com  
E-mail



## TEST REPORT FOR PNEUMATIC FENDER

Client: TRELLEBORG MARINE SYSTEMS FZE  
Certificate No: TCQ/009fp/26  
Product: B25405BNTS00(6PCE)  
S/C No.: 20013931

We hereby confirm that the above products have been produced using rubber compounds, which meet the specification when tested using the test methods given in the table below.

Test Item	Test method	Outer rubber		Inner rubber		
		Required value	Results	Required value	Results	
1	Before ageing					
1.1	Tensile strength (MPa)	ISO37:2011	18MPa or more	21.9	10MPa or more	22.6
1.2	Elongation (%)	ISO37:2011	400% or more	577.9	400% or more	640.2
1.3	Hardness (Shore A)	ISO7619-1:2010	60±10 ( Durometer hardness test type A)	58	50±10 ( Durometer hardness test type A )	58
Conclusion:		Pass		Pass		

Note: 1. If the colour of the outer rubber is not black, the material requirements will differ from those in this table.

2. The result depend on rubber compound supply deliver batch.

The tests were carried out under strict laboratory conditions using specimens taken from batches of unvulcanised rubber compound.

**Prepared:** Martin Wang

**Authorized:** Michael Song



## **CERTIFICATE OF CONFORMANCE**

Client: TRELLEBORG MARINE SYSTEMS FZE  
 Certificate No: TCQ/009fp/26  
 Product: B25405BNTS00(6PCE)  
 S/C No.: 20013931

We hereby confirm that the above products have been produced using rubber compounds, which meet the specification when tested using the test methods given in the table below.

Test Item		Test method	Outer rubber	Inner rubber
			Specification	Specification
2	After ageing	ISO 188:2011	Air oven ageing, 70°C±1 °C, 96h	Air oven ageing, 70°C±1 °C, 96h
2.1	Tensile strength (MPa)	ISO37:2011	Not less than 80% of the original property	Not less than 80% of the original property
2.2	Elongation (%)	ISO37:2011	Not less than 80% of the original property	Not less than 80% of the original property
2.3	Hardness (Shore A)	ISO7619-1:2010	Not to exceed the original property by more than 8	Not to exceed the original property by more than 8
3	Tear (N/cm)	ISO 34-1:2010	400N/cm or more	No requirement
4	Compression set (%)	ISO 815-1:2008	30% (70°C±1 °C for 22h) or less	No requirement
5	Static ozone ageing test	ISO 1431-1:2012	No cracks after elongation by 20% and exposure to 50 pphm at 40°C for 96h	No requirement

Note: If the colour of the outer rubber is not black, the material requirements will differ from those in this table.

pphm: parts of ozone per hundred million of air by volume.

The tests were carried out under strict laboratory conditions using specimens taken from batches of unvulcanised rubber compound.

**Prepared:** Martin Wang

**Authorized:** Michael Song

# Logbook of Trelleborg Pneumatic Fender

## Identification Information

Fender Size	2.5Dx4.0L
Initial Internal Pressure	50KPa
Fender Serial No.	TBIS2540-5- 2601-012
Safety Valve Serial No.	A24110010
Fender Type	Type I
Fender Color	Black
Receive Date	

## Special Terms

<b>Submarine Usage</b>	<b>Yes</b>	<b>NO</b> ✓
<b>Non-Marking Fender</b>	<b>Yes</b>	<b>NO</b> ✓



# Logbook of Trelleborg Pneumatic Fender

## Identification Information

Fender Size	2.5Dx4.0L
Initial Internal Pressure	50KPa
Fender Serial No.	TBIS2540-5- 2601-013
Safety Valve Serial No.	A24090006
Fender Type	Type I
Fender Color	Black
Receive Date	

## Special Terms

<b>Submarine Usage</b>	<b>Yes</b>	<b>NO</b> ✓
<b>Non-Marking Fender</b>	<b>Yes</b>	<b>NO</b> ✓



# Logbook of Trelleborg Pneumatic Fender

## Identification Information

Fender Size	2.5Dx4.0L
Initial Internal Pressure	50KPa
Fender Serial No.	TBIS2540-5- 2601-014
Safety Valve Serial No.	A24110012
Fender Type	Type I
Fender Color	Black
Receive Date	

## Special Terms

<b>Submarine Usage</b>	<b>Yes</b>	<b>NO</b> ✓
<b>Non-Marking Fender</b>	<b>Yes</b>	<b>NO</b> ✓



# Logbook of Trelleborg Pneumatic Fender

## Identification Information

Fender Size	2.5Dx4.0L
Initial Internal Pressure	50KPa
Fender Serial No.	TBIS2540-5- 2601-015
Safety Valve Serial No.	A24110009
Fender Type	Type I
Fender Color	Black
Receive Date	

## Special Terms

<b>Submarine Usage</b>	<b>Yes</b>	<b>NO</b> ✓
<b>Non-Marking Fender</b>	<b>Yes</b>	<b>NO</b> ✓



# Logbook of Trelleborg Pneumatic Fender

## Identification Information

Fender Size	2.5Dx4.0L
Initial Internal Pressure	50KPa
Fender Serial No.	TBIS2540-5- 2601-016
Safety Valve Serial No.	A24110011
Fender Type	Type I
Fender Color	Black
Receive Date	

## Special Terms

<b>Submarine Usage</b>	<b>Yes</b>	<b>NO</b> ✓
<b>Non-Marking Fender</b>	<b>Yes</b>	<b>NO</b> ✓



# Logbook of Trelleborg Pneumatic Fender

## Identification Information

Fender Size	2.5Dx4.0L
Initial Internal Pressure	50KPa
Fender Serial No.	TBIS2540-5- 2601-017
Safety Valve Serial No.	A24040002
Fender Type	Type I
Fender Color	Black
Receive Date	

## Special Terms

<b>Submarine Usage</b>	<b>Yes</b>	<b>NO</b> ✓
<b>Non-Marking Fender</b>	<b>Yes</b>	<b>NO</b> ✓

