

PNEUMATIC FENDER

Inspection Report

Product Name: Pneumatic fender Φ 1500x3000L

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	2025.11.29-12.09
SIZE	B15305BNTS00	SERIAL NO.	TBIS1530-5-2512-103,104,105,106

Picture:



Item	Specification	Dimensional	Judgement
Length	3000+10%/-5% (2850~3300)	3003, 2996, 2998, 3003	Good
Diameter	1500+10%/-5% (1425~1650)	1505, 1500, 1503, 1503	Good
Inspected by	Reviewed by	Approved by	
Chengkai Qiu	Helen Peng	Andy Sun	

1-2 Dimension inspection

DIMENSIONAL INSPECTION

ITEM	Pneumatic Fender	DATE	2026.01.15-01.17
SIZE	B15305BNTS00	SERIAL NO.	TBIS1530-5-2601-024, 025, 026

Picture:



Item	Specification	Dimensional	Judgement
Length	3000+10%/-5% (2850~3300)	3005, 2995, 2996	Good
Diameter	1500+10%/-5% (1425~1650)	1505, 1502, 1506	Good
Inspected by	Reviewed by	Approved by	
Chengkai Qiu	Helen Peng	Andy Sun	

1-3 Dimension inspection

DIMENSIONAL INSPECTION

ITEM	Pneumatic Fender	DATE	2026.01.17-01.27
SIZE	B15305BNTS00	SERIAL NO.	TBIS1530-5-2601-027, 028, 029

Picture:



Item	Specification	Dimensional	Judgement
Length	3000+10%/-5% (2850~3300)	2995, 2996, 2998	Good
Diameter	1500+10%/-5% (1425~1650)	1505, 1503, 1505	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	2025.11.29-12.09
SIZE	B15305BNTS00	SERIAL NO.	TBIS1530-5-2512-103,104,105,106

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	2026.01.15-01.17
SIZE	B15305BNTS00	SERIAL NO.	TBIS1530-5-2601-024, 025, 026

Picture:



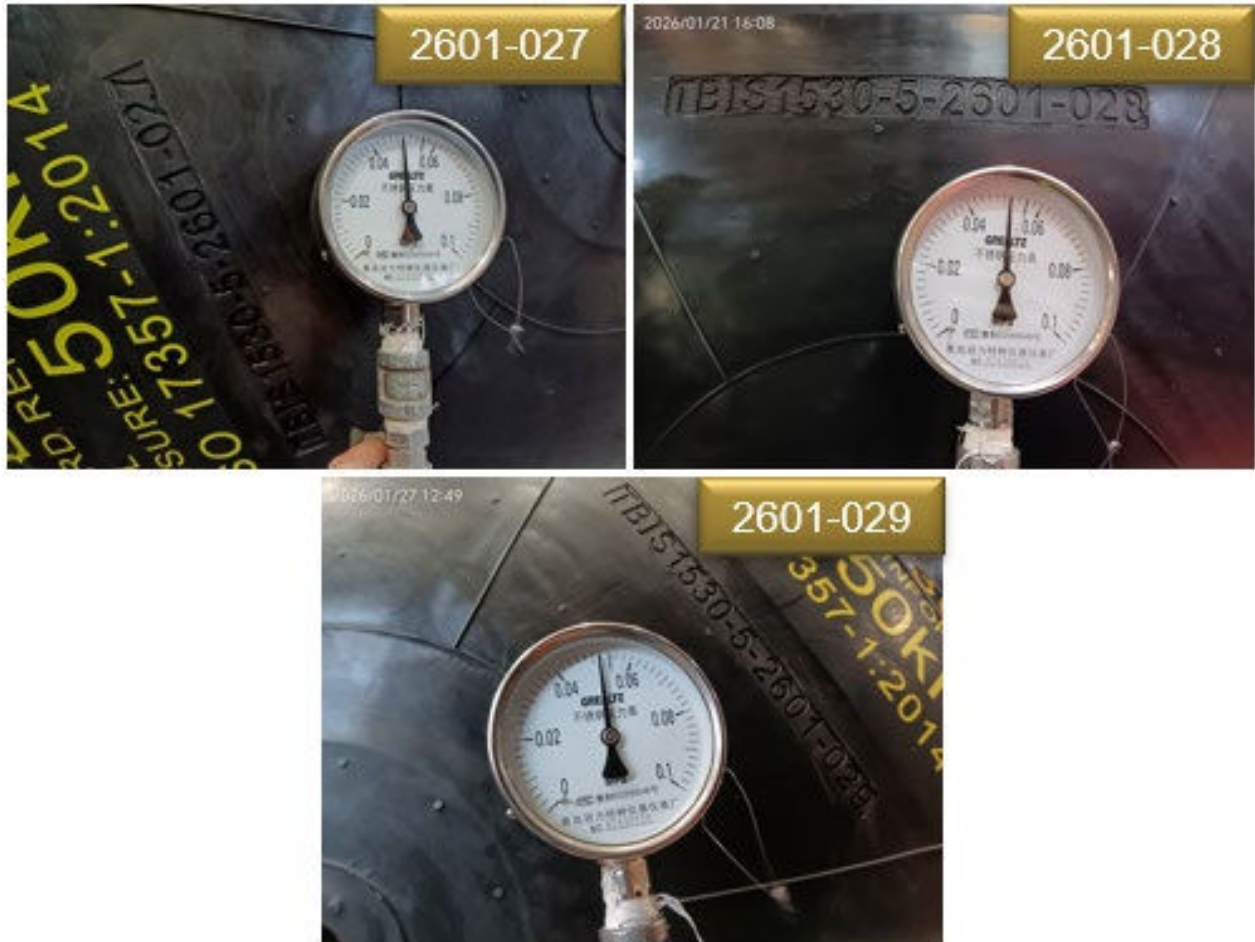
Item	Specification	Result	Judgement
Pneumatic Fender Internal Pressure 50kPa after 30 minutes	No air-leakage	No air-leakage	Good
Inspected by	Reviewed by	Approved by	
Chengkai Qiu	Helen Peng	Andy Sun	

2-3 Air-leakage test

AIR-LEAKAGE TEST

ITEM	Pneumatic Fender	DATE	2026.01.21-01.27
SIZE	B15305BNTS00	SERIAL NO.	TBIS1530-5-2601-027, 028, 029

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	



证书编号:
Certificate No.



2025-1-26-01532

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



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: 07430001
Serial NO.:

建议下次校准日期: 2026-04-14
The next calibration date:



批准日期: 2025-10-20
Date for calibrated:

批准人: 林洁
Approved by: 林洁

校准日期: 2025-10-15
Date for calibrated:

核验员: 杨笛
Inspected by: 杨笛

接样日期: 2025-10-14
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
Add:
网址: www.sctclab.com
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电话: 0512-53520063
Tel:
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E-mail



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

批准人: 林洁 林洁
Approved by

校准日期: 2025-12-04
Date for calibrated

核验员: 杨笛 杨笛
Inspected by

接样日期: 2025-12-02
Date of Receive

校准员: 徐雯雯 徐雯雯
Calibrated by

地址: 江苏省太仓市昭溪路101号太仓星药港4号楼
Add:
网址: www.sctclab.com
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电话: 0512-53520063
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邮编: 215400
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电子邮件: office@sctclab.com
E-mail



TEST REPORT FOR PNEUMATIC FENDER

Client: TRELLEBORG MARINE SYSTEMS FZE
Certificate No: TCQ/010fp/26
Product: B15305BNTS00(10PCE)
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	21.6	10MPa or more	21.5
1.2	Elongation (%)	ISO37:2011	400% or more	589.6	400% or more	652.3
1.3	Hardness (Shore A)	ISO7619-1:2010	60±10 (Durometer hardness test type A)	60	50±10 (Durometer hardness test type A)	57
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/010fp/26
 Product: B15305BNTS00(10PCE)
 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	1.5Dx3.0L
Initial Internal Pressure	50KPa
Fender Serial No.	TBIS1530-5- 2512-103
Safety Valve Serial No.	/
Fender Type	Type I
Fender Color	Black
Receive Date	

Special Terms

Submarine Usage	Yes	NO ✓
Non-Marking Fender	Yes	NO ✓

Logbook of Trelleborg Pneumatic Fender

Identification Information

Fender Size	1.5Dx3.0L
Initial Internal Pressure	50KPa
Fender Serial No.	TBIS1530-5- 2512-104
Safety Valve Serial No.	/
Fender Type	Type I
Fender Color	Black
Receive Date	

Special Terms

Submarine Usage	Yes	NO ✓
Non-Marking Fender	Yes	NO ✓

Logbook of Trelleborg Pneumatic Fender

Identification Information

Fender Size	1.5Dx3.0L
Initial Internal Pressure	50KPa
Fender Serial No.	TBIS1530-5- 2512-105
Safety Valve Serial No.	/
Fender Type	Type I
Fender Color	Black
Receive Date	

Special Terms

Submarine Usage	Yes	NO ✓
Non-Marking Fender	Yes	NO ✓

Logbook of Trelleborg Pneumatic Fender

Identification Information

Fender Size	1.5Dx3.0L
Initial Internal Pressure	50KPa
Fender Serial No.	TBIS1530-5- 2512-106
Safety Valve Serial No.	/
Fender Type	Type I
Fender Color	Black
Receive Date	

Special Terms

Submarine Usage	Yes	NO ✓
Non-Marking Fender	Yes	NO ✓

Logbook of Trelleborg Pneumatic Fender

Identification Information

Fender Size	1.5Dx3.0L
Initial Internal Pressure	50KPa
Fender Serial No.	TBIS1530-5- 2601-024
Safety Valve Serial No.	/
Fender Type	Type I
Fender Color	Black
Receive Date	

Special Terms

Submarine Usage	Yes	NO ✓
Non-Marking Fender	Yes	NO ✓

Logbook of Trelleborg Pneumatic Fender

Identification Information

Fender Size	1.5Dx3.0L
Initial Internal Pressure	50KPa
Fender Serial No.	TBIS1530-5- 2601-025
Safety Valve Serial No.	/
Fender Type	Type I
Fender Color	Black
Receive Date	

Special Terms

Submarine Usage	Yes	NO ✓
Non-Marking Fender	Yes	NO ✓

Logbook of Trelleborg Pneumatic Fender

Identification Information

Fender Size	1.5Dx3.0L
Initial Internal Pressure	50KPa
Fender Serial No.	TBIS1530-5- 2601-026
Safety Valve Serial No.	/
Fender Type	Type I
Fender Color	Black
Receive Date	

Special Terms

Submarine Usage	Yes	NO ✓
Non-Marking Fender	Yes	NO ✓

Logbook of Trelleborg Pneumatic Fender

Identification Information

Fender Size	1.5Dx3.0L
Initial Internal Pressure	50KPa
Fender Serial No.	TBIS1530-5- 2601-027
Safety Valve Serial No.	/
Fender Type	Type I
Fender Color	Black
Receive Date	

Special Terms

Submarine Usage	Yes	NO ✓
Non-Marking Fender	Yes	NO ✓

Logbook of Trelleborg Pneumatic Fender

Identification Information

Fender Size	1.5Dx3.0L
Initial Internal Pressure	50KPa
Fender Serial No.	TBIS1530-5- 2601-028
Safety Valve Serial No.	/
Fender Type	Type I
Fender Color	Black
Receive Date	

Special Terms

Submarine Usage	Yes	NO ✓
Non-Marking Fender	Yes	NO ✓

Logbook of Trelleborg Pneumatic Fender

Identification Information

Fender Size	1.5Dx3.0L
Initial Internal Pressure	50KPa
Fender Serial No.	TBIS1530-5- 2601-029
Safety Valve Serial No.	/
Fender Type	Type I
Fender Color	Black
Receive Date	

Special Terms

Submarine Usage	Yes	NO ✓
Non-Marking Fender	Yes	NO ✓

