



PNEUMATIC FENDER ACCESSORIES

Inspection Report

Product Name: Pneumatic fender Φ 2500x5500L

Purchase order: PO-001322-1/PNE-STOCK-FEB-2023

Initial Internal Pressure: 50kPa

Date: 16th, Jun 2023





Trelleborg Marine Engineering (Qingdao) Co., Ltd

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

The following pneumatic rubber fender components were examined, tested in accordance with the purchase order and specifications requirements.

1. Safety valve
2. Shackles
3. Swivel shackles
4. Chain
5. Towing lug



安全阀性能测试报告

Performance Test Report

公称口径: DN80(185*135)
Nominal diameter
使用温度: -40℃~+100℃
Suitable temperature
序列号: A20040011
Serial number

工作压力: P 0.16-0.25 MPa
Work temperature
适用介质: 气体(Gas) 等
Suitable fluid
生产许可证号: TSF710106-2021
Manufacturing License NO.

检验项目 Test project	要求 Requirement	结果 Result
主要零件材料 Part material	根据标准规定 According to the standard	符合 Qualified
螺纹精度粗糙度 The accuracy and roughness	按图样 Meet the drawing requirements	符合 Qualified
主要连接尺寸 Connection dimensions	根据JB2203、JISB2220标准 According to the JB2203、JISB2220 standard	符合 Qualified
弹簧 Spring	进行探伤及刚度检验	符合 Qualified
强度试验 Shell test	1.5PN (试验介质: 水) Test fluid: Water	符合 Qualified
整定压力(MPa) Set Pressure(MPa)	0.175±0.015 (试验介质: 空气) Test fluid: Gas	符合 Qualified
密封性 Sealing property	≤20泡/分钟 (试验介质: 空气) Test fluid: Gas	符合 Qualified

本产品按图样及GB/T12243-2005标准规定检验合格, 准予出厂。
The product is according to the drawing and GB/T12243-2005 standard, inspection qualified.

国家质量监督局压力管道元件制造单位安全注册, 安全标记: TS
General Administration of Quality Supervision, Inspection Safety Valve and safety device, Safe sign: TS

上海埃弗斯阀门制造有限公司
Shanghai AFS Valve Manufacturing Co., Ltd.
印章:
Seal
出厂检验员: 检3
Checker
检验日期: 2020-04
Test date

主要零件材料机械性能

Mechanical Properties

零件名称 Part Name	材料牌号 Material Name	抗拉强度 σ _b MPa	屈服强度 σ _{0.2} MPa	伸长率 δ ₅ %	收缩率 ψ %		
阀体 Body	SUS316	610	325	45	40		
阀盖 Cover	SUS316	610	325	45	40		
阀瓣 Disc	SUS316	520	205	35	40		
阀座 Seat	SUS316	520	205	35	40		
弹簧 Spring	SUS316	520	205	35	40		

主要零件材料化学成分

Chemical Composition

零件名称 Part Name	材料牌号 Material Name	碳 C	硅 Si	锰 Mn	磷 P	硫 S	铬 Cr	镍 Ni	钼 Mo
阀体 Body	SUS316	0.025	0.505	0.999	0.034	0.014	16.45	10.18	2.10
阀盖 Cover	SUS316	0.025	0.505	0.999	0.034	0.014	16.45	10.18	2.10
阀瓣 Disc	SUS316	0.021	0.41	1.1	0.034	0.002	16.26	10.12	2.05
阀座 Seat	SUS316	0.021	0.41	1.1	0.034	0.002	16.26	10.12	2.05
弹簧 Spring	SUS316	0.032	0.35	1.02	0.035	0.001	16.57	10.1	2.12

安全阀性能测试报告

公称口径: DN80(185*135)
Nominal diameter
使用温度: -40℃~+100℃
Suitable temperature
序列号: 18040002
Serial number

工作压力: P 0.16-0.25 MPa
Work temperature
适用介质: 气体(Gas) 等
Suitable fluid
生产许可证号: TSF710106-2021
Manufacturing License NO.

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General Administration of Quality Supervision, Inspection Safety Valve and safety device, Safe sign: TS

上海埃弗斯阀门制造有限公司
Shanghai AFS Valve Manufacturing Co., Ltd.
印章:
Seal
出厂检验员: 检3
Checker
检验日期: 2018-04
Test date

主要零件材料机械性能

Mechanical Properties

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青岛天顺达机械制造有限公司

QINGDAO TAI STAR MACHINERY CO., LTD

证书编号: TSD190718-1
 CERTIFICATE NO.: TSD190718-1

工厂检测证书

MILL CERTIFICATE AND CERTIFICATE OF QUANTITY

采购方: 特瑞堡工程系统(青岛)有限公司

PURCHASER: Trelleborg Engineered Systems (Qingdao) Co., Ltd

货物描述

DESCRIPTION OF PRODUCT

1、货物: 2500-3300 拖拽吊耳

PRODUCT: P2533TOWINGL

规格尺寸: 详见以下图纸

SPECIFICATION: ACCORDING TO APPROVAL DRAWING

材 质: Q345B

MATERIAL: Q345B

数 量: 4 件

QUANTITY: 4PCS

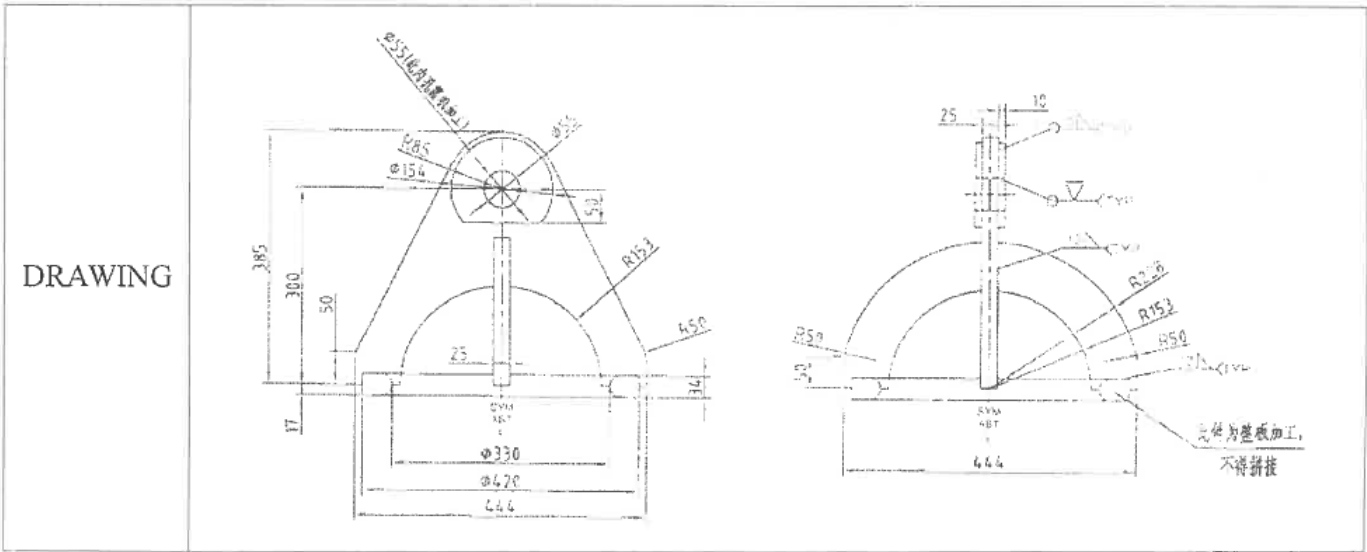
表面处理: 热镀锌

SURFACE FINISHED: HOP DIP GALVANIZED

是否合格: 是

APPEARANCE: CHECK OUT

所有尺寸均按照图纸进行生产 ALL SIZES MADE ACCORDING TO THE DRAWING



2、货物: G210 卸扣 7/8"

PRODUCT: G210 SHACKLE 7/8"

卸扣名义尺寸 NOMINAL SIZE OF SHACKLE

直径: 22 MM

额定载荷: 6.5 T

数量: 28 件

DIAMETER: 22 MM

WLL: 6.5 T

QUANTITY: 28 PCS

拉力负荷: 130 KN

PROOF TEST LOAD: 130 KN

破断负荷: 390 KN

BREAKING LOAD: 390 KN

表面处理: 热镀锌 ≥ 85 UM

SURFACE FINISHED: H.D.G. ≥ 85 UM

3、货物: G210 卸扣 3/4"
PRODUCT: G210 SHACKLE 3/4"
卸扣名义尺寸 NOMINAL SIZE OF SHACKLE
直径: 19 MM 额定载荷: 4.75 T 数量: 28 件
DIAMETER: 19 MM WLL: 4.75 T QUANTITY: 28 PCS
拉力负荷: 95 KN PROOF TEST LOAD: 95 KN
破断负荷: 285 KN BREAKING LOAD: 285 KN
表面处理: 热镀锌 \geq 85 UM SURFACE FINISHED: H.D.G. \geq 85 UM

4、货物: G2130 卸扣 1-1/2"
PRODUCT: G2130 SHACKLE 1-1/2"
卸扣名义尺寸 NOMINAL SIZE OF SHACKLE
直径: 38 MM 额定载荷: 17 T 数量: 8 件
DIAMETER: 38 MM WLL: 17 T QUANTITY: 8 PCS
拉力负荷: 340 KN PROOF TEST LOAD: 340 KN
破断负荷: 1020 KN BREAKING LOAD: 1020 KN
表面处理: 热镀锌 \geq 85 UM SURFACE FINISHED: H.D.G. \geq 85 UM

5、货物: G402 旋转环 1-1/2"
PRODUCT: G402 SWIVEL 1-1/2"
卸扣名义尺寸 NOMINAL SIZE OF SHACKLE
直径: 38 MM 额定载荷: 20 T 数量: 4 件
DIAMETER: 38 MM WLL: 20 T QUANTITY: 4 PCS
表面处理: 热镀锌 \geq 85 UM SURFACE FINISHED: H.D.G. \geq 85 UM

6、货物: 蝴蝶卸扣 13MM
PRODUCT: HAMMER LOCK 13MM
卸扣名义尺寸 NOMINAL SIZE OF SHACKLE
额定载荷: 5.3 T 数量: 200 件
WLL: 5.3 T QUANTITY: 200 PCS
拉力负荷: 106 KN PROOF TEST LOAD: 106 KN
破断负荷: 212 KN BREAKING LOAD: 212 KN
表面处理: 热镀锌 \geq 85 UM SURFACE FINISHED: H.D.G. \geq 85 UM

7、货物: 12MM 二级无档链*34M/条
PRODUCT: U2 12MM OPEN LINK CHAIN*34M/LENGTH
链环名义尺寸 NOMINAL SIZE OF CHAIN LINKS
直径: 12 MM 内长: 66 MM 内宽: 24 MM
DIAMETER: 12 MM INSIDE LENGTH: 66 MM INSIDE WIDTH: 24 MM
数量: 34 米 \times 1 条 QUANTITY: 34M \times 1PC
拉力负荷: 39.5 KN CHAIN PROOF LOAD: 39.5 KN
破断负荷: 79.2 KN CHAIN BREAKING LOAD: 79.2 KN
表面处理: 热镀锌 \geq 85 UM SURFACE FINISHED: H.D.G. \geq 85 UM
链条公差: +2.5%/-0 SIZE TOLERANCE: +2.5%/-0

8、货物：16MM 二级无档链*50M/条
PRODUCT: U2 16MM OPEN LINK CHAIN*50M/LENGTH
链环名义尺寸 NOMINAL SIZE OF CHAIN LINKS
直径：16 MM 外长：96 MM 外宽：57.6 MM
DIAMETER：16 MM OUTSIDE LENGTH：96 MM OUTSIDE WIDTH：57.6 MM
数量：50 米×3 条 QUANTITY：50M×3PCS
拉力负荷：66.2 KN CHAIN PROOF LOAD：66.2 KN
破断负荷：132.3 KN CHAIN BREAKING LOAD：132.3 KN
表面处理：热镀锌≥85 UM SURFACE FINISHED：H.D.G.≥85 UM
链条公差：+2.5%/-0 SIZE TOLERANCE：+2.5%/-0

合同/定单编号 (CONTRACT NO.) : 4500030431 / T1906295

兹证明上述产品经本厂检验和试验，符合本厂规范和批准图纸要求，可以使用。

THIS IS TO CERTIFY THAT THE ABOVE-MENTIONED GOODS HAVE BEEN INSPECTED AND TESTED BY OUR FACTORY AND FOUND TO BE IN COMPLIANCE WITH STANDARD OF OUR FACTORY AND THAT IT IS FIT FOR USE.

检验员：宋修君 批准：蓝孝柱 发证日期：2019 年 07 月 18 日
INSPECTOR：XIUJUN SONG APPROVER：XIAOZHU LAN DATE OF ISSUE：2019-07-18