

Work Order: 5769672-A
First Visit Date: 30-Mar-2023
Last Visit Date: 08-May-2023

Vendor PO 120477, 124994 and

Number: 124978 Survey Oslo

Location:

Equipment Certification Report

Asset Type Pipe Fitting

Customer Name SKIPPER ELECTRONICS A/S

WCN of Customer 500646 Location Oslo

This is to certify that the undersigned Surveyors to this Bureau did at the request of SKIPPER ELECTRONICS A/S, from 30-Mar-2023 to 08-May-2023, carry out the following survey and report as follows:

Client Asset Name Quantity

Set of Two (2) Transducer Tanks

Name Plate Data

ABS Label Manufacturer Purchaser Designer Destination Vessel Spare
Set of Two (2) Transducer Tanks SKIPPER ELECTRONICS A/S - SKIPPER ELECTRONICS A/S - Yes

Basic Identification Data

Serial Number Model Number Owner Tag Number Supplier Ref. Number

· ETNST - -

Report Details

ABS Stamping Maltese Cross

5769672 Yes

Design Details

Design state	Project Number	Reviewing Organization	Rule Set Name	Rule Set Version
Product Design	22-2241511-	London Engineering	Rules for Building and Classing Marine	2023
Assessed	PDA	Department	Vessels	

Additional Data

Test Pressure 5 bar

Statement of Work - Classification Service - Certification -

- Plan review and/or Product Design Assessment (PDA) has identified design restrictions and/or limitations which are to be referenced upon installation onboard the vessel.
- Company has provided a declaration of conformity as required by International Maritime Organization (IMO) Resolution MSC.282(86), adopting SOLAS Reg. II-1/3-5.2, and the IMO MODU Code 2009, the aforementioned product or design does not contain any form of asbestos.
- Testing machines are maintained in a satisfactory condition and records of their recheck or calibration dates confirmed.
- Dimensions and tolerances were verified as required by the design approval.
- NDE and hardness testing was conducted in accordance with approved specification and found to be the satisfaction of the attending Surveyor.

NOTE: This Report evidences that the survey reported herein was carried out in compliance with one or more of the Rules, guides, standards or other criteria of the American Bureau of Shipping and is issued solely for the use of the Bureau, its committees, its clients or other authorized entities. This Report is a representation only that the vessel, structure, item of material equipment, machinery or any other item covered by this Report has been examined for compliance with, or has met one or more of the Rules, guides, standards or other criteria of American Bureau of Shipping. The validity, applicability and interpretation of this Report is governed by the Rules and standards of American Bureau of Shipping who shall remain the sole judge thereof. Nothing contained in this Report or in any notation made in contemplation of this Report shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, repairer, operator or other entity of any warranty express or implied.

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Location:

- Rule required testing (pressure/load/operational/proof-load/etc.) of the equipment/component was witnessed to the satisfaction of the attending Surveyor.
- Subject to satisfactory installation, testing and trials after installation onboard the vessel.
- Material test reports (MTR) were reviewed and found to be the satisfaction of the attending Surveyor. Where required by the Rules, ABS
 material certification reports have been verified.
- Major weldments were examined prior to welding as necessary.
- Welding procedure specifications and welder qualifications were reviewed and found to be satisfactory to attending ABS Surveyor. Final welding was examined upon completion.

Report Findings Statement/Observation

Finding No	Asset	Survey Task	Date Created
219.0	Set of Two (2) Transducer Tanks	Certification - Set of Two (2) Transducer Tanks	08-May-2023

Found

Visual inspection, dimensional control and review of material certification carried out.

Transducer tanks were found covered by ABS Product Design Assessment no. 22-2241511-PDA.

Closing Paragraph:

The component/equipment was surveyed in accordance with the Rules, specifications, and approved drawings, as applicable, and is eligible for installation on board an ABS classed vessel subject to satisfactory installation and testing, as necessary.

Attending Surveyor(s):

Fuglei, Tor Brodde

Signed-off Date: 08-May-2023

Reviewing Surveyor(s)

Work Order Reviewer: Vocke, Sebastian Work Order Credit Date: 08-May-2023



Work Order: 5769672-B
First Visit Date: 30-Mar-2023
Last Visit Date: 08-May-2023

Vendor PO 120477, 124994 and

Number: 124978 Survey Oslo

Location:

Equipment Certification Report

Asset Type Ship Side Valve

Customer Name SKIPPER ELECTRONICS A/S

WCN of Customer 500646 Location Oslo

This is to certify that the undersigned Surveyors to this Bureau did at the request of SKIPPER ELECTRONICS A/S, from 30-Mar-2023 to 08-May-2023, carry out the following survey and report as follows:

Client Asset Name Quantity

Ship Side Ball Valve 1

Name Plate Data

ABS Label Manufacturer Purchaser Designer Destination Spare
Vessel

Ship Side Ball VIS VANA SAN. ITHALAT IHRACAT - VIS VANA SAN. ITHALAT IHRACAT - Yes
Valve TIC.LTD.STI. TIC.LTD.STI.

Basic Identification Data

Serial Number Model Number Owner Tag Number Supplier Ref. Number

23182 SB-100-SB - -

Report Details

ABS Stamping Maltese Cross

5769672 Yes

Design Details

Design stateDrawing NumberReviewing Organization Product DesignRule Set NameRule Set NameProduct Design Assessed22-2329626-PDA DepartmentLondon Engineering DepartmentRules for Building and Classing Marine Vessels2022

Additional Data

Design Pressure 5 bar

Valve Material Austenitic Cast Stainless Steel

Valve Size 100 mm

Client Asset Name Quantity

Ship Side Ball Valve 1

Name Plate Data

ABS Label Manufacturer Purchaser Designer Destination Spare
Vessel

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Work Order: 5769672-B First Visit Date: 30-Mar-2023 Last Visit Date: 08-May-2023

Vendor PO 120477, 124994 and

Yes

124978 Number: Oslo

Survey Location:

Ship Side Ball Valve

VIS VANA SAN. ITHALAT IHRACAT

TIC.LTD.STI.

VIS VANA SAN. ITHALAT IHRACAT

TIC.LTD.STI.

Basic Identification Data

Serial Number Model Number Owner Tag Number Supplier Ref. Number

23183 SB-100-SB

Report Details

ABS Stamping

5769672

Design Details

Design state **Drawing** Reviewing Organization Rule Set Name Rule Set Number Version

Rules for Building and Classing Marine 2022

London Engineering Product Design 22-2329626-PDA Department Vessels Assessed

Additional Data

Design Pressure 5 bar

Austenitic Cast Stainless Steel Valve Material

100 mm Valve Size

Client Asset Name Quantity

Ship Side Gate Valve 2

Name Plate Data

ABS Label Destination Manufacturer Purchaser Designer Spare Vessel

VIS VANA SAN. ITHALAT IHRACAT Ship Side Gate VIS VANA SAN. ITHALAT IHRACAT Yes

Valve TIC.LTD.STI. TIC.LTD.STI.

Basic Identification Data

Serial Number Model Number Owner Tag Number Supplier Ref. Number

PWO-120477 23180, 23181 SB-100-SA

Report Details

ABS Stamping Maltese Cross

5769672 Yes

Design Details

Design state Drawing **Reviewing Organization** Rule Set Name Rule Set Number Version 22-2329626-PDA **London Engineering** Rules for Building and Classing Marine 2022 **Product Design**

Assessed Department Vessels



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Location:

Additional Data

Design Pressure5 barValve MaterialCopperValve Size100 mm

Statement of Work - Classification Service - Certification -

- Plan review and/or Product Design Assessment (PDA) has identified design restrictions and/or limitations which are to be referenced
 upon installation onboard the vessel.
- Company has provided a declaration of conformity as required by International Maritime Organization (IMO) Resolution MSC.282(86), adopting SOLAS Reg. II-1/3-5.2, and the IMO MODU Code 2009, the aforementioned product or design does not contain any form of asbestos.
- Testing machines are maintained in a satisfactory condition and records of their recheck or calibration dates confirmed.
- Dimensions and tolerances were verified as required by the design approval.
- Functional testing of subassemblies and completed units, as specified in the fabrication procedures was completed to the satisfaction of the attending Surveyor.
- Rule required testing (pressure/load/operational/proof-load/etc.) of the equipment/component was witnessed to the satisfaction of the attending Surveyor.
- Subject to satisfactory installation, testing and trials after installation onboard the vessel.
- Material test reports (MTR) were reviewed and found to be the satisfaction of the attending Surveyor. Where required by the Rules, ABS
 material certification reports have been verified.

Report Findings

Statement/Observation

Finding No	Asset	Survey Task	Date Created
220.0	-	Certification - Ship Side Ball Valve, Ship Side Ball Valve, Ship Side Gate Valve, Ship Side Gate Valve	08-May-2023

Found

Set of 2 (two) Ship Bottom Shell Gate Valve DN100

Valve intended for for Echo Sounder Transducer or Speed Log Sensor installation.

Valve assembly may include Intermediate Element, Bottom Flange, Blanking Plate, Intermediate tube, Intermediate Flange.

Hydrostatic pressure test was carried out at 5 bar with closed valve for 5 minutes in accordance with 2023 ABS Marine Vessel Rules 4.6.2/7.3.2.

No leakage or plastic deformation were noted during testing.

Material certificates of valve, intermediate element and bottom flange were provided by the Manufacturer and satisfactorily reviewed.

The valve was found covered by ABS Product Design Assessment no. 22-2329626-PDA.

Statement/Observation



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Survey Location:

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Attending Surveyor(s):

Fuglei, Tor Brodde

Signed-off Date: 08-May-2023

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Work Order Reviewer: Vocke, Sebastian Work Order Credit Date: 08-May-2023