

Work Order: 6173753-A
First Visit Date: 15-Dec-2023
Last Visit Date: 19-Apr-2024

Vendor Purchase 127101-130161-130163 **Order Number:** -126990

Survey Location: Oslo

Equipment Certification Report

Asset Type Pipe Fitting

Customer Name JOTRON SKIPPER AS

Customer WCN 500646 Location Oslo

This is to certify that the undersigned Surveyors to this Bureau did at the request of JOTRON SKIPPER AS, from 15 December 2023 to 19 April 2024, carry out the following survey and report as follows:

Client Asset Name Quantity

Set of Four (4) Transducer Tanks 1

Name Plate Data

ABS Label Manufacturer Purchaser Designer Destination Vessel Spare
Set of Four (4) Transducer Tanks JOTRON SKIPPER AS - Yes

Basic Identification Data

Serial Number Model Number Supplier Reference Number

NA Transducer Tank ETNST -

Report Details

ABS Stamping Maltese Cross

6173753 Yes

Design Details

Design State Drawing Number Reviewing Organization

Product Design Assessed 22-2241511-PDA London Engineering Department

Statement of Work - Classification Service - Certification -

- 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.
- 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.
- 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.
- 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.
- 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.
- Testing machines are maintained in a satisfactory condition and records of their recheck or calibration dates confirmed.
- Welding procedure specifications and welder qualifications were reviewed and found to be satisfactory to attending ABS Surveyor. Final welding was examined upon completion.

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.



Work Order: 6173753-A
First Visit Date: 15-Dec-2023
Last Visit Date: 19-Apr-2024

Vendor Purchase 1
Order Number: -1

Survey Location:

127101-130161-130163

-126990 Oslo

Report Findings Statement/Observation

Finding No	Asset	Survey Task	Date Created
234.0	Set of Four (4) Transducer Tanks	Certification - Set of Four (4) Transducer Tanks	19-Apr-2024

Found

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

Transducer tanks with bottom flanges and intermediate elements 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: 19-Apr-2024

Reviewing Surveyor(s)

Work Order Reviewer: Vocke, Sebastian Work Order Credit Date: 19-Apr-2024



Work Order: 6173753-B
First Visit Date: 15-Dec-2023
Last Visit Date: 19-Apr-2024

Vendor Purchase 127101-130161-130163 **Order Number:** -126990

Survey Location: Oslo

Equipment Certification Report

Asset Type Ship Side Valve

Customer Name JOTRON SKIPPER AS

Customer WCN 500646 Location Oslo

This is to certify that the undersigned Surveyors to this Bureau did at the request of JOTRON SKIPPER AS, from 15 December 2023 to 19 April 2024, carry out the following survey and report as follows:

Client Asset Name Quantity

Ship Side Valve, SB-100-SB 9

Name Plate Data

ABS Label Manufacturer Purchaser Designer Destination Vessel Spare
Ship Side Valve, SB-100-SB VISVANA SAN - Yes

Basic Identification Data

Serial Number Supplier Reference Number Supplier Reference Number

23637, 23638, 23639, 23640, 23641, 23642, 23643, 23644, 23645 SB-100-SB

Report Details

ABS Stamping Maltese Cross

6173753 Yes

Design Details

Design State Drawing Number Reviewing Organization

Product Design Assessed 22-2329626-PDA London Engineering Department

Additional Data

Valve Material ASTM - Stainless Steel - ASTM A-473, Grade CF-8 - Austenitic Cast Stainless Steel

Valve Size 100 mm

Statement of Work - Classification Service - Certification -

- 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.
- 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.
- 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.
- 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.
- Rule required testing (pressure/load/operational/proof-load/etc.) of the equipment/component was witnessed to 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.



Work Order: 6173753-B
First Visit Date: 15-Dec-2023
Last Visit Date: 19-Apr-2024

Vendor Purchase 127101-130161-130163 **Order Number:** -126990

Survey Location: Oslo

· Testing machines are maintained in a satisfactory condition and records of their recheck or calibration dates confirmed.

Report Findings Statement/Observation

Finding No	Asset	Survey Task	Date Created
232.0	Ship Side Valve, SB-100-SB	Certification - Ship Side Valve, SB-100-SB, Ship Side Valve, SB-100-SB	19-Apr-2024

Found

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 elements and bottom fanges were provided by the Manufacturer and satisfactorily reviewed.

The valves were found covered by ABS Product Design Assessment no. 22-2329626-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: 19-Apr-2024

Reviewing Surveyor(s)

Work Order Reviewer: Vocke, Sebastian Work Order Credit Date: 19-Apr-2024



Work Order: 6173753-C First Visit Date: 15-Dec-2023 Last Visit Date: 19-Apr-2024

Vendor Purchase 127101-130161-130163 **Order Number:** -126990

Survey Location: Oslo

Equipment Certification Report

Asset Type Ship Side Valve

Customer Name JOTRON SKIPPER AS

Customer WCN 500646 Location Oslo

This is to certify that the undersigned Surveyors to this Bureau did at the request of JOTRON SKIPPER AS, from 15 December 2023 to 19 April 2024, carry out the following survey and report as follows:

Client Asset Name Quantity

Ship Side Valve, SB-60-SA 2

Name Plate Data

ABS Label Manufacturer Purchaser Designer Destination Vessel Spare
Ship Side Valve, SB-60-SA VISVANA SAN - Yes

Basic Identification Data

Serial Number Model Number Supplier Reference Number

23646, 23647 SB-60-SA -

Report Details

ABS Stamping Maltese Cross

6173753 Yes

Design Details

Design State Drawing Number Reviewing Organization

Product Design Assessed 22-2329626-PDA London Engineering Department

Additional Data

Valve Material ASTM - Stainless Steel - ASTM A-473, Grade CF-8 - Austenitic Cast Stainless Steel

Valve Size 65 mm

Statement of Work - Classification Service - Certification -

- 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.
- 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.
- 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.
- 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.
- Rule required testing (pressure/load/operational/proof-load/etc.) of the equipment/component was witnessed to 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.



Work Order: 6173753-C First Visit Date: 15-Dec-2023 Last Visit Date: 19-Apr-2024

Vendor Purchase 127101-130161-130163 **Order Number:** -126990

Survey Location: Oslo

• Testing machines are maintained in a satisfactory condition and records of their recheck or calibration dates confirmed.

Report Findings Statement/Observation

Finding No	Asset	Survey Task	Date Created
233.0	Ship Side Valve, SB-60-SA	Certification - Ship Side Valve, SB-60-SA, Ship Side Valve, SB-60-SA	19-Apr-2024

Found

Valves intended for for Echo Sounder Transducer, Doppler Log Sensor, or Speed Log Sensor installation.

Valves 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 valves, intermediate elements and bottom fanges were provided by the Manufacturer and satisfactorily reviewed.

The valves were found covered by ABS Product Design Assessment no. 22-2329626-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: 19-Apr-2024

Reviewing Surveyor(s)

Work Order Reviewer: Vocke, Sebastian Work Order Credit Date: 19-Apr-2024