



Work Order: 6272556-A
 First Visit Date: 22-Feb-2024
 Last Visit Date: 26-Feb-2024
 Vendor Purchase Order Number: 130851, 127103, 126991
 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 22 February 2024 to 26 February 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	-	JOTRON SKIPPER AS	-	Yes

Basic Identification Data

Serial Number	Model Number	Supplier Reference Number
6272556	ETNST	-

Report Details

ABS Stamping **Maltese Cross**
 6272556 Yes

Design Details

Design State	Drawing Number	Reviewing Organization
Product Design Assessed	22-2241511-PDA	London Engineering Department

Statement of Work - Classification Service - Certification -

- ABS Certificate was issued as required by the Rules
- 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.
- Manufacturing Record Book was reviewed.
- 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.
- Subject to satisfactory installation, testing and trials after installation onboard the vessel.
- The intended application of the equipment has not been provided at this time and any specific requirements depending on final application of the equipment is to be verified by the surveyor attending during installation.
- 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.



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Report Findings

Statement/Observation

<i>Finding No</i>	<i>Asset</i>	<i>Survey Task</i>	<i>Date Created</i>
239.0	Set of Four (4) Transducer Tanks	Certification - Set of Four (4) Transducer Tanks	26-Feb-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):

Refshauge, Arne S.

Signed-off Date: 26-Feb-2024

Reviewing Surveyor(s)

Work Order Reviewer: Fuglei, Tor Brodde
Work Order Credit Date: 26-Feb-2024



Work Order: 6272556-B
 First Visit Date: 22-Feb-2024
 Last Visit Date: 26-Feb-2024
 Vendor Purchase Order Number: 130851, 127103, 126991
 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 22 February 2024 to 26 February 2024, carry out the following survey and report as follows:

Client Asset Name **Quantity**
 Ship Bottom Ball Valve - DN65 1

Name Plate Data

ABS Label	Manufacturer	Purchaser	Designer	Destination Vessel	Spare
Ship Bottom Ball Valve - DN65	Visvana	-	Visvana	-	Yes

Basic Identification Data

Serial Number	Model Number	Supplier Reference Number
24122	SB-65-SA	-

Report Details

ABS Stamping **Maltese Cross**
 6272556 Yes

Design Details

Design State	Drawing Number	Reviewing Organization
Product Design Assessed	22-2329626-PDA	London Engineering Department

Additional Data

Valve Material Austenitic Cast Stainless Steel
Valve Size 65 mm

Client Asset Name **Quantity**
 Ship Bottom Ball Valve - DN65 1

Name Plate Data

ABS Label	Manufacturer	Purchaser	Designer	Destination Vessel	Spare
Ship Bottom Ball Valve - DN65	Visvana	-	Visvana	-	Yes

Basic Identification Data

Serial Number	Model Number	Supplier Reference Number
24121	SB-60-SA	-

Report Details

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Last Visit Date: 26-Feb-2024
Vendor Purchase Order Number: 130851, 127103, 126991
Survey Location: Oslo

ABS Stamping Maltese Cross

6272556 Yes

Design Details

Design State **Drawing Number** **Reviewing Organization**

Product Design Assessed 22-2329626-PDA London Engineering Department

Additional Data

Valve Material Austenitic Cast Stainless Steel

Valve Size 60 mm

Statement of Work - Classification Service - Certification -

- ABS Certificate was issued as required by the Rules
- 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.
- Manufacturing Record Book was reviewed.
- 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.
- The intended application of the equipment has not been provided at this time and any specific requirements depending on final application of the equipment is to be verified by the surveyor attending during installation.

Report Findings

Statement/Observation

<i>Finding No</i>	<i>Asset</i>	<i>Survey Task</i>	<i>Date Created</i>
238.0	Ship Bottom Ball Valve - DN65	Certification - Ship Bottom Ball Valve - DN65, Ship Bottom Ball Valve - DN65	26-Feb-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 2024 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.



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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):

Refshauge, Arne S.
Signed-off Date: 26-Feb-2024

Reviewing Surveyor(s)

Work Order Reviewer: Fuglei, Tor Brodde
Work Order Credit Date: 26-Feb-2024



Work Order: 6272556-C
 First Visit Date: 22-Feb-2024
 Last Visit Date: 26-Feb-2024
 Vendor Purchase Order Number: 130851, 127103, 126991
 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 22 February 2024 to 26 February 2024, carry out the following survey and report as follows:

Client Asset Name **Quantity**
 Ship Bottom Gate Valve 5

Name Plate Data

ABS Label	Manufacturer	Purchaser	Designer	Destination Vessel	Spare
Ship Bottom Gate Valve	Visvana	-	Visvana	-	Yes

Basic Identification Data

Serial Number	Model Number	Supplier Reference Number
24116, 24117, 24118, 24119, 24120	SB-100-SB	-

Report Details

ABS Stamping **Maltese Cross**
 6272556 Yes

Design Details

Design State	Drawing Number	Reviewing Organization
Product Design Assessed	22-2329626-PDA	London Engineering Department

Additional Data

Valve Material Stainless Steel
Valve Size 100 mm

Statement of Work - Classification Service - Certification -

- ABS Certificate was issued as required by the Rules
- 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.
- Manufacturing Record Book was reviewed.
- 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.
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Work Order: 6272556-C
First Visit Date: 22-Feb-2024
Last Visit Date: 26-Feb-2024
Vendor Purchase Order Number: 130851, 127103, 126991
Survey Location: Oslo

- 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.
- The intended application of the equipment has not been provided at this time and any specific requirements depending on final application of the equipment is to be verified by the surveyor attending during installation.

Report Findings

Statement/Observation

<i>Finding No</i>	<i>Asset</i>	<i>Survey Task</i>	<i>Date Created</i>
237.0	Ship Bottom Gate Valve	Certification - Ship Bottom Gate Valve, Ship Bottom Gate Valve, Ship Bottom Gate Valve, Ship Bottom Gate Valve, Ship Bottom Gate Valve	26-Feb-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 2024 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):

Refshauge, Arne S.

Signed-off Date: 26-Feb-2024

Reviewing Surveyor(s)

Work Order Reviewer: Fuglei, Tor Brodde
 Work Order Credit Date: 26-Feb-2024