

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 21-Sep-2021 to 20-Oct-2021, carry out the following survey and report as follows:

Client Asset Name **Quantity**

Shell Valve Diam. 100 mm 1

Name Plate Data

ABS Label	Manufacturer	Purchaser	Designer	Destination Vessel	Spare
Shell Valve Diam. 100 mm	SKIPPER ELECTRONICS A/S	-	LK VALVES AB	-	Yes

Basic Identification Data

Serial Number	Model Number	Owner Tag Number	Supplier Ref. Number
21246	SB-100-SB	-	-

Report Details

ABS Stamping **Maltese Cross**

4951155 Yes

Design Details

Design state	Drawing Number	Reviewing Organization	Rule Set Name	Rule Set Version
Product Design Assessed	17-LD1648327-PDA	London Engineering Department	Rules for Building and Classing Marine Vessels	2021

Additional Data

Valve Size 100 mm

Statement of Work - Classification Service - Certification -

- All parts of the machinery/equipment satisfactorily complied with the approved drawings. Amendments, if any, verified to be rectified and considered satisfactory.
- Asbestos-free declaration verified and supporting documentation reviewed.
- Subject to satisfactory installation, testing and trials after installation onboard the vessel.
- The principal data has been verified in accordance with the applicable Rules/specifications and applicable approved plans, and confirmed to be within acceptable tolerances.
- All testing (pressure/load/operational/etc.) has been carried out as applicable and verified in accordance with the applicable Rules/specifications.
- Testing machines are maintained in a satisfactory condition and records of their recheck or calibration dates confirmed.

- Traceability of materials used on this project has been verified.

Report Findings

Statement/Observation

<i>Finding No</i>	<i>Asset</i>	<i>Survey Task</i>	<i>Date Created</i>
187.0	Shell Valve Diam. 100 mm	Certification - Shell Valve Diam. 100 mm	20-Oct-2021

Found

One (1) DN 100 Side shell valve including intermediate element intended for Echo Sounder Transducer Installation

Hydrostatic pressure test was carried out at 5 bar with closed valve for 5 minutes in accordance with 2021 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 flanges were provided by the manufacturer and satisfactorily reviewed.

The valves were found covered by ABS Product Design Assessment no. 17-LD1648327-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: 20-Oct-2021

Reviewing Surveyor(s)

Work Order Reviewer: Vocke, Sebastian

Work Order Credit Date: 20-Oct-2021

Equipment Certification Report

Asset Type Ship Side Valve
Customer Name SKIPPER ELECTRONICS A/S
WCN of Customer 500646
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Client Asset Name **Quantity**

Shell Valve Diam. 100 mm 2

Name Plate Data

ABS Label	Manufacturer	Purchaser	Destination Vessel	Spare
Shell Valve Diam. 100 mm	SKIPPER ELECTRONICS A/S	-	-	Yes

Basic Identification Data

Serial Number	Model Number	Owner Tag Number	Supplier Ref. Number
21247, 21248	SB-100-SA	-	-

Report Details

ABS Stamping **Maltese Cross**

4951155 Yes

Design Details

Design state	Drawing Number	Reviewing Organization	Rule Set Name	Rule Set Version
Product Design Assessed	17-LD1648327-PDA	London Engineering Department	Rules for Building and Classing Marine Vessels	2021

Additional Data

Valve Size 100 mm

Statement of Work - Classification Service - Certification -

- All parts of the machinery/equipment satisfactorily complied with the approved drawings. Amendments, if any, verified to be rectified and considered satisfactory.
- Asbestos-free declaration verified and supporting documentation reviewed.
- Subject to satisfactory installation, testing and trials after installation onboard the vessel.
- The principal data has been verified in accordance with the applicable Rules/specifications and applicable approved plans, and confirmed to be within acceptable tolerances.
- All testing (pressure/load/operational/etc.) has been carried out as applicable and verified in accordance with the applicable Rules/specifications.
- Testing machines are maintained in a satisfactory condition and records of their recheck or calibration dates confirmed.

- Traceability of materials used on this project has been verified.

Report Findings

Statement/Observation

<i>Finding No</i>	<i>Asset</i>	<i>Survey Task</i>	<i>Date Created</i>
188.0	Shell Valve Diam. 100 mm	Certification - Shell Valve Diam. 100 mm, Shell Valve Diam. 100 mm	20-Oct-2021

Found

Two (2) DN 100 Side shell valves including intermediate element intended for Echo Sounder Transducer Installation

Hydrostatic pressure test was carried out at 5 bar with closed valve for 5 minutes in accordance with 2021 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 flanges were provided by the manufacturer and satisfactorily reviewed.

The valves were found covered by ABS Product Design Assessment no. 17-LD1648327-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: 20-Oct-2021

Reviewing Surveyor(s)

Work Order Reviewer: Vocke, Sebastian

Work Order Credit Date: 20-Oct-2021