



AMERICAN BUREAU OF SHIPPING

Customer Name	SKIPPER ELECTRONICS A/S	Purchase Order No.	PWO 109439 / 109440
Attending Office	Oslo	Report Number	OS3592123
First Visit Date	29-Nov-2018	Last Visit Date	29-Nov-2018

Certification Of: Shell Valve Diam. 60 mm Quantity: One(1)
Manufacturer: SKIPPER ELECTRONICS A/S

Survey Location: Oslo, Norway

Equipment Data

Manufacturer Number(S. No.) 18351
Model Number SB-60-SA
Vendor Tag Number PWO 109440

Design Details

Design State Product Design Assessed
ABS Reviewing Organization London Engineering Department
Drawing Number 17-LD1648327-PDA

Additional Data

ABS Stamping ✱ OS3592123-A
Valve Size 60
Valve Material Stainless Steel - High Strength Steel - NOT SPECIFIED - NOT SPECIFIED

This is to Certify that the undersigned surveyor(s) to this Bureau did, at the request of the customer, carry out the following survey and report as follows:

Traceability of materials used on this project has been verified.

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.

Final markings for identification confirmed.

Side shell valves intended for Echosounder Transducer Installation

Hydrostatic pressure test was carried out at 5 bar with closed valve.

No leakage or plastic deformation were noted during testing.

The valves were found covered by ABS Product Design Assessment no. 17-LD1648327-PDA.

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Surveyor(s) to The American Bureau of Shipping
Attending Surveyors

Silvestro Francesco

Electronically Signed on 30-Nov-2018

Reviewed By
Fuglei, Tor Brodde

Electronically Signed on 30-Nov-2018, Oslo Port



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Certification Of: Shell Valve Diam. 60 mm Quantity: One(1)
Manufacturer: SKIPPER ELECTRONICS A/S

Survey Location: Oslo, Norway

Equipment Data

Manufacturer Number(S. No.) 18352
Model Number SB-60-SA
Vendor Tag Number PWO 109440

Design Details

Design State Product Design Assessed
ABS Reviewing Organization London Engineering Department
Drawing Number 17-LD1648327-PDA

Additional Data

ABS Stamping ✱ OS3592123-A
Valve Size 60
Valve Material Stainless Steel - High Strength Steel - NOT SPECIFIED - NOT SPECIFIED

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Traceability of materials used on this project has been verified.

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.

Final markings for identification confirmed.

Side shell valves intended for Echosounder Transducer Installation

Hydrostatic pressure test was carried out at 5 bar with closed valve.

No leakage or plastic deformation were noted during testing.

The valves were found covered by ABS Product Design Assessment no. 17-LD1648327-PDA.

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Certification Of: Set of Three (3) Transducer Tanks Quantity: One(1)
Manufacturer: SKIPPER ELECTRONICS A/S

Survey Location: Oslo, Norway

Equipment Data

Manufacturer Number(S. No.) Batch no 18431
Model Number ETNST
Vendor Tag Number PWO 109439

Design Details

Design State Product Design Assessed
ABS Reviewing Organization London Engineering Department
Drawing Number 16-LD1465075-PDA

Additional Data

ABS Stamping ✱ OS3592123-B
Diameter 219 mm
Material Carbon Steel - Ordinary Strength Steel - NOT SPECIFIED - NOT SPECIFIED

This is to Certify that the undersigned surveyor(s) to this Bureau did, at the request of the customer, carry out the following survey and report as follows:

Traceability of materials used on this project has been verified.

Welding plans, procedures & welder qualifications have been reviewed as required by Rule/Specifications.

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.

Final markings for identification confirmed.

Steel tanks intended for Echosounder Transducer Installation

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

Tanks were found covered by ABS Product Design Assessment no. 16-LD1465075-PDA.

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