Confirmation of Product Type Approval

Company Name: ROBERT H. WAGER CO., INC.

Address: 570 MONTROYAL ROAD NC 27045 United States

Product: Vent, Check Valve

Model(s): 1500-MV

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	19-HS1935115-PDA	05-DEC-2019	04-DEC-2024
Manufacturing Assessment (MA)	17-NN3381414	16-NOV-2017	15-NOV-2022
Product Quality Assurance (PQA)	NA	NA	NA

Tier
3

Intended Service
Vent Outlet Automatic Closing and Overfill Preventive Device.

Description
The 1500-1 vertical vent check valve is used in line with the 1500-MV mud overflow valve and is designed for tanks that carry liquid mud. The mud valve prevents liquid mud from rising into the upper vertical vent check valve by fording the liquid mud through a spring loaded door on the front of the valve.

Ratings
Sizes 4", 5", 6", 8" and 10"

Service Restrictions
Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments
The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

To be installed in accordance with all applicable requirements specified in 4-6-4/9 of the Marine Vessels Rules

Notes, Drawings and Documentation
Drawing No. 1500-MV, Vent Check Valve, Revision: -,

Drawing No. 10-1300FSG-MV, 10-1300 Mud Overflow, Revision: -,

Drawing No. 10-1500-MV, 10-1500-MV, Revision: -,

Test Report No. 10-1500-MV-PD, Pressure Drop Test Report, Revision: A, Robert Wager Co. Inc.

Test Report No. 10-1500-MV-RF, Vacuum Test Report, Revision: -, Robert Wager Co. Inc.

Test Report No. 10-1500-MV-TT, Vacuum Test Report, Revision: C, Robert Wager Co. Inc.

Drawing No. 10-1500FSS-1, 10-1500-316SS Vertical Vent Check Valve, Revision: -,

Drawing No. 4-1300FSG-MV, 4 1300 Mud Overflow, Revision: -,

Drawing No. 4-1500-MV, 4 1500 MV, Revision: -,

Test Report No. 4-1500-MV-PD, Pressure Drop Test Report, Revision: A, Robert Wager Co. Inc.

Test Report No. 4-1500-MV-RF, Vacuum Test Report, Revision: -, Robert Wager Co. Inc.

Test Report No. 4-1500-MV-TT, Tightness Test Report, Revision: C, Robert Wager Co. Inc.

Drawing No. 4-1500FSS-1, 4 1500 Flanged 316SS Vertical Vent Valve, Revision: -,

Drawing No. 5-1300FSG-MV, 5 1300 Mud Overflow, Revision: -,

Drawing No. 5-1500-MV, 5-1500-MV, Revision: -,

Test Report No. 5-1500-MV-PD, Pressure Drop Test Report, Revision: A, Robert Wager Co. Inc.

Test Report No. 5-1500-MV-RF, Vacuum Test Report, Revision: -, Robert Wager Co. Inc.

Test Report No. 5-1500-MV-TT, Tightness Test Report, Revision: C, Robert Wager Co. Inc.

Drawing No. 5-1500FSS-1, 5-1500 Vertical Vent Flanged Valve, Revision: -,

Drawing No. 6-1300FSG-MV, 6-1300 Mud Overflow, Revision: -,

Drawing No. 6-1500-MV, 6-1500MV, Revision: -,

Test Report No. 6-1500-MV-PD, Pressure Drop Test Report, Revision: A, Robert Wager Co. Inc.

Test Report No. 6-1500-MV-RF, Vacuum Test Report, Revision: -, Robert Wager Co. Inc.

Test Report No. 6-1500-MV-TT, Tightness Test Report, Revision: C, Robert Wager Co. Inc.

Drawing No. 6-1500FSS-1, 6-1500 316SS Flanged Vertical Vent Valve, Revision: -,

Drawing No. 8-1300FSG-MV, 8-1300 Mud Overflow, Revision: -,

Drawing No. 8-1500-MV, 8-1500-MV, Revision: -,

Test Report No. 8-1500-MV-PD, Pressure Drop Test Report, Revision: A, Robert Wager Co. Inc.

Test Report No. 8-1500-MV-RF, Vacuum Test Report, Revision: -, Robert Wager Co. Inc.

Test Report No. 8-1500-MV-TT, Tightness Test Report, Revision: C, Robert Wager Co. Inc.

Drawing No. 8-1500FSS-1, 8-1500 316SS Vertical Vent Valve, Revision: -,

Test Report No. FLT-12-SS, Impact Test Report, Revision: A, Robert Wager Co. Inc.

Test Report No. FLT-12SS, 12 Full Stainless steel Ball Float, Revision: -, Robert Wager Co. Inc.

Drawing No. FLT-5SS, 5 Ball Float, Revision: -,

Test Report No. FLT-6-SS, Impact Test Report, Revision: A, Robert Wager Co. Inc.

Drawing No. FLT-6SS, 6 Full Stainless Ball Float, Revision: -,

Test Report No. FLT-7-SS, Impact Test Report, Revision: -, Robert Wager Co. Inc.

Drawing No. FLT-7SS, Full Stainless Steel Ball Float, Revision: -, Pages: 1

Test Report No. FLT-9-SS, Impact Test Report, Revision: A, Robert Wager Co. Inc.

Drawing No. FLT-9SS, 9 Full Stainless Steel Ball Float, Revision: -,

Test Report No. WI-Impact Test-01 (Impact Test) Rev B, Impact Test Instruction, Revision: B, Robert Wager Co. Inc.

Test Report No. WI-PD Test-01 (Pressure Drop Test) Rev B, Pressure Drop Test Instruction, Revision: Robert Wager Co. Inc.

Test Report No. WI-Tightness Test-01 (Tightness Test) Rev C, Tightness Test Instruction, Revision: C, Robert Wager Co. Inc.

Drawing No. WI-Vacuum Test-01, Vacuum Test Instruction, Revision: B,

Term of Validity
This Product Design Assessment (PDA) Certificate remains valid until 04/Dec/2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

ABS Rules
Rules for Conditions of Classification, Part 1 - 2019: 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

Rules for Building and Classing Marine Vessels (2019): 4-6-4/9.3.5, and 4-6-4/9.3.7;

Rules for Building and Classing Steel Vessels (2019): 4-6-4/9.3.5, and 4-6-4/9.3.7;

Rules for Building and Classing Steel Vessels Under 90 Meters (295 feet) in Length (2019): 4-4-3/9.9.3

Rules for Building and Classing Offshore Support Vessels (2019): 4-6-4/9.3.5, and 4-6-4/9.3.7;

Rules for Conditions of Classification, Part 1 - 2019 Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

Rules for Building and Classing Mobile Offshore Units (2019): 4-2-3/1.9

Rules for Building and Classing Mobile Offshore Drilling Units (2019): 4-2-3/1.9

International Standards
IACS P3 Rev. 4 Jan 2016

EU-MED Standards
NA

National Standards
NA

Government Standards

NA

Other Standards
NA

Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 09-Jan-2020 7:35

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

Acceptance of product is limited to the “Intended Service” details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.