



Confirmation of Product Type Approval 13/APR/2009

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product.

This is to certify that, pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 02/APR/2014. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until 19/MAR/2014 subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

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.

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.

SIA SALDUS WELDING

Model Name(s): Aero 1.1, Aero 1.2, Aero 1.3, Aero 1.3 inert, Aero 1.4, Aero 1.5, Aero 1.6 & Mud 1

Presented to:

SIA SALDUS WELDING
SANDES, SALDUS PAGASTS
SALDUS RAJONS
LV-3801
Latvia

Intended Service:

For air vents on water, ballast, fuel, lube oil tanks & inerted ballast tanks.

Description:

Float type air closing device. The "Aero 1.3 inert" is provided with additional spring loaded pressure/vacuum vent valves in the housing, for pressure balance when closing device is activated. The "Mud 1- Double check vent valve" is a combined air vent head and overflow relief valve for liquid mud, in upper and lower chambers respectively.

Ratings:

Aero 1 series - Sizes: DN 40, 50, 65, 80, 100, 125, 150, 175, 200, 250, 300, 350, 400 mm. Mud 1- Double check vent valve- Sizes: DN 125, 150, 175, 200, 250 mm.

Service Restrictions:

1) Not suitable for cargo tanks on tank vessels. 2) Vent valves with heating element are not to be used for fuel and lube oil tanks or in hazardous areas. 3) The double check vent valve may only be used on liquid mud tanks conveying liquid mud with flashpoint above 60#C. The overflow swing check valve shall have the same sectional area as the air pipe from the liquid mud tanks. 4) 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:

1) Flame screens are required for fuel oil tank vents and vents fitted to cofferdams and ballast tanks adjacent to cargo tanks on oil carriers. 2) Duplicate PDA issued to Sia Saldus Welding.

Notes / Documentation: 1) Compression loading test and impact test report of floats, from Moreforsking, Alesund, Project no. 5550/94074 dated 08-03-95. 2) Tightness test reports certified by Lloyd's Register dated 06 Aug 2004, 10 Oct 2004, 16 Dec 2004 and 4 Jan 2005. 3) Tightness test report certified by DNV dated 26 March 2009 4) This Product Design Assessment (PDA) is valid only for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

Term of Validity: This Design Assessment Certificate number 09-LD432564/1-PDA/DUP, dated 27/Mar/2009 will expire on 19/Mar/2014 or at an earlier date should there be alterations to the product's design or changes to the referenced ABS Rules and other specifications, which affect the product. Product use on or after 1 January 2010, will be subject to compliance with the ABS Rules or specifications in effect when the vessel, MODU or facility is contracted. The product's acceptability on board ABS-classed vessels or facilities is defined in the service restrictions of this certificate.

ABS Rules: 2009 Steel Vessel Rules 1-1-4/7.7, 4-6-4/9.3.5, 4-6-4/9.3.7 & 4-6-4/9.5.1

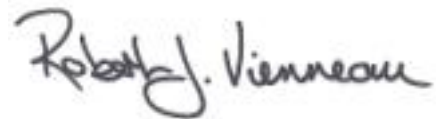
National Standards: IACS Unified Requirements P3

International Standards:

Government Authority:

EUMED:

Others:



ABS Programs

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 was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. 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.