



CERTIFICATE NUMBER

13-HS1079072-PDA

DATE

08 October 2013

ABS TECHNICAL OFFICE

Houston SED - Ship Structures

CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of
NABRICO MARINE PRODUCTS - GALLATIN

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

PRODUCT: **Hatch, Flush Watertight**

MODEL: **DF-503, DF-504, DF-505, DF-510;**

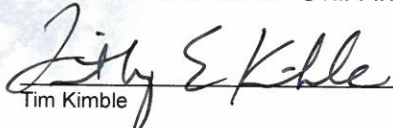
This Product Design Assessment (PDA) Certificate 13-HS1079072-PDA, dated 08/Oct/2013 remains valid until 07/Oct/2018 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING


Tim Kimble
Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

NABRICO MARINE PRODUCTS

DIV. OF TRINITY INDUSTRIES, INC.

1250 GATEWAY DR.

GALLATIN

TN 37066

United States

Telephone: 615-442-1300

Fax: 615-442-1313

Email: nabrico@trin.net

Product: Hatch, Flush Watertight

Model: DF-503, DF-504, DF-505, DF-510;

Intended Service:

Marine & Offshore Application - Flush Watertight Cover for Marine Vessels and Offshore Installations.

Description:

15" x 23" or 18" x 24" clear opening, flush, multi-bolt or multi-screw or multi-stud watertight hatch complete with neoprene gasket and deck mounting ring. Manufactured from ASTM A-36 Steel or 304 Stainless Steel. Hatch cover is 3/8 inch (9.525 mm) or 1/2 (12.7mm) nominal thickness.

Ratings:

Watertight to Pressure Heads of 17.5 feet (5.3 meters) for hatch cover 18'x24' or 15'x23" or any similar style hatch with sizes equal to or less than the sizes listed, but with the same thickness.

Service Restrictions:

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

For each installation, drawings are to be submitted for Review and Verification that the Cover Scantlings, Materials and Arrangements, including Closing Arrangements are acceptable for the proposed Location.

This product is not to be installed on the exposed Fore Deck within the forward 0.25L (L is the scantling length of a ship), where the Deck in way of the Hatch is less than 0.1L or 22m (72.2 ft) above the Summer Load Line, whichever is less, per ABS SVR 3-2-15/14.

These fittings are difficult to maintain gastight, and are not to be in cargo or fuel tanks where lack of gastight seal possess a serious hazard.

Comments:

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

Watertight Rating is based on even and adequate compression of the Neoprene Gasket between the Cover and the Deck Ring.

Notes / Drawings / Documentation:

Supporting Data:

Dwg No. 21088 Rev. 0, DF-503 (SS) Flush (15x23) Multi-Bolt Hatch;

Dwg No. 21113 Rev. 1, DF-503 (15x23) Flush Multi-Bolt Hatch;

Dwg No. 21121 Rev. 1, DF-504 (18x24) Flush Multi-Bolt Hatch;

Dwg No. 21148 Rev. 2, DF-505 Flush (15x23) Multi-Screw Hatch;

Dwg No. 21185 Rev. 0, DF-505 (SS) Flush (15x23) Multi-Screw Hatch;

Dwg No. 21251 Rev. 0, DF-504 (SS) lush (18x24) Multi-Bolt Hatch;

Dwg No. 30152 Rev. 0, DF-510 Flush (18x24) Multi-Stud Hatch;

Dwg No. 30154 Rev. 0, DF-510 (SS) Flush (18x24) Multi-Stud Hatch;

Term of Validity:

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STANDARDS

ABS Rules:

2013 Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 3-2-15/3.3, 3-2-15/ 9.1;

National:

NA

International:

NA

Government Authority:

NA

EUMED:

NA

Others:

Manufacturer's Standards