



CERTIFICATE NUMBER  
17-HS1673392-PDA

DATE  
21 Sep 2017

ABS TECHNICAL OFFICE  
Houston ESD - Piping

# CERTIFICATE OF DESIGN ASSESSMENT

This is to certify that a representative of this Bureau did, at the request of  
**A-T CONTROLS**

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: **Valve, Resilient Seated Butterfly Valves**

Model: **Series OCB, OSB, OS & OC**

This Product Design Assessment (PDA) Certificate 17-HS1673392-PDA, dated 21/Sep/2017 remains valid until 20/Sep/2022 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

  
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Ting Jiang  
Engineer/Consultant

## A-T CONTROLS

9955 INTERNATIONAL BOULEVARD

CINCINNATI OH

United States 45246

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**Tier: 3 - Type Approved, unit certification not required**

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**Product:** Valve, Resilient Seated Butterfly Valves

**Model:** Series OCB, OSB, OS & OC

**Intended Service:**

Marine & Offshore Applications - various piping systems.

### Description:

A-T Controls Manual and Automated Resilient Seated Wafer or Lug Style Butterfly Valves, body manufactured with Ductile Iron, Cast Iron and 316 Stainless Steel, Disc with Nickel plated ductile iron, 316 Stainless Steel, Aluminum Bronze, Stem with 416 Stainless Steel and 316 Stainless Steel and Seat with Buna-N, EPDM, Viton and PTFE over EPDM.

### Rating:

Wafer and Lug Style

Sizes: 2"-12" (50mm to 305mm)

Pressure Rating: to 200 psi

Seat Temperature Ratings: Buna-N 0 °F to 200 °F; EPDM -20 °F to 250 °F; PTFE over EPDM 0 °F to 275 °F; Viton® -10 °F to 325 °F

### Service Restriction:

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.

i) Wafer type butterfly valves are not to be used for any connections to the vessel's shell; Lug or flanged type valves may be used for shell connections only if fire tested.

ii) Grey Cast Iron valves not to be used as shell valves and shut-off valve for fuel oil tanks. Nodular iron or Ductile Iron will be accepted provided the material has an elongation not less than 12% in 50mm as indicated in SVR 4-6-2/3.1.4

iii) All valves to maintain a 4:1 burst test ratio minimum for intended use.

iv) All butterfly valves are not to be used on oil tanks (including cargo oil tanks) having a static head of flammable oil.

v) Resilient seated valves may be considered for use on flammable services and fire fighting system, provided the proposed valves are capable of passing an appropriate fire test.

### Comments:

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

ii) All valves are to be subjected by the manufacturer to a hydrostatic test at pressure equal to that stipulated by the American National Standards Institute or other recognized standard. The manufacturer's trademark, pressure/temperature rating and material identification, as applicable, must be stamped or cast on the component as indicated in MODU Rules 4-2-2/9.5

iii) The manufacturer of a valve is to guarantee that the valve is constructed to the standard and conforming to the identification to which it is marked. The manufacturer is to guarantee also that the valve has been tested before shipment to the pressure required by the pressure rating of the valve. The certificate of test is to be submitted upon request as indicated in SVR 4-6-2/5.11.4

iv) All valves intended for installation on the side shell at or below the deepest load waterline, including those at sea chests, are to be hydrostatically tested in presence of the Surveyor in accordance with SVR 4-6-2/7.3.2

### Notes/Drawing/Documentation:

Identifying Data:

Brochure 201210118BFV LIT0031 - AT Manual and Automated Resilient Seated Butterfly Valves;

Certificate of Performance dated 4 October 2012;

Inspection & Test Procedures dated 4 October 2012;

Tianjin Guang-Hui Valve Co. File YD-02222007- Material Test Reports dated 25 Sept 2012;

Certificate of Registration number 00014-1;

Simulation of XX-W1-1200 Body dated 11 October 2012;

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**Terms of Validity:**

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**STANDARDS****ABS Rules:**

The Rules for Condition of Classification, Part 1, 2017 Steel Vessels Rules 1-1-4/7.7, 1-1-A 3, 1-1-A 4, which covers the following:

2017 Steel Vessel: 4-6-2/3.1.4, 5.11;

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

2017 Mobile Offshore Drill Unit : 4-2-2/9.1.1.

**National:**

ASME B16.34 (2017), API 598 (10th), API 609(8th), MSS-SP-67(2017),

**International:**

NA

**Government:**

NA

**EUMED:**

NA

**OTHERS:**

NA