



CERTIFICATE NUMBER

03-HS356479/2-PDA

DATE

12 January 2010

ABS TECHNICAL OFFICE

Houston SED - Ship Systems

CERTIFICATE OF Design Assessment

This is to Certify that a representative of this Bureau did, at the request of
PBM, Inc. - Irwin

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. It will remain valid as noted below or until the Rules or specifications used in the assessment are revised (whichever occurs first).

PRODUCT: Valve, ball 2 - Way Ball Valves

MODEL: SP Series 5; AN Series 1

ABS RULE: 2010 Steel Vessels Rules 1-1-4/7.7, 4-6-1/7.1, 4-6-2/3, and 4-6-2/5.11

OTHER STANDARD: ASME B16.34 (where applicable to specific Model and Material) MSS SP 72 (where applicable to specific Model and Material);; Manufacturer's standard (for valves constructed of ASTM B148 C95300 or B148 C95300);

AMERICAN BUREAU OF SHIPPING

Hans P. Haendler

Engineering Type Approval Co-ordinator

PBM, Inc.

1070 Sandy Hill Road
Irwin
Pennsylvania 15642
United States
Telephone: 724-863-0550
Fax: 724-863-3283

MA Certificate No. 09-ER1616056-X

Product: Valve, ball 2 - Way Ball Valves

Model: SP Series 5; AN Series 1

Intended Service:

Marine and Offshore Applications NOT requiring CAT A valves

Description:

ASME Class 150 and 300 , 2 way ball valves - SP Series 1, 1/4" to 4", materials ASTM B62 C83600, B61C92200, (MSS SP 72) , B148 C95300 or C95500 (manufacturer's standard only) AN Series 1, 1/2" to 10" materials ASTM B62 C83600, B61C92200, (MSS SP 72) , B148 C95300 or C95500 (manufacturer's standard only) A216 WCP, A351-CF8M, A351-CF3M, A494-CN12MW (ASME B16.34), SP Series 5, 1/4" to 6", materials ASTM B62 C83600, B61C92200, (MSS SP 72) , B148 C95300 or C95500 (manufacturer's standard only) A216 WCP, A351-CF8M, A351-CF3M, A494-CN12MW (ASME B16.34)

Ratings:

Ratings are to be as specified in standards MSS SP 72 or ASME B16.34 for those valves constructed in accordance with those standards (see description above) - NOTE: valves constructed to Manufacturer's standard, at the rating given by the manufacturer, may only be used in ABS class III systems. MAWP: 3000 psi @ 200 degrees F; MDMT: -40 degrees F.

Service Restrictions:

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

Valves are not to be used in locations requiring either positive shutoff or Cat A certification. Valves constructed to the manufacturer's standard and at the manufacturer's ratings, may only be used in ABS Class III Systems. Valve end connections to be in accordance with the "Pipe Joint Limitations" tables for specific systems.

Comments:

Marking of valves constructed to ASME B16.34 or MSS SP 72 are to be in accordance with those standards.

Notes / Drawings / Documentation:

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 product/model is covered under Product Design Assessment (PDA) Certificate # 03-HS356479/2-PDA, dated 12/Jan/2010. This PDA Certificate expires 11/Jan/2015. It will remain valid for 5 years from date of issue or until the Rules or specifications used in the assessment are revised (whichever occurs first). It is valid for all vessels contracted on or before the date of the Rules used in this evaluation.

STANDARDS**ABS Rules:**

2010 Steel Vessels Rules 1-1-4/7.7, 4-6-1/7.1, 4-6-2/3, and 4-6-2/5.11

National:

ASME B16.34 (where applicable to specific Model and Material) MSS SP 72 (where applicable to specific Model

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and Material);

International:

NA

Government Authority:

NA

EUMED:

NA

Others:

Manufacturer's standard (for valves constructed of ASTM B148 C95300 or B148 C95300)