27 June 2016

PBM, INC. 1070 Sandy Hill Rd., Irwin, PA-15642 JL/YS OPN: 3754100 Task No.: T1531171

Attention:

Mr. Shawn Opfer

Subject:

Product Design Assessment (PDA) Revision

ANSI Flanged fire safe 2 Way ball valves

Models: AN Series 6 & TN Series 6 (1/2" to 12")

Reference: PDA Certificate No. 15-HS1371427-PDA dated 13 July 2015

Enclosures as per attached list

Gentlemen:

We have your application for type approval revision dated 03 June 2016 together with the enclosures listed below. Having reviewed the enclosures in accordance with the following Rules/standards,

- 1. ABS Rules for Building and Classing Steel Vessels 2016
- 2. ABS Rules for Building and Classing Steel Vessels Under 90 Meters in Length 2016
- 3. ABS Rules for Building and Classing Offshore Support Vessels 2016
- 4. ABS Rules for Building and Classing Mobile Offshore Drilling Units 2016
- 5. API Std 607 Fire Test for Quarter-turn Valves and Valves Equipped with Nonmetallic Seats, (6th Ed., 2010)
- 6. ASME B16.34-2013 Valves Flanged, Threaded and Welding End

we are pleased to advise that we have completed the design assessment phase of the type approval process.

Enclosed is your original copy of the Certificate of Design Assessment (PDA). Please read the pages attached to the certificate to be sure that you understand the scope and conditions of the validity of the certificate. We recommend that you monitor the ABS Rules and other specifications used in the approval. These Rules and specifications often change on an annual basis, and you must comply with the new Rules and specifications in order for the product to be used on an ABS classed vessel or facility contracted under the new Rules or specifications.

Since the original certificate is multi-colored, we have no objections to unlimited black and white photocopies of the certificate being distributed. As you already know, your details are published on our web site and can also be downloaded there.

An electronic copy of the documents, appropriately stamped is available through the ABS Eagle Construct Engineering Manager (O2E), Web Portal.

WEBSITE: www eagle org

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We have received your declaration stating that the materials used in the system indicated in the submittal are free from Asbestos.

Please find enclosed our invoice to cover the cost of the design assessment phase of the type approval process.

If you should have any comments relative to the scope and conditions of the assessment of your product, or if we can be of any further assistance, please do not hesitate to contact us. We do appreciate your continued confidence in the services that ABS provides.

Very truly yours,

Roy H. Bleiberg

Vice President of Engineering

ABS Americas

Angel Moscoso

By: /

Managing Principal Engineer - Systems Group

Ship Engineering Department

cc: ABS Celeveland - w/inv. (O2E).

WEBSITE: www.eagle.org



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Drawings List

Engineering Office:	Houston SED Machinery - Piping & Electrical Sys.	
Submitter:	PBM, INC. (784844)	
Drawing No	Revision No	Drawing Title
6th Ed - 2.0 inch - Class 150 - C276 HAST - TFM - ANC-H6L-GP052		Fire Test Report ANSI/API Standard 607, 6th Edition 2010 ISO 10497: 2010
AN76 TN76 TypeApproval Application Form NEW Signed	-	TypeApproval Application
6th Ed - 2.0 inch - Class 150 - 316 SS - TFM - ANH-H6L-G-P052 - March 30	-	Fire Test Report ANSI/API Standard 607, 6th Edition 2010 ISO 10497: 2010
6th Ed - 2.0 inch - Class 150 - WCB CS - TFM - ANE-H6L-GP052 - Se	-	Fire Test Report ANSI/API Standard 607, 6th Edition, 2010 ISO 10497: 2010
ABS Design Assessment AN_TN6		ABS Design Assessment AN_TN6
ANH-C6L-G04	0	1/2" anh-c6 2-way api-607 (4th ed) ansi ball valve with 150# r.f. flange end connections tfm primary
ABS Type Approval AN_TN6	•	ABS Type Approval AN_TN6
ANH-D6L-G04	0	3/4" anh-d6 2-way api-607 (4th ed) ansi ball valve with 150# r.f. flange end connections tfm primary
ANH-E6L-G04	0	1" anh-e6 2-way api-607 (4th ed) ansi ball valve with 150# r.f. flange end connections tfm primary
ANH-H6L-G04	0	2" anh-h6 2-way api-607 (4th ed) ansi ball valve with 150# r.f. flange end connections tfm primary
ANH-G6L-G04	0	1 1/2" anh-g6 2-way api-607 (4th ed) ansi ball valve with 150# r.f. flange end connections tfm prima
ANH-J6L-G02	0	2 1/2" anh-j6 2-way api-607 (4th ed) ansi ball valve with 150# r.f. flange end connections tfm prima
ANH-K6L-G04	0	3" anh-ke6 2-way api-607 (4th ed) ansi ball valve with 150# r.f. flange end connections tfm primary
ANH-L6L-G	0	4" anh-16 2-way api-607 (4th ed) ansi ball valve with 150# r.f. flange end connections tfm primary
ANH-M6L-Z08	0	6" anh-m6 2-way api-607 (4th ed) ansi ball valve with 150# r.f. flange end connections tfm primary

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Correspondence		Email 03-June-2016 subj: QUOTE and Request for Application: Type Approval Expansion Request
PBM, Inc ISO Certificate 0106267 exp April	-	PBM, Inc ISO Certificate 0106267 exp April 2017
2017		
Marine Brochure LT-2D pbm13 0		Marine Brochure LT-2D pbm13 0
PO 46325		Purchase Order
AND503LI	2	3/4" AN-D5 VALVE END FITTING
ANC503LI	2	1/2" AN-C5 VALVE END FITTING
ANC501LI	3	1/2" AN-C5 VALVE BODY
ANE501L-RI	4	1" AN SERIES 5, 150# BODY CASTING
AND501LI	1	3/4" AN-D5 VALVE BODY
ANG503L-RI	3	1-1/2" AN SERIES 5, 150# END FITTING CASTING
ANG501L-RI	4	1-1/2" AN SERIES 5, 150# BODY CASTING
ANH503L-RI	3	2" AN SERIES 5, 150# END FITTING CASTING
ANH501L-RI	4	2" AN SERIES 5, 150# BODY CASTING
ANK501L-RI	3	3" AN SERIES 5, 150# BODY CASTING
ANL501L-RI	2	4" AN SERIES 5, 150# BODY CASTING
ANK503L-RI	2	3" AN SERIES 5, 150# END FITTING CASTING
ANM501L-RI	4	6" AN SERIES 5, 150# BODY CASTING
ANL503L-RI	3	4" AN SERIES 5, 150# END FITTING CASTING
ANM503L-RI	2	6" AN SERIES 5, 150# END FITTING CASTING
ANE501LI	2	1" AN-E5 150# R.F. FLANGE BODY
ANG501LI	3	1-1/2" AN-G5 150# R.F. FLANGED BODY
ANE503L-RI	4	1" AN SERIES 5, 150# END FITTING CASTING
ANM501LI	1	6" AN-M5 BODY
ANE503LI	3	1" AN-E5 150# R.F. FLANGE END FITTING
ANM503LI	1	6" AN-M5 END FITTING
ANL503LI	4	4" AN-L5 150# FLANGE END FITTING
ANL501LI	4	4" AN-L5 150# R.F. FLANGED BODY
ANK501LI	3	3" AN-K5 BODY



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ANK503LI	4	3" AN 150# END FITTING
ANJ501L9-B	0	2-1/2" AN-J5 150# FLANGED BODY
ANJ503L9-B	0	2-1/2" AN-J5 END FITTING
ANG503LI	2	1-1/2" AN-G5 150# F.F. FLANGE END FITTING
ANH503LI	2	2" AN-H5 150# R.F. FLANGE END FITTING
ANH501L I	5	2" AN-H5 150# R.F. FLANGED BODY
Correspondence	-	Fire test
Correspondence		Applicable size