

**APPLICATION FOR RENEWAL OF APPROVAL FOR PRESSURE RELIEF  
DEVICES, VALVES, CLOSURES, AND FITTINGS**

1. AAR APPROVAL No. E182108  
 2. Date of Application 05/01/2018  
 3. Previous AAR Approval E089004 & E172100

4. Applicant: Metso  
 5. Address: 44 Bowditch Dr., Shrewsbury, MA 01545-8044  
 6. Drawing No. See Below 7. Latest rev. See Below 8. Date of latest rev. See Below  
 9. Description of device: 1/2" - 6" LIQUID / VAPOR VALVE 10. Device IDNo. 9000 Series

**CERTIFICATION:** The subject device is **unchanged** from the previous approval, and conforms with the latest revision of AAR Specifications for Tank Cars, Appendix A. The device conforms with drawing listed above.

11. By: \_\_\_\_\_ Title: \_\_\_\_\_

If device is **changed** since latest approval, fill in the following blanks

12. Reference Previous Drawing	New Drawing	If on Service Trial
No. <u>5446</u> Rev. <u>G</u> Date <u>4/20/17</u>	No. <u>5572</u> Rev. <u>0</u> Date <u>7/1/15</u>	S.T. No. _____
No. <u>5104</u> Rev. <u>L</u> Date <u>5/12/16</u>	No. <u>5574</u> Rev. <u>0</u> Date <u>7/1/15</u>	S.T. No. _____
No. <u>5571</u> Rev. <u>B</u> Date <u>6/10/16</u>	No. <u>5428</u> Rev. <u>B</u> Date <u>1/31/12</u>	S.T. No. _____
No. <u>5573</u> Rev. <u>B</u> Date <u>6/10/16</u>		
No. <u>5575</u> Rev. <u>B</u> Date <u>6/10/16</u>		

13. New drawing supersedes previous one  or does not obsolete it

**CHANGES**

**REASONS FOR CHANGES**

- |  |   |
|--|---|
| 14. a. <u>Replace Mod. A/B 2-4" Class 300 with Mod. C</u><br>b. <u>2 - 4" Class 300 Bonnet mounting bolt pattern</u><br>c. <u>2 - 4" Class 300 Stem diameter</u><br>d. _____<br>(if needed use supplemental sheet) | a. <u>Models A &amp; B are scheduled to be discontinued</u><br>b. <u>To meet ISO 5211 actuator mount standard</u><br>c. <u>To communize packing design with butterfly valve</u><br>d. _____ |
|--|---|

15. Normal operational effect of changes of device: None: Form, fit and function are the same as previous model. Sealing components (Ball & Seat) are the same for equivalent operating torque and sealing performance. Stem diameters are slightly smaller to match currently approved WSRR (AAR E089015).

16. Drawing submitted with this application: 5446-G, 5104-L, 5571-B, 5573-B, 5575-B, 5572-0, 5574-0, & 5428-B

**CERTIFICATION:** The above data is correct and conforms with AAR Specifications for Tank Cars, Appendix A. The device conforms with drawing listed above.

17. By: David Escobar  Title: Director of Engineering

APPROVAL AAR Tank Car Committee:

Date Approved: 7/5/2018   
 (Signature) on behalf of Committee