

APPLICATION FOR RENEWAL OF APPROVAL FOR VALVES AND FITTINGS

- 1. AAR APPROVAL No. E111050
- 2. Date of Application 8/22/11
- 3. Previous AAR Approval E031029

- 4. Applicant: American Railcar Industries
- 5. Address: 100 Clark Street, St. Charles, MO 63301
- 6. Drawing No. 5-U-3253
- 8. Date of latest rev. 10-03-00
- 9. Description of device: Bottom Outlet Plug Valve
- 10. Device ID No. 1585

7. Latest rev. V2

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.4-U-3245 Rev. E1 Date 09-27-99	No.4-Y-2576 Rev. B Date 06-06-11	S.T. No. _____
No.4-U-3252 Rev. B2 Date 09-28-99	No.3-Y-2596 Rev. A Date 08-19-11	S.T. No. _____
No.2-U-2676 Rev. E1 Date 09-28-99	No.2-Y-5487 Rev. A Date 08-19-11	S.T. No. _____
No.5-U-3253 Rev. V2 Date 10-03-00	No.5-Y-5259 Rev. A Date 08-19-11	S.T. No. _____
No. _____ Rev. _____ Date _____	No. _____ Rev. A Date _____	S.T. No. _____

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

CHANGES

- 14. a. 4-Y-2576 converted all stainless steel to carbon steel with stainless steel inlay
- b. 3-Y-2596 reduced part count/size, converted mechanically fastened seal to slip fit
- c. 2-Y-5487 reduced part size
- d. 5-Y-5259 spring size/quantity, reduced retaining post size

REASONS FOR CHANGES

- a. Reduces cost of flange while maintaining anti-corrosive sealing surface
- b. Easier to manufacture, eliminates 1 leak path
- c. Reduces cost of stem guide
- d. Increases cumulative spring compression, reduces cost of retaining post

(if needed use supplemental sheet)

15. Normal operational effect of changes of device: The valve operates in the same manner when opening/closing. During derailment, valve with shear off as designed and will have greater spring compression than current design to prevent leaking. Sealing force remains unchanged and is adjusted by turning the plug instead of turning the stem.

16. Drawing submitted with this application: 4-U-3245, 4-U-3252, 2-U-2676, 5-U-3253, 4-Y-2576, 3-Y-2596, 2-Y-5487, 5-Y-5259

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:  Title: VP ENGINEERING - AMERICAN RAILCAR

APPROVAL AAR Tank Car Committee:

Date Approved: NOV 21 2011


(Signature) on behalf of Committee