

Applicant ACF Industries, Incorporated - AMCAR Division

APPLICATION FOR APPROVAL OF: Construction Conversion Alterations Welded Repairs (Other) _____
 Reporting Marks and Car Numbers PPGX 1666 thru 1718 Number of Cars 53

1. Tank Specification DOT 105A500W
2. Stenciled Specification DOT 105A500W
3. Commodity Chlorine (90 Ton)
4. Initial Commodity Wt. Per Gal., Lbs. 11.74 @ 68°
- TANK SHELL:
5. Full Water Capacity, Gal. 17,360
6. Dome Capacity or Outage, Gal. N.A.
7. Material & Thickness AAR Spec. TC 128 Gr. B 13/16" head, .7751 shell
8. Lining None Inside Diameter, In. 100.4498
9. Head Radii: Main, In. 2:1 Ell Knuckle, In. N.A.
10. Test Pressure, PSI 500
11. Insulation, In. 4 Kind See Note
 Thermal Conductivity, Btu-in./hr.-ft.²-F 0.15

- SAFETY RELIEF DEVICES:
12. Type Valve
 - Number 1 Start to Discharge, PSI 375
 13. Flow Capacity, CFM (Air) Actual 2,930
 14. Flow Capacity, CFM (Air) Required 168
 15. Tank Surface Area, Sq. Ft. 1,214
 - CAR STRUCTURE:
 16. Bolster Slabbing Area, Sq. Ft. N.A.
 17. Estimated Light Wt., Lbs. 83,000
 18. Center of Gravity Loaded, In. 82
 19. Rail Load Limit, Lbs. 263,000
 20. Truck Capacity, Tons 100
 21. AAR Clearance Diagram Pl. B

NOTES: Urethane Foam - 2#/Cu. Ft. Nominal.
 The maximum lading wt. is 90 tons of chlorine in accordance with HMR 173.314 (C) Note 12.

| The Following Drawings Apply | Precedent | | |
|--|----------------|----------------|--------------------|
| | Drawing Number | Drawing Number | Application Number |
| 22. General Arrangement | 4-H-3262-A | | |
| 23. Arrangement, Tank | 3-H-0261-A | | 2781200 |
| 24. Reinforced Openings, Including Calculations | 1-B-1777-B | | 2781200 |
| 25. Anchorage, Including Calculations | 4-F-5277-B | | A781046-B |
| 26. Fittings Arrangement | 4-H-3263-B | | |
| 27. Manway Assembly/Cover | 3-B-1963-D | | 2781200 |
| 28. Protective Housing | 3-C-1198-D | | 2781200 |
| 29. Venting, Loading and Discharge Valves <u>ACF TY 1301</u> | 3-F-8650-A | | 2781200-B |
| 30. Safety Relief Devices <u>Crosby 1 1/2 JQ 375</u> | H-50155 | | 1770185 |
| 31. Heater Systems | None | | |
| 32. Gaging Devices | None | | |
| 33. Bottom Outlet Valve | None | | |
| 34. Repairs | | | |
| 35. <u>Excess Flow Check Valve 15,000#/HR</u> | | | |
| 36. <u>Special Commodity Stencil</u> | | | |

REVISIONS:

APPLICATION BY: R. B. Polley
 I certify that the foregoing conforms to all applicable DOT and AAR requirements, including Specifications, Regulations, Rules of Interchange and the DOT Railroad Safety Appliance Standards.
 SIGNATURE: _____
 TITLE: Product Engineer

Date of Order 7-5-78

APPROVAL AAR Tank Car Committee Date Approved APR 26 1979 R. REBEK
 (Signature) on behalf of Tank Car Committee

CERTIFICATION: The cars enumerated below conform to the above approved description and to all applicable DOT and AAR requirements, including Specifications, Regulations, Rules of Interchange and the DOT Railroad Safety Appliance Standards. Copy of this Certificate of Construction will be furnished to the owner and others required by 49 CFR Part 179.5 before these cars are placed in service.

Initials and Car Numbers: PPGX 1666-1718, 5773 Date June 1, 1979
 By: _____
 Title: Manager, Quality Assurance

SEE ATTACHED SHEET
ACF 200 Stub Sell