

AAR Manual of Standards and Recommended Practices Specifications for Tank Cars

M-1002

CHAPTER 1

APPLICATION FOR APPROVAL OF VALVES, CLOSURES, AND FITTINGS

Applicant Kelso Technologies Inc. AAR No. E162113
 Description of Device 2" Angle Valve

Applicant No. _____ Device Ident. No. K2AV Series Date 5/23/16

1. Manufacturer Kelso Technologies Inc.
 2. Address 7773-118A Street City Delta State British Columbia Zip Canada V4C 8V1
 3. Test facility if other than the manufacturer _____ Address _____
 4. Test date 4/15/16 4. Observer Bob Irving
 Title: Staff Engineer

TEST PROCEDURE
 5. Description of prototype testing: High and Low Temp. Testing (190F & -20F); Shock and Vibration; High and Low pressure testing at different temps. seat and body housing structural integrity. The same tests below were conducted at room temp. (75F) for same pressures - No issues or leaks

6. Cycles	Min. Temp.	@ Pressure	Cycles	Max. Temp.	@ Pressure	Test Medium	Remarks
10	-20 °F	500 psi	10	190 °F	500 psi	Nitrogen	No Leaks
10	-28 °C	3447 kPa	10	88 °C	3447 kPa	Nitrogen	
Cycles	Min. Temp.	@ Pressure	Cycles	Max. Temp.	@ Pressure	Test Medium	Remarks
10	-20 °F	30 psi	10	190 °F	30 psi	Nitrogen	No Leaks
10	-28 °C	206 kPa	10	88 °C	206 kPa	Nitrogen	
Cycles	Min. Temp.	@ Pressure	Cycles	Max. Temp.	@ Pressure	Test Medium	Remarks
10	-40 °F	500 psi	10	190 °F	500 psi	Nitrogen	No Leaks
10	-40 °C	3447 kPa	10	88 °C	3447 kPa	Nitrogen	

7. Commodity: Regulated Commodity Non Regulated Commodity Specific Commodity _____
 8. Flow rate (if applicable) _____ gpm (_____ L/min)

Applicable drawings	Material	Drawing Number latest revision	Precedent	
			Drawing Number	Application/Certificate
9. Device application	SS, CS	K2AV (5/23/2016) (2 pages)		
10. Device assembly	SS, CS	K2AV (5/23/2016) (2 pages)		
11. Device details	SS, CS	K2AV (5/23/2016) (2 pages)		

12. Quality Control Statement Kelso has adhered to a strict quality control system that has granted Kelso a "Code B85, B86, C4 and C5" certification rating by the AAR.

REVISIONS:
CERTIFICATION: The above data is correct and conforms with AAR Specifications for Tank Cars, Appendix A. The devices tested conform with drawings listed above.

By [Signature] Title Engineering Mngr.
APPROVAL AAR Tank Car Committee Service Trial Required
 Date Approved for Service Trial 3/7/2017
 Service Trial Number ST-467
[Signature]
 (Signature) on behalf of Tank Car Committee

APPROVAL AAR Tank Car Committee Service Completed / Not Required
 Date Service Trial Completed _____ Date AAR Received Form AAR 4-6 _____
 Date Approved _____
 Expiration Date _____

 (Signature) on behalf of Tank Car Committee

Form AAR 4-5 Revised 10/2014

Fig. 1.4 Form AAR 4-5 Application for Approval of Valves and Fittings