

APPLICATION FOR APPROVAL OF VALVES, CLOSURES AND FITTINGS

Applicant MIDLAND MANUFACTURING AAR No. E192100
 Description of Device 2 INCH AND 3 INCH BALL VALVE, FULL PORT

Applicant No. N/A Device Ident. No. A-7200/A-7240; A-7300/A-7340 Date 7/19/2017 REV 6/24/19

1. Manufacturer MIDLAND MANUFACTURING
2. Address 7733 GROSS POINT ROAD City SKOKIE State IL Zip 60077
3. Test facility if other than the manufacturer MIDLAND / DATASYST / CEESI Address SKOKIE, IL / DALAFIELD, WI / NUNN, CO.
4. Test date 07/2016-07/2017 4. Observer ERIK CLEMENS-MIDLAND/JOHN BIESZK-DATASYST/BRYAN TROSEL-CEESI
 Title: MFG. ENG / LAB TECH / ENG. MANAGER

TEST PROCEDURE:

5. Description of prototype testing: BURST TEST: 1500 PSIG FOR 2INCH AND 1200 PSIG FOR 3 INCH; FLOW TEST: ESTABLISHED Cv; CYCLE TEST: 2000 CYCLES @ 80 PSIG; SHOCK AND VIBRATION: 5,000,000 CYCLES @ 112/182 Hz & 5/6G, 20 SHOCKS @ 20G IN XYZ; PRESSURE/TEMPERATURE TESTING: ESTABLISHED PRESSURE/TEMPERATURE CURVE FOR PTFE SEALS

6. Cycles	Min. Temp.	@ Pressure	Cycles	Max. Temp.	@ Pressure	Test Medium	Remarks
6000	70 °F _____ °C	275 psi _____ kPa	_____	_____ °F _____ °C	_____ psi _____ kPa	AIR	NO LEAKS
Cycles	_____ °F _____ °C	_____ psi _____ kPa	_____	_____ °F _____ °C	_____ psi _____ kPa	_____	_____
Cycles	_____ °F _____ °C	_____ psi _____ kPa	_____	_____ °F _____ °C	_____ psi _____ kPa	_____	_____

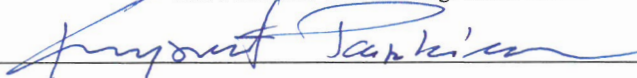
7. Commodity: Regulated Commodity Non Regulated Commodity Specific Commodity _____
 8. Flow rate (if applicable) 143 AND 1030 gpm (_____) L/min

Applicable drawings	Material	Drawing Number latest revision	Precedent	
			Drawing Number	Application/Certificate
9. Device application	CARBON STEEL/316 STAINLESS	A-7200 (D),A-7300 (B) / A-7240 (D),A-7340 (B)		
10. Device assembly				
11. Device details				

12. Quality Control Statement MIDLAND IS CERTIFIED TO AAR M-1002/M-1003 C4 AND C5 AND ISO 9001

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  Title SENIOR ENGINEER

APPROVAL AAR Tank Car Committee Service Trial Required

Date Approved for Service Trial 11/16/2020
 Service Trial Number ST- 479



(Signature) on behalf of Tank Car Committee

APPROVAL AAR Tank Car Committee Service Completed / Not Required

Date Service Trial Completed _____
 Date Approved _____
 Expiration Date _____

(Signature) on behalf of Tank Car Committee