

**APPLICATION FOR APPROVAL OF VALVES, CLOSURES AND FITTINGS**

Applicant Midland Manufacturing Corp AAR No. E182102  
 Description of 2" Transfer Valve for use as Vapor and Liquid Valves  
 Device Top Angle

Applicant No. \_\_\_\_\_ Device Ident. A-720/A-724 Series No. \_\_\_\_\_ Date 3/15/2018

1. Manufacturer Midland Manufacturing Corp
2. Address 7733 Gross Point Rd City Skokie State IL Zip 60077
3. Test facility if other than the manufacturer Gaynes Lab Address \_\_\_\_\_
4. Test date 3/17-12/17 4. Observer See Supplemental Title: \_\_\_\_\_

**TEST PROCEDURE:**

5. Description of prototype testing: See supplemental Information

6. Cycles	Min. Temp.	@ Pressure	Cycles	Max. Temp.	@ Pressure	Test Medium	Remarks
See Supplemental	____ °F ____ °C	____ psi ____ kPa	____	____ °F ____ °C	____ psi ____ kPa	____	____
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 AA/EO/Mercaptan/VCM  
 8. Flow rate (if applicable) \_\_\_\_\_ gpm (\_\_\_\_ l/min)

Applicable drawings	Material	Drawing Number latest revision	Precedent	
			Drawing Number	Application/Certificate
9. Device application				
10. Device assembly	Ductile Iron	A-720/A-724 REV V		
11. Device details	See Supplemental			

12. Quality Control Statement MIDLAND IS CERTIFIED TO AAR 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.

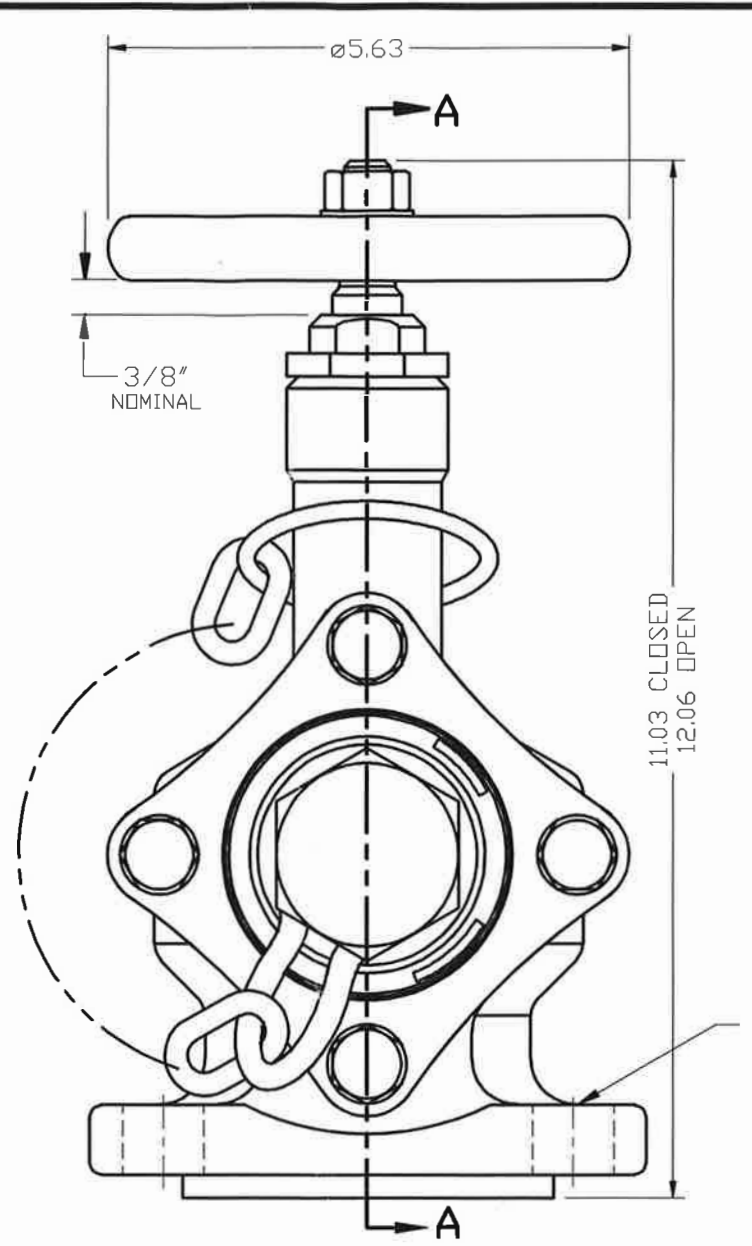
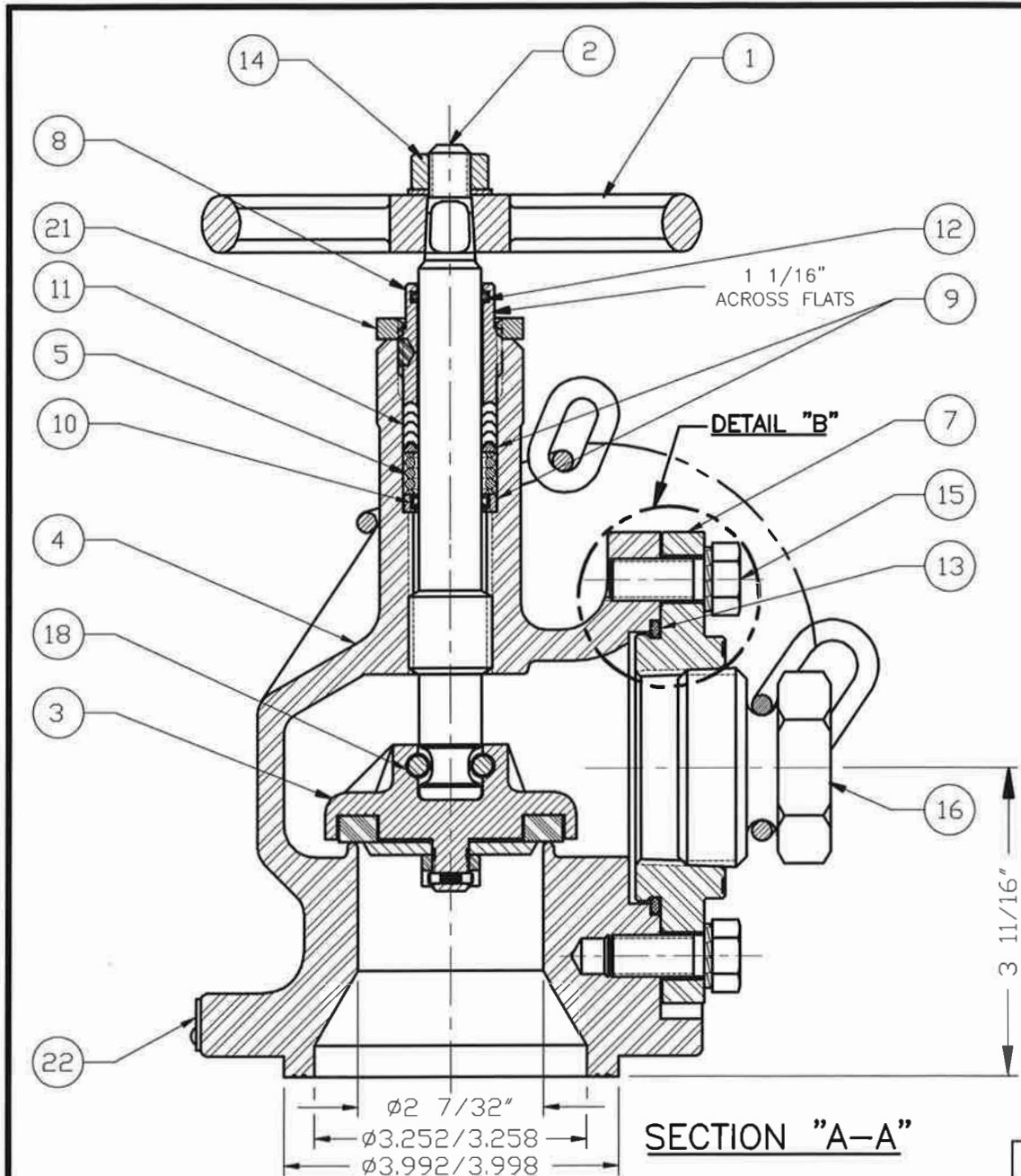
By Khiem Q Hoang Title Engineering Manager

**APPROVAL AAR Tank Car Committee Service Trial Required**

Date Approved for Service Trial 5/31/2018  
 Service Trial Number ST-471  
 (Signature) on behalf of Tank Car Committee [Signature]

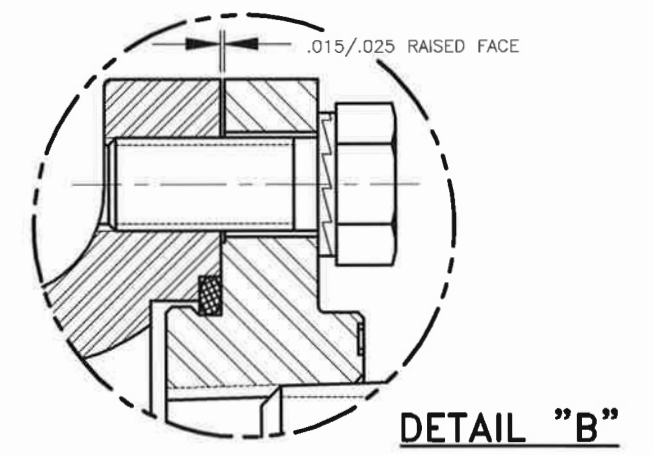
~~APPROVAL AAR Tank Car Committee Service Completed / Not Required~~

Date Service Trial Completed 12/12/2023  
 Date Approved 3/2/2024  
 Expiration Date 5/31/2028  
 (Signature) on behalf of Tank Car Committee [Signature]



ITEM	QTY.	DESCRIPTION	A-720		A-724	
			MATERIAL	PART No.	MATERIAL	PART No.
1	1	HANDWHEEL	ALUMINUM	720-1-AL	ALUMINUM	720-1-AL
2	1	STEM	STAINLESS	720-2A-SS	STAINLESS	720-2A-SS
3	1	GASKET RETAINER ASSY	STEEL	720-301-CS	STAINLESS	720-301-SS
4	1	BODY	STEEL	720-4-CS	STAINLESS	724-4-SS
5	1	SPRING, COIL	STAINLESS	720-5-SS	STAINLESS	720-5-SS
7	1	OUTLET FLANGE	STEEL	720-71-CS	STAINLESS	720-71-SS
8	1	PACKING SCREW W/INSERT	STEEL	720-8-CS	NITRONIC 60	720-8-N60
9A	1	PACKING WASHER TOP	STAINLESS	720-93-SS	STAINLESS	720-93-SS
9B	1	SPACER	STAINLESS	720-95-SS	STAINLESS	720-95-SS
10	1	WIPER	PEEK	713-33-PK	PEEK	713-33-PK
11	4	PACKING	TEFLON	720-11-TF	TEFLON	720-11-TF
12	1	STEM SEAL	BUNA-N *	720-12-BN	BUNA-N *	720-12-BN
13	1	'O' RING OUTLET	BUNA-N *	720-131-BN	BUNA-N *	720-131-BN
14A	1	HANDWHEEL NUT	STAINLESS	10-15-SS	STAINLESS	10-15-SS
14B	1	WASHER	STEEL	308-12-CS	STEEL *	308-12-CS
15A	4	BOLT	STAINLESS	724-15-SS	STAINLESS	724-15-SS
15B	4	LOCK WASHER	STAINLESS	724-152-SS	STAINLESS	724-154-SS
16	1	OUTLET PLUG & CHAIN *	STEEL, PLATED	720-16-CS	STAINLESS	720-16-SS
18A	1	STEM RETAINER	STAINLESS	720-18-SS	STAINLESS	720-18-SS
18B	2	NUT	STAINLESS	720-181-SS	STAINLESS	720-181-SS
21	1	PACKING LOCK NUT	STEEL	720-21-CS-G	STAINLESS	724-21-SS-G
22	1	NAME PLATE	STAINLESS	720-22-SS	STAINLESS	724-22-SS

\* ALTERNATE MATERIAL AVAILABLE



REVISION	DESCRIPTION	DRN	DATE	APP
V	ADDED 'COIL' TO DESCRIPTION OF SPRING (ITEM 5)	FS	3/15/18	KQH
U	REMOVED * ALTERNATE MATERIAL AVAILABLE NOTE FROM 713-33-PK (ITEM 10) REMOVED BLANK SPACES IN TABLE FOR ITEMS 6, 17, 19, & 20	FS	1/22/18	KQH
T	720-95-SS WAS 720-91-SS, ADDED 713-33-PK, QTY.4 WAS 5 FOR 720-11-TF 720-21-CS-G & 724-21-SS-G WERE 720-21-CS & 724-21-SS	FS	11/15/17	KQH
R	720-2A-SS WAS 720-2-SS, REMOVED AAR E112004, CAD FILE NO. WAS 0209	FS	5/10/17	KQH
P	ADDED AAR APPROVAL NO.	FS	1/19/11	MN
N	720-301-CS & 720-301-SS WERE 720-3-CS & 720-3-SS, GASKET RETAINER ASSY WAS GASKET RETAINER, REMOVED ITEMS 6, 10, 19, & 20	FS	9/24/10	MN
M	10-15-SS WAS 720-14-SS.	FS	6/15/10	MN
L	720-14-SS WAS 720-14-CS.	KM	5/3/04	CHP
K	720-91-SS WAS 724-91-SS.	KM	2/27/04	CHP

REVISION	DESCRIPTION	DRN	DATE	APP
J	724-154-SS WAS 724-152-SS.	KM	2/11/04	RG
I	REMOVED ITEM 17, 'OUTLET PLUG & CHAIN' IN ITEM 16 WAS 'OUTLET PLUG' 720-16-CS & 720-16-SS WERE 201-MI & 201-SS.	KM	1/5/04	RG
H	724-10-TF WAS 720-10-TF	KM	11/5/03	RG
G	QTY 5 ON ITEM 11 WAS 4.	KM	12/4/02	RG
F	720-131-BN WAS 720-13-BN	KM	4/16/99	RHD
E	ADDED PLUG CHAIN, ADDED ITEMS 9B, 14B, 15B, & 18B REMOVED 13/64 DIM FROM PIPE PLUG ASSEMBLY	CB	12/14/97	RHD
D	720-3-SS WAS 724-3-SS; 720-6-SS WAS 724-6-SS; 720-71-CS WAS 720-7-CS; 720-71-N60 WAS 724-7-SS; 720-8-N60 WAS 724-8-N60	RG	11/5/97	RHD
C	724-8-N60 & 720-8-CS WERE 724-8-SS & 720-8-SS	RG	9/10/96	RHD
B	ADDED DETAIL 'B', 11 1/32 & 12 1/16 WERE 10 3/4 & 11 1/2	CB	8-6-96	RHD
A	REVISED CORE BOX FOR NIPPLE CLEARANCE.	CHP	11/17/95	RHD

**MIDLAND** MANUFACTURING CORP.  
SKOKIE, IL, U.S.A.

**2" ANGLE VALVE**

MATERIAL: SEE TABLE

TOLERANCES UNLESS SPECIFIED:  
2 PLACE DECIMAL ± .015  
3 PLACE DECIMAL ± .005  
ANGULAR ± 1', FRACTIONS ± 1/64  
CHAMFERS AND WELD PREP ± 5'

REMOVE ALL BURRS.  
BREAK ALL EDGES & CORNERS.

FINISH (Ra) : √ =

SCALE: 1/2    DRAWN: LKT    DATE: 11/07/70    APPROVED: JP

CAD FILE NO.    SIZE    DWG NO.    REV

A-720\_A-724    B    A720 & A724    V