

**AAR Manual of Standards and Recommended Practices
Specifications for Tank Cars**

M-1002

APPLICATION FOR APPROVAL OF VALVES, CLOSURES, AND FITTINGS

Applicant HEROSE GMBH Armaturen und Metalle AAR No. **E252103**
Description of Device Cryogenic Globe Valve, DN10 (3/8") to DN150 (6")

Applicant No. _____ Device Ident. No. 01341 Date 09/10/2024

1. Manufacturer HEROSE GMBH Armaturen und Metalle
2. Address Elly-Heuss-Knapp-Str. 12 City Bad Oldesloe State Germany Zip 23843
3. Test facility if other than the manufacturer _____ Address _____
4. Test date 8/16/2013 and 5/23/2023 4. Observer S. Korn (2013) and S. Luetjens (2023)
Title: _____

TEST PROCEDURE

5. Description of prototype testing: In acc. with DIN EN 1626:2009, DIN EN 12266 part 1 & 2 and HEROSE Spec. QMAA 02-001-001

6. Cycles <u>2000</u>	Min. Temp. <u>-321</u> °F <u>-196</u> °C	@ Pressure <u>725</u> psi <u>5000</u> kPa	Cycles _____	Max. Temp. <u>+248</u> °F <u>+120</u> °C	@ Pressure _____ psi _____ kPa	Test Medium <u>Liquid Nitrogen</u>	Remarks
Cycles _____	Min. Temp. _____ °F _____ °C	@ Pressure _____ psi _____ kPa	Cycles _____	Max. Temp. _____ °F _____ °C	@ Pressure _____ psi _____ kPa	Test Medium _____	Remarks
Cycles _____	Min. Temp. _____ °F _____ °C	@ Pressure _____ psi _____ kPa	Cycles _____	Max. Temp. _____ °F _____ °C	@ Pressure _____ psi _____ kPa	Test Medium _____	Remarks

7. Commodity: Regulated Commodity X Non Regulated Commodity _____ Specific Commodity Air gases, vapour and cryogenic liquefied gases (for example: O₂, N₂, Ar, He, CO₂, LNG, LPG, Ethylen and similar)
8. Flow rate (if applicable) N/A gpm (_____ L/min)

Applicable drawings	Material	Drawing Number latest revision	Precedent	
			Drawing Number	Application/Certificate
9. Device application	<u>Stainless steel</u>	<u>01341-DNXX-ZULASSUNG (valid data: 2/6/2023)</u>		
10. Device assembly				
11. Device details				

12. Quality Control Statement HEROSE has established a certified quality control programm in acc. with: DIN EN ISO 9001:2015, PED 2014/68/EU and AD 2000 - HP0

REVISIONS: 1

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 Quality Management of HEROSE Group

APPROVAL AAR Tank Car Committee Service Trial Required

Date Approved for Service Trial 3/17/2025

Service Trial Number 509


(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. 1.6 Form AAR 4-5 Application for Approval of Valves and Fittings