

ITEM NO: 068013725

1.1 Scope of Specification

This specification covers the technical requirements for Foot Valve requirements for SXMR 3, 4 & 19 tank wagons for conveying Octene.

1.2 Design Standards

The valve shall meet requirement mentioned on Pressure Equipment Regulations (PER), latest, as issued by Department of Labour, Occupation Health and Safety Act, 1993. Where **no** PER apply or exist, the valve must meet all relevant International Railway Standards & European Norms which are:

- I. Association of American Railroads (AAR).
- II. American Society of Mechanical Engineers (ASME).
- III. American National Standards Institute (ANSI).
- IV. European standards (EN14433).
- V. British standards (BS).
- VI. International Standards Organisation (ISO).
- VII. International union of railways (UIC).
- VIII. Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)

1.3 Foot Valve

Nominal diameter	4" (100mm)
Temperature (Max)	46 °C
Temperature (Min)	0 °C
Overall Length	465 mm
Angel	90°
Outlet Flange Thickness	12 mm, 3 mm Raised Face with Serrated Surface Finish (See Figure 1)
Inlet Flange Thickness	16 mm Steel Sump flange (See Figure 1)
Inlet & Outlet Flange Size	8 holes x Ø19 with PCD of 260 mm (See Figure 1)
Maximum Allowable Working Pressure	500 kPa
Test Pressure	750 kPa
Valve Material	316L / 304L / CF8 Stainless Steel (Body, Stem & Trim)

Shear groove	Yes
Gasket & Seal Material	Ethylene Propylene Diene Monomer - EPDM
Specification example	Figure 1

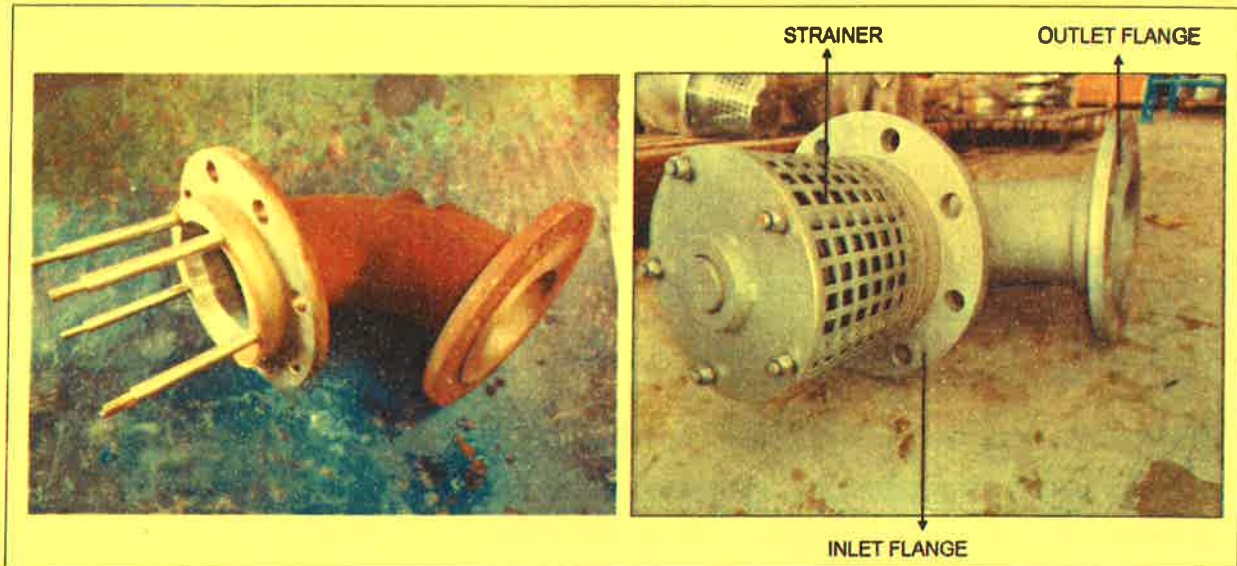


Figure 1: Foot Valve

1.4 Certification and Guarantee

- All components to be supplied with all relevant certificates as proof and guarantee.

1.5 Documentation

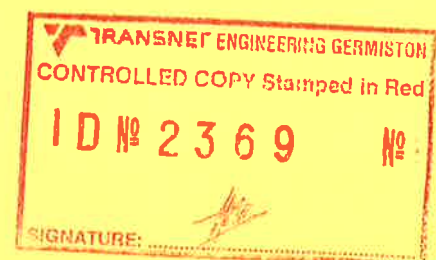
The following documents are required for acceptance of the valve.

- Material specifications.
- ISO/SANS specifications for material and product compliance.
- Material and product compliance certificates (Test certificate).
- Data plate and serial number on the valve.

1.6 Test Certificate

The test certificate must include the following information

- Name of Company
- Company Valve description/ Figure or Item No
- Test Pressure
- Maximum Allowable Working Pressure
- Flow Rate



- Test Date
- Seal Material
- Serial Number
- Design standards (refer to **Clause 1.2**)

1.7 Data Plate- Marking

The data plate/marking must include the following information

- Company Name
- Material Type
- Seal Material
- Passed Test Date
- Serial Number

1.8 Quality Assurance Provision

The supplier must be ISO accredited, however if that is not the case the supplier must have a proper quality management system that is in line with the principles in the policy on the supplier quality management framework Doc No: OPS_CQ_KLP_PP_0001.

