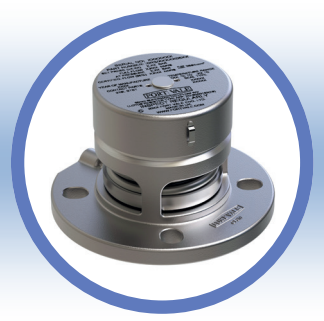
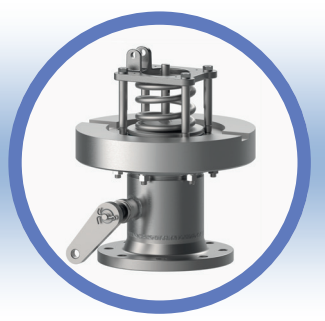
FORT VALE®

TANK WAGON EQUIPMENT


A


B


C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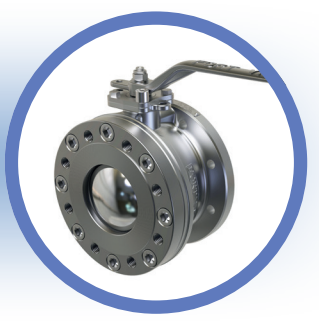
E


F

Fort Vale manufacture the most extensive range of rail tank wagon equipment available for the diverse requirements of RID for European rail transport. We supply a range of spares and ancillary items such as mesh filters, end caps, flame arresters, as well as consumable parts such as seals, gaskets, swingbolt assemblies and fasteners. We also manufacture exotic alloy valves and lined equipment for corrosive cargoes.

A Manlid

Standard manlid and neckring assemblies are supplied and manufactured to design codes ASME VIII DIV1, BS EN 14025:2018 + AC:2020 & BS EN 12561-6:2011. The standard manlid and neckring assemblies are supplied with 4 point swingbolt fastenings and are manufactured in either carbon steel or stainless steel.

B Relief Valves

Installed into the vapour space of a vessel, it is designed to protect the vessel from accidental over-pressure and implosion due to unwanted vacuum conditions. Relief valves are not always required on European specification tank wagons as it is dependent on the tank design. However, we can supply pressure and vacuum relief valves as individual valves, or as a combination pressure and vacuum valve. Lined relief valves can also be supplied for corrosive cargoes.

C Vent Valves

These are fitted into the vapour space of the tank wagon and connected to pipework to create a closed loop system - enabling vapour recovery of the product in the tank. The valves are DN80 size and are connected via a cable system with the footvalve, only opening when the footvalve is opened. Valves also offer rollover protection and can be fitted with a flame arrester, further protecting the contents of the tank and reducing the risk of fire engulfment. Vent valves can be supplied with a hydraulic or pneumatic actuator as an option as an alternative to the manual cable operating system. The standard inlet flange style is supplied as 4 holes on a 160mm PCD - there is also an option of a larger inlet flange with 8 holes on a 240mm PCD to suit older tank wagon designs - allowing Fort Vale valves to be retro fitted in place of other manufacturers' equipment.

D Bottom Discharge Foot Valves

The footvalve is the primary internal closure valve fitted to the central drain point of the vessel. It is used to load and discharge cargo in combination with a secondary valve. Footvalves are connected to t-piece pipework that terminate in the secondary valve, allowing for product loading/discharge from either side of the tank wagon. Footvalve size is DN125 and are supplied as standard as 180° option. The valves can be supplied in carbon steel or stainless-steel materials. Valves can be painted if required. We also offer steam heated options and can also supply in a 45° or, 90° outlet arrangement if required.

E Y-Pattern Valves

These are fitted as the secondary valves at each end of the t-piece bottom outlet pipework. They are DN100 size and terminate in a 5.5"BSW thread as standard and we have stainless steel, carbon steel, or plastic end cap options - DN100 flanged outlets can also be provided. The valves can be supplied in carbon steel or stainless-steel materials, or painted if required. The valves have a conical sealing seat that offers bubble-tight sealing performance. Low handwheel torque compared with flat face sealing seats allows ease of manual operation. Spring-energised seals offer exceptional stem sealing performance at low temperatures. Four bolt bonnet connection provides a safer, low-torque flange connection compared to a 3-bolt design. Specialist anti-galling stainless steel is used for key components to ensure reliable long-term valve operation and offers improved wear and corrosion resistance characteristics. Y-Valves may also be connected to a dry disconnect coupling.

F DN100 Ball Valves

The ball valves are fitted as the secondary valves at each end of the t-piece bottom outlet pipework. These would be supplied as an alternative to the y-pattern valves. They are DN100 size and may also be connected to a dry disconnect coupling. Fort Vale ball valves are stainless steel as standard.

FORT VALE. FOLLOW THE LEADER.

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