



- Sizes available - 4" & 6"
- Use of high quality materials
- Suitable up to 100% aromatics

Flexible Bend Articulated Roof Drain System

For External Floating Roof Tanks

The Flexible Bend Articulated Rigid Pipe Roof Drain System is used to remove rain water from the roof of an External Floating Roof Tank.

The Roof Drain System is designed to remove rain water so as not to put unacceptable loadings on the roof. API 650 Appendix C states that the drain system shall not be smaller than 3 ins (75 mm) diameter for roofs with a diameter less than 120 ft or smaller than 4 ins (100 mm) diameter for roofs with a diameter greater than 120 ft.

Land and Marine TankServ can provide this Roof Drain System completely prefabricated with an Installation Manual for final assembly and installation at site by the customer. Alternatively Land and Marine TankServ can install the Roof Drain Systems using our own installation crew at a time convenient for the customer.

Provided by the experienced team from Land & Marine TankServ

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This Drain System comprises of rigid pipe, normally carbon steel and a number of flexible bend joints.

The flexible bend joints incorporate flexible hose material fixed within a stainless steel or galvanised carrier frame and are specifically designed for submerged service and the operational requirements of the drain system. It is normal practice to have 4 No flexible bends where the tank diameter is greater than the height and 3 No where the tank diameter is less than the height.

Advantages

1. Unlike the swivel joint system, the flexible bends are maintenance free.
2. Load stresses are transferred across the flexible bend not through it.
3. The complete drain system is designed to ensure a continuous slope from roof to shell nozzle and so avoid any water being retained in the pipe work.
4. The pipework is fitted with support legs, complete with neoprene pads to protect the tank floor when the drain system is in the low position.
5. The drain system is fitted in a fixed position in the tank. This ensures no interference with tank internals, a problem that can occur with a flexible hose drain system.
6. Rigid pipework ensures no kinking, collapsing, dragging or scraping action across the tank floor something that can be a problem with the flexible hose drain system.
7. There are no piping runs on the underside of the floating roof.

Material Specification

- Flexible Bending Joint: each joint consists of a section of flexible hose designed with stainless steel helix wires to maintain rigidity and multi layer elastomeric materials provide impermeable protection against the stored products
- Flexible Bending Joint Carrier Frame: manufactured in either mild steel, galvanized steel or stainless steel material
- Bending Joint Pin: manufactured from high quality stainless steel materials designed to provide trouble free operation for the life of the drain system
- Pipework: manufactured from ASTM 106 GrB sched 40 materials
- Elbows: manufactured from ASTM A 234 M-91C S40 materials
- Flanges: supplied ASTM A 182 ANS 150lbs RF
- Suitable for 100% aromatics

Land & Marine

TANKSERV

Land and Marine Project Engineering Ltd

Dock Road North, Bromborough,
Wirral CH62 4LN United Kingdom

T. +44 (0)151 641 5600

F. +44 (0)151 644 9990

E. company@landandmarine.com

W. www.landandmarine.com

For more details on this and other products visit:

www.landandmarine.com

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