Floating Roof Drain System

Overview

Floating roof tanks require a specialized drainage system to ensure the automatic removal of accumulated rainwater. Our Roof Drain System is specifically engineered for large storage tanks with floating roofs, providing efficient rainwater drainage.

Constructed from high-quality materials, our system is renowned for its durability and long service life. The materials and manufacturing process guarantee excellent corrosion resistance and high performance in various climatic conditions.

Benefits

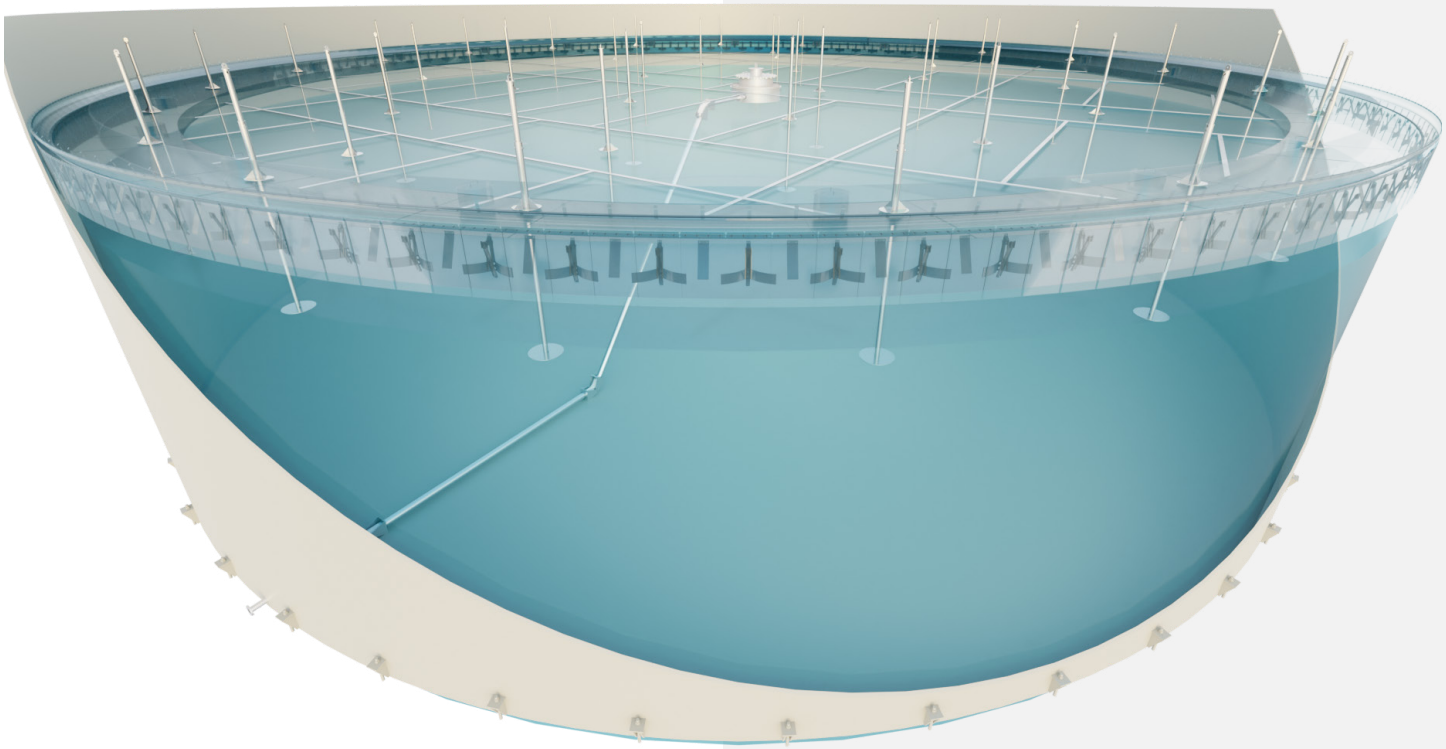
- **Customized Design:** Tailored to meet individual tank specifications and customer requirements.
- **Durable Operation:** Engineered for long-term use, even in full contact with the stored substances.
- **Tank Integrity Protection:** Designed to avoid contact with the tank bottom, preventing potential damage to the tank's coating due to friction.

Design Features

- **High-Quality Materials:** Manufactured using premium stainless steel and high-strength alloys for superior corrosion resistance.
- **Customizable Diameter:** Diameter can be tailored to meet specific design requirements, providing flexibility for various applications.
- **Long-Lasting Performance:** Engineered to comply with industrial standards, ensuring reliability and longevity.
- **Ease of Installation and Maintenance:**Designed for straightforward installation and minimal maintenance, enhancing operational continuity and reducing costs.

Technical Specifications

- **Material Options:** Stainless Steel (SS304/SS316) and other high-strength alloys
- **Operating Temperature Range:** -40°C to +80°C
- **Pressure Rating:** Up to 10 bar
- **Customizable Diameter:** Typically ranges from 2" to 6"
- **Flexible Lengths:** Adjustable to fit different tank dimensions



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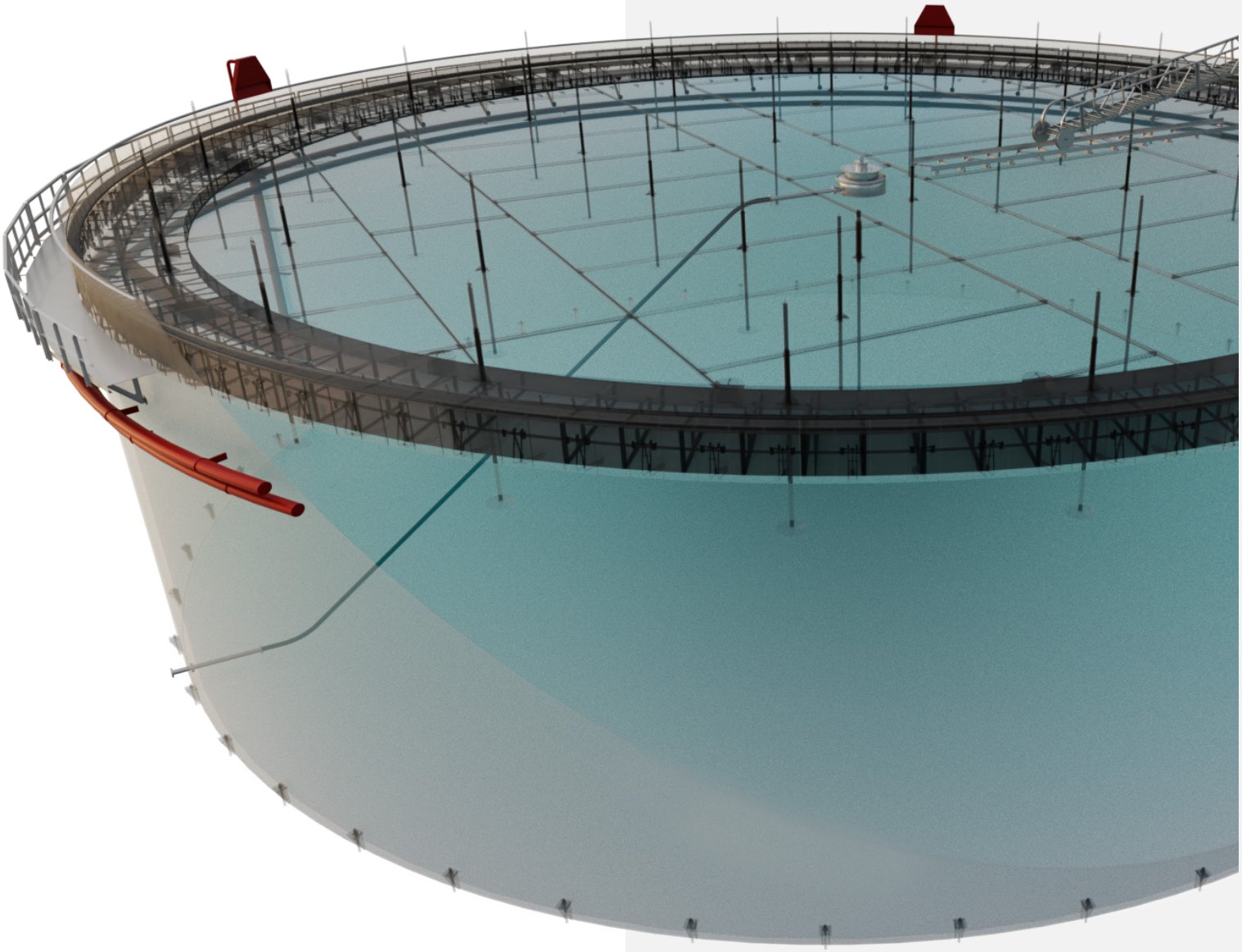

Applications

- **Oil & Gas Industry:** Essential for floating roof tanks storing crude oil, gasoline, and other hydrocarbons.
- **Chemical Processing:** Ideal for tanks holding various chemicals, preventing contamination and operational issues from accumulated liquids.
- **Water Treatment Plants:** Efficiently manages rainwater and other liquids in water storage tanks.
- **Petrochemical Facilities:** Provides reliable drainage for storage tanks containing petrochemical products, enhancing safety and compliance.

Installation and Maintenance

- **Easy Installation:** Modular design allows for quick and straightforward installation, either as part of a new build or a retrofit project.
- **Maintenance Access:** Designed for easy access and inspection, allowing for regular maintenance and quick replacement of components when necessary.
- **Support and Training:** Comprehensive installation manuals and technical support are available to ensure proper installation and maintenance.

Compliance and Standards

- **Industry Standards:** Complies with API, ASME, and other relevant international standards.
- **Quality Assurance:** Manufactured under stringent quality control procedures to ensure consistent performance and reliability.

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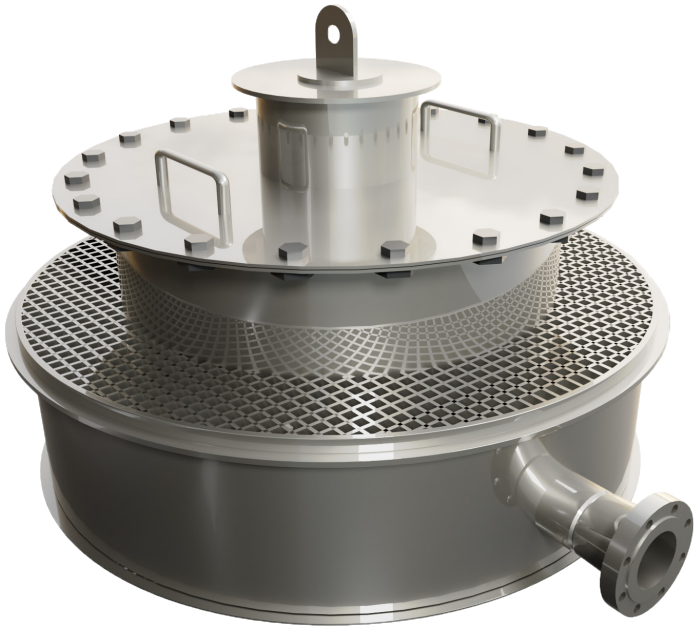
Drain Sump

The Drain Sump is a crucial component in floating roof tanks, designed to collect and safely drain accumulated liquids.

Its optimized design ensures maximum efficiency and durability, making it the most widely used seal design for tanks storing crude oil and refined oil products.

Optionally, the Drain Sump can be equipped with a shut-off valve located downstream to control the drainage process.



Key Features

- **Efficient Liquid Collection:** Ensures organized and safe drainage of liquids from the tank.
- **Durable Construction:** Typically made of carbon steel or stainless steel, ensuring long-term reliability.
- **Optional Shut-Off Valve:** Provides additional control over the drainage process.
- **Versatile Application:** Widely used in floating roof tanks storing various oil products.

Pivot Master

The Pivot Master is an advanced component designed to facilitate efficient roof drainage without interference from objects inside the tank or the roof legs. This innovative solution does not require modifications to existing tank structures and is straightforward to install.

By incorporating the Pivot Master into your floating roof drainage system, you can ensure a long-lasting, efficient, and maintenance-free operation, enhancing the overall performance and reliability of your storage tanks.

Key Features

- **Non-Interference Operation:** Works smoothly without any interference with objects inside the tank or with the roof legs.
- **Easy Installation:** Does not require modifying existing tank structures and is very simple to install.
- **Material Options:** Available in stainless steel or galvanized versions, ensuring durability and corrosion resistance.
- **Maintenance-Free Operation:** Provides efficient roof drainage with maintenance-free operation, extending service life by preventing hose kinking, blockage, and eliminating stress on bearings or seals.
- **Space Efficiency:** Can be easily installed in a fixed position and requires minimal space.
- **Sediment Prevention:** Continuous sloping design prevents sediment accumulation, maintaining system efficiency.
- **Underwater Design:** Designed for underwater conditions without the need for lubrication.
- **Flow Rate Calculations:** Flow rate calculations are available on demand to ensure optimum performance under various operating conditions.
- **Optional Rotation Stop:** Offers the option of installation with a rotation stop, which allows precise control over drainage angles.

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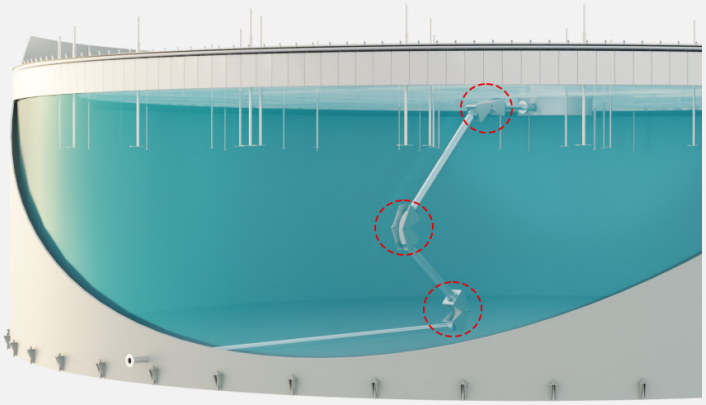
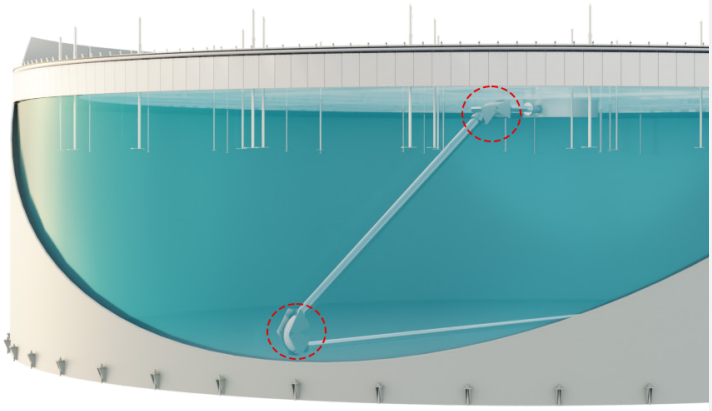
Efficient Multi-Joint System for Flexible Drainage

This configuration demonstrates multiple swivel joints working in harmony to provide full flexibility and efficient drainage from the floating roof tank, adapting seamlessly to the changing levels within the tank.



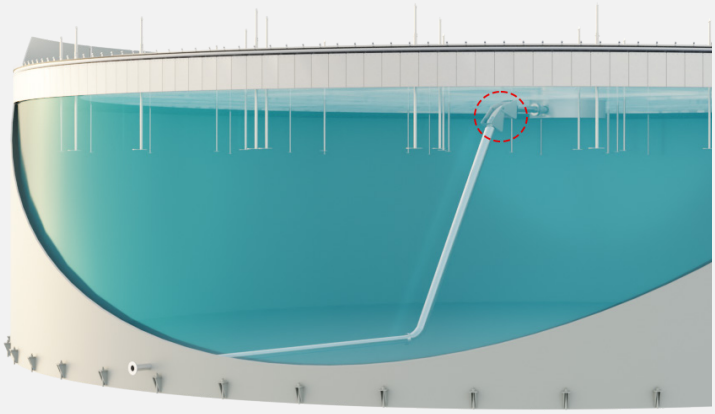


Single Swivel Joint for Optimized Movement

A single swivel joint is employed to adjust the drainage pipe according to the liquid level in the tank. Its lightweight, compact design allows smooth 360-degree movement, ensuring optimal drainage and easy maintenance.

Angled Swivel Joint Adaptability

Here, the swivel joint is shown angled to match varying operational conditions. Its robust design, combined with stainless steel construction, maintains system efficiency by adapting to changing liquid heights, enhancing overall tank reliability.



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Piping System

Our Piping System is designed to ensure the safe and efficient transportation of water from the tank, tailored to meet the specific requirements of each project. The system's design considers various flow rates and pressures, ensuring optimal performance under all conditions.

Key Features

- **Customizable Design:** The number and size of pipes are determined by the design conditions, including rainfall rate and required drainage capacity.
- **Chemical Resistance:** Materials are selected to ensure high resistance to chemicals and external influences within the tank.
- **Robust Construction:** Designed to withstand various flow rates and pressures, ensuring durability and reliability.
- **Optimal Drainage Capacity:** Calculated to ensure efficient drainage, preventing overflow and maintaining tank integrity.

By incorporating these components into your floating roof tank system, you ensure efficient, reliable, and safe drainage of accumulated liquids, enhancing the overall performance and longevity of your storage solutions.

Features	Details
Material	Carbon steel, stainless steel
Diameter and Thickness	Variable according to project requirements
Connection Type	Threaded Connections,Welded Connections, Flanged Connections
Maximum Pressure	Atmospheric pressure
Flow Rate	Adjustable between 0.5 m/s - 2 m/s

Swivel Joint

The Swivel Joint is designed to provide flexible movement of pipes, allowing the system to adapt to various operating conditions. Its three-piece split flange design facilitates quick and easy maintenance of the primary seal without the need to remove the marbles. The Swivel Joint features a shorter structural length, smaller diameter, and minimal weight, ensuring efficient and reliable performance

Key Features

- **360-Degree Rotation:** Offers full rotation capabilities for maximum flexibility.
- **Hydrostatic Testing:** Each swivel joint undergoes rigorous hydrostatic testing before shipment to ensure quality and reliability.
- **Variety of Sizes and Materials:** Available in various sizes and materials to meet specific operational requirements and environmental conditions.
- **Durable Construction:** Suitable for various floating roof storage tanks, including those used for oil, petrochemical, and water storage.
- **Enhanced Reliability:** Equipped with a double row ball bearing of larger dimensions to ensure continuous reliability.
- **Sealed Design:** The body seal prevents dirt from entering and product from leaking, maintaining the integrity of the marble track.
- **Long-Lasting Bearings:** Bearings are made of Teflon to extend the life of the O-ring seal, with stainless steel marbles and a hardened marble track for added durability.
- By integrating Swivel Joints into your floating roof tank system, you ensure optimal adaptability, ease of maintenance, and long-term reliability, enhancing the overall efficiency and performance of your storage solutions.

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