

# Emission Control & Safety Equipment

for Storage Tanks







# Who are we?

Äager, an innovative company in environmental process, emission, and air pollution control equipment manufacturing and engineering, started its journey in Munich, Germany. With four international branch offices, Äager extends its reach to over 150 countries.

Boasting 40 years of experience, Äager holds a leadership role in creating superior, safer, and more cost-effective solutions for storage tank equipment, pressure vessels, and process solutions.



**Process & Pressure Vessels** 

As a single source for plug-and-play systems, ERGIL can reduce your project cost and time drastically.

We can reduce your site activities and reduce your risk by supplying single or multiple units from our world-class manufacturing facility.



Emission Control & Safety Solutions

Storagetech<sup>™</sup> manufactures storage tank equipment, such as flame arresters, breather valves, gauge hatches, floating roofs, and floating suction pipes.

Storagetech<sup>™</sup> also provides many other products for the industrial solutions as turnkey packages including fire fighting systems.







Build the best product, cause no unnecessary harm, use business to inspire and implement solutions to the environmental crisis.

Some of our customers:





#### Storagetech™

products are designed to safeguard the integrity of storage tanks, to serve for extreme conditions to provide best safety choice for its prestigious users to provide its clients a competitive pricing, Outstanding performance and environmental protection.

#### Storagetech™

an Äager brand is a specialist designer and manufacturer with extensive experience providing technically advanced emission control & safety equipment for bulk storage tanks, tanker vessels, and road tankers.



# Our Mission Thank You for choosing Storagetech™

### 40 Years of Engineering Excellence in Oil and Gas: A CEO's Perspective

Storagetech™'s value proposition has always been to provide the highest quality products, at optimal prices and to deliver them on time. Rahmi Oktay Altunergil













Regions







# Together We Achieve

Äager





# Atmospheric Bulk Storage Tank Equipment

### Emission Control & Safety

- Internal Floating Roofs and Seals
- Flame Arresters
- Pressure Vacuum Vents
- Breather Vents
- Emergency Vents
- Emergency Relief Vents
- Gauge Hatch



- Floating Suction Units
- Roof Drain Systems
- Oil Skimmers
- Swivel & Pivot Joints
- Sight Glass
- Tank Liquid Level Indicator





# **Flame** ARRESTER



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# Flame Arresters

#### Model 300 / Vertical, In Line Deflagration

The Model Number 300 In-Line Deflagration Flame Arrester is a safety device designed to act as an extinguishing barrier. It works by absorbing and dispersing heat, lowering fire temperature, and reducing oxygen levels to extinguish flames through layers of metal ribbons with crimped corrugations. This device can be installed vertically or horizontally between two lines or combined with a pressure vacuum vent on storage tanks.

Designed to endure low to medium deflagration levels, it is constructed from steel or carbon steel, with options for special materials and coatings



#### Model 320 / Vertical, In Line, Detonation

The Storagetech<sup>™</sup> Model 320 In-line Detonation Flame Arrester is specifically engineered for installation in gas pipelines. Detonation, characterized by a flame reaching supersonic velocities within the pipeline, often results from factors such as pipeline configuration or surface roughness.

Variations in gas density and pressure can transform flame velocity from subsonic to supersonic.



#### Model 301 / Horizontal, In Line, Deflagration

The Model Number 301 In-Line Deflagration Flame Arrester, a horizontal extinguishing barrier, is engineered to absorb heat, lower fire temperature, and reduce oxygen levels using crimped corrugated metal ribbons. Designed for horizontal installation, its special in-line configuration optimizes flow capacity with minimal pressure drop.

Suitable for low to medium deflagrations, it is made from steel or carbon steel, with options for special materials and coatings available upon request





# Flame Arrester (Horizontal, In Line, Detonation)

#### Model 321 / Horizontal, in Line, Detonation

Storagetech<sup>™</sup>'s Model 321 In-line Detonation Flame Arrestor, equipped for gas groups IIB and IIA, exceeds the standard maximum experimental safe gap (MESG).

It features a quenching element, significantly larger than the pipe it's installed in, assembled between two flanged spools. The element, made from crimped stainless steel ribbons, forms vapor-passing passages, with their area determining the protection level.



#### Model 310 / end of Line, Deflagration

Storagetech<sup>™</sup> End-of-Line Deflagration Flame Arrester serves as a critical safety mechanism, designed to act as an extinguishing barrier. It effectively absorbs heat, lowers fire temperature, and diminishes oxygen levels, utilizing layers of crimped corrugated metal ribbons to halt fire propagation.

Positioned at the pipeline's end or on a storage tank vent pipe, it facilitates venting while providing flame protection in vertical vent setups. Additionally, it is engineered to block external contaminants like dust, insects, and water from entering the tank.



#### Model 312 / end of Line, With Automatic Opening Hood Deflagration

Storagetech<sup>™</sup> End-of-line, with Automatic Opening Hood serve as passive safety devices, designed to block the propagation of flames or fire from entering a pipeline or vessel emitting flammable vapor.

Diverging from the Model 310, the Model 312 end-ofline flame arrestor features a weather hood equipped with a fusible link. This link melts in the event of a fire, allowing the weather hood to instantly react by releasing the gas/fire into the atmosphere.





#### Model 100 / Pressure Vacuum Relief Valve end of Line, Weight Loaded

Storagetech<sup>™</sup> Pressure Vacuum Relief Valve is a crucial safety mechanism designed to safeguard storage tanks or pressure vessels by venting excess pressure directly to the atmosphere. This device ensures protection against the build-up of excessive pressure or vacuum within the tank. Functioning both as an inhaler under negative pressure and as a release valve for overpressure, the valve automatically opens and separates from the seal to release any surplus negative or positive pressure when the air pressure surpasses the preset limit of the pressure vacuum vent.

Typically mounted to a flange or pipe that links to a storage tank's vapor space, these vents are customizable based on specific needs. They allow for the precise calibration of pallet assemblies to

Other Available Models: Model 110: Pressure Vacuum Relief valve (End of Line, with humidity control)



#### Model 101 /Top-mounted, end-of-Line, Spring-Loaded Pressure Vacuum Relief Valve

The Model 101 Pressure Vacuum Relief Valve is essential for maintaining safe pressure levels in storage tanks.

It automatically opens when pressure exceeds a preset level, releasing excess gas safely. Its features include a self-draining design to prevent condensation buildup, a Teflon diaphragm for durability, and safeguards against debris ingress. Overall, it ensures tank safety and smooth operation.





#### Model 100 + 330 / Pressure Vacuum Relief Valve with Flame Arrester, end of line, Weight Loaded, Combination, Atmospheric Deflagration Proof

Storagetech<sup>™</sup> Pressure Vacuum Relief Valve with Flame Arrester represents a fusion of Model 100 (end-of-line pressure vacuum relief valve) and Model 300 (in-line deflagration flame arrester), functioning as a comprehensive safety device. It manages internal tank pressure by combining a flame barrier with a pressure vacuum vent on top.

The flame arrester acts as an extinguishing barrier, absorbing and dispersing heat, lowering the fire temperature, and reducing oxygen levels to extinguish flames through its crimped corrugated metal ribbons.

#### Other Available Models:

Model 101+300: Pressure Vacuum Relief Valve with Flame Arrester (End of line, spring loaded, combination, atmospheric deflegration proof)



Storagetech<sup>™</sup> Vacuum Relief Valve, featuring an Integral End-of-line Flame Arrester, is a safety device engineered to shield storage tanks from excessive pressure or vacuum, offering operators complete peace of mind. It safeguards against potential damage due to over-pressurization or implosion from vacuum conditions and blocks external flames from entering the tank. Acting both as an inhaler under negative pressure and as a release valve for overpressure, this valve automatically opens when air pressure surpasses the pre-established threshold. It then separates from the seal to relieve any undue negative or positive pressure.





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#### Model 120 / Pressure Vacuum Relief Valve Top Mounted, Pipe Away Type, Weight Loaded

Storagetech<sup>™</sup> Top Mounted Pipe-Away Pressure Vacuum Relief Valve serves as a safety device, engineered to shield storage tanks or low-pressure vessels from excessive pressure or vacuum. This Pipe-Away Pressure Vacuum Vent is designed to redirect toxic gases to a separate containment system, offering a safer alternative to releasing hazardous gases directly into the atmosphere. When air pressure surpasses the predetermined setting of the pressure vacuum vent, the pallet activates, disengaging from the seal and releasing any undue negative or positive pressure.

Typically installed on a flange or pipe connected to a storage tank's vapor space, these vents are customizable to meet specific operational needs, allowing for the pallet assemblies to trigger at a precise vacuum level.

Other Available Models:

Model 122: Pressure Vacuum Relief Valve (Side Mounted, Pipe Away Type, Weight Loaded) Model 123: Pressure Vacuum Relief Valve (Side Mounted, Pipe Away Type, Spring Loaded)



#### Model 121 / Top-mounted PV Relief Valve, Pipe-Away, Spring-Loaded

Storagetech's Model 121 Pressure-Vacuum Relief Valve safeguards bulk storage tanks from pressure fluctuations. Mounted on the tank roof or vent pipe, it prevents vapor loss by sealing tightly when closed. When pressure exceeds the set point, the valve opens, releasing gas into the atmosphere. It reseals when pressure stabilizes.

Similarly, it opens to admit air when pressure drops. The valve features self-draining design, Teflon components to prevent ice formation, and free-moving pallet assembly for effective operation.





#### Model 141 / Pressure Relief Valve Top Mounted, Pipe-Away, Weight Loaded

Storagetech<sup>™</sup> Pressure Relief Valve serves as a safety mechanism to release excessive pressure. Designed with a Pipe-Away feature, it safely redirects toxic gases to a containment system instead of releasing them into the atmosphere. The valve includes pallet assemblies that remain sealed under normal conditions but open when pressure exceeds a set limit, channeling excess pressure away through a pipeline.

Typically installed on a flange or pipe connected to a storage tank's vapor space, these valves can be tailored to specific operational needs, activating at predetermined pressure levels. Note: This model does not offer vacuum relief.

#### Model 142 / Pressure Relief Valve Top Mounted, Pipe-Away, Spring Loaded

The Model 142 Pressure Relief Valve safeguards bulk storage tanks from excessive internal pressure. When closed, it seals tightly to prevent vapor loss.

If internal pressure exceeds the set point, it opens to discharge gas. The valve features selectable opening set-points, self-draining body, Teflon diaphragm, and free-moving pallet assembly for effective operation.

#### Model 140 / Pressure Relief Valve end of Line, Weight Loaded

Storagetech<sup>™</sup> Pressure Relief Valve functions as a safety device designed to relieve excessive pressure. It features pallet assemblies that remain sealed under normal conditions. Upon reaching a predetermined excess pressure level, the pallets elevate, breaking the seal to release any surplus positive pressure.

Typically attached to a flange or pipe linked to a storage tank's vapor space, these Pressure Relief Vents can be customized according to specific needs, enabling the pallet assemblies to activate at designated pressure thresholds. It's important to note that this model is exclusively for pressure relief and does not offer vacuum relief.

Other Available Models: Model 144: Pressure Relief Valve (Side Mounted, Weight Loaded) Model 145: Pressure Relief Valve (Side Mounted, Spring Loaded)











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### Pressure Vacuum Relief Valves

### Model 143 / Pressure Relief Valve End of line, spring loaded

The Model 143 Pressure Relief Valve defends bulk storage tanks from excessive internal pressure. When closed, it seals tightly, preventing vapor loss. If internal pressure exceeds the set point, it opens, discharging gas.

The valve features selectable opening set-points and safeguards against debris ingress. Its design ensures smooth, effective operation with self-draining features, Teflon components, and a free-moving pallet assembly.



#### Model 170 / High Velocity Pressure Vacuum Relief Valve

High-Velocity Pressure Vacuum Valves, engineered by Äager Storagetech<sup>™</sup>, cater to the rigorous demands of offshore conditions. Constructed entirely from stainless steel SS316, these valves are exceptionally resistant to corrosion.

Their advanced design ensures smooth operation during sailing, featuring a specially designed magnet that maintains the set pressure accurately and facilitates immediate vapor release well above the ship's surface.

The jet releasing mechanism prevents vapor accumulation on the ship's surface, enhancing operational safety. Suitable for use in temperatures as low as -25°C, these High-Velocity PVVs also include a manual lifting handle for ice removal on both pressure and vacuum sides, ensuring reliable performance in icy conditions.





#### Model 190 / Vacuum Relief Valve end of Line, Weight Loaded

Storagetech<sup>™</sup> Vacuum Relief Valve is designed for optimal airflow regulation into liquid storage tanks, counteracting thermal contractions and preventing internal vacuum build-up that exceeds vent settings. It features pallet assemblies that activate to break the seal and relieve excess negative pressure when the internal pressure drops below a predefined threshold.

Typically installed on a flange or pipe connecting to a tank's vapor space, these valves are customizable to meet particular operational demands, ensuring the pallet assemblies respond at designated vacuum levels.

#### Other Available Models:

Model No 191: Vacuum Relief Valve (Top Mounted, Pipe-Away, Weight Loaded) Model No 191: Vacuum Relief Valve (Top Mounted, Pipe-Away, Spring Loaded) Model No 194: Vacuum Relief Valve (Side Mounted, Weight Loaded) Model No 195: Vacuum Relief Valve (Side Mounted, Spring Loaded)



#### Model 193 / Vacuum Relief Valve End of Line, spring loaded

Storagetech's Model 193 Vacuum Relief Valve maintains safe pressure levels in bulk storage tanks to prevent implosion damage. Installed on the tank roof or vapor space pipe, it seals tightly to prevent vapor loss. When tank pressure drops, it opens to admit air, balancing internal pressure.

The valve features selectable opening set-points and a mesh filter screen to prevent debris ingress. Its design ensures smooth operation with self-draining features, Teflon components, and a free-moving pallet assembly.





#### Model 1200 / CO<sub>2</sub> Storage Tank Vent Absorber

Storagetech<sup>™</sup> Model 1200 CO Storage Tank Vent Absorber is a low-pressure-drop filtering product tailored for liquid storage applications that encounter gases, dust, and particles from the atmosphere during the emptying process. The specific methods for capturing gas and particles are determined based on product requirements.

Our skilled engineering teams conduct thorough analyses for each type of liquid, ensuring the most suitable protection is provided for your systems. Essential technical data such as liquid type, operating temperature and pressure, total tank capacity, and annual turnover rate are utilized to customize the product material, cartridge, and filtration type, including the schedule for cartridge replacement.

#### Model 1400 / Storage Tank Vent Odour Filter

Storagetech<sup>™</sup> Model 1400 Storage Tank Vent Odour Filter provides an effective solution for mitigating strong, nuisance odors emanating from evaporated gases in industrial settings. Designed for continuous odor absorption, this filter significantly enhances the quality of your environment.

It also acts to prevent the release of harmful gases into the atmosphere during tank filling operations. Equipped with Low-Pressure-Drop MMHasso<sup>™</sup> Filter cartridges, the system includes replaceable cartridges featuring cells and particulate filters for comprehensive gas absorption. Tailored to meet specific system requirements, Storagetech<sup>™</sup>'s odor absorption filters are custom-designed based on factors like the stored medium, ambient conditions, working pressure, temperature, and equipment size, ensuring optimal compatibility and performance. The Storagetech<sup>™</sup> Storage Tank Vent Odour Filter achieves an impressive 98%-99% efficiency in removing offensive odors, significantly improving the industrial environment.





#### Type ADR

ADR stands for "European Agreement Concerning the International Carriage of Dangerous Goods by Road." Storagetech develops specialized pressure vacuum relief valves (PVRVs) in compliance with this agreement. Ensuring safety is our foremost concern, and we adhere to relevant international standards in all our designs. Our ADR Type PVRVs are tailored for vehicles and tanks transporting dangerous goods, with all potential scenarios meticulously evaluated by our seasoned design and engineering teams. These valves are specifically used for Group 3 liquids.



#### LPG & NH3 Pressure Relief Valve

LPG (Liquefied Petroleum Gas) and NH3 (Ammonia) pose potential risks during transportation and storage, necessitating careful control of vapors that may arise. Specialized pressure relief valves are essential for managing these gases effectively.

Leveraging 40 years of engineering expertise and industry knowledge, Storagetech offers LPG & NH3 Type Pressure Relief Valves. Prioritizing your safety and system requirements is our foremost commitment.





#### Model 150 / Free Vent Capped Type

Storagetech<sup>™</sup> Capped Free Vent is designed for installation on low-pressure atmospheric storage tanks, facilitating free breathing to prevent internal pressure build-up. This vent, ideally mounted on the tank's roof flange at the center, comes equipped with a weather hood and stainless mesh-screen for enhanced protection. Its cap and screen effectively shield against external elements such as dust, wind, rain, or insects, preserving product integrity. Notably, the Model 150 requires no routine maintenance, ensuring continuous and effective operation without



### **Emergency** Relief Valves & Gauge Hatches

#### Model 151 / Gooseneck Free Vent

Storagetech<sup>™</sup> Gooseneck Free Vent represents an economical solution for venting non-evaporating liquid storage tanks. It facilitates the efficient flow of atmospheres and vapors in and out of tanks, preventing extreme internal pressure build-up, whether positive or negative. Designed to safeguard tank breathing vents from external particles like dust, wind, rain, and insects, this vent ensures a clean and safe storage environment. Typically installed on a flange or pipe connected to the tank's vapor space, the Model Number 151 enhances tank integrity and operational safety.

#### Model 200 / Gauge Hatch Without lock

Storagetech<sup>™</sup> Gauge Hatch provides straightforward and convenient access to the vapor space of bulk storage tanks. Designed for ease of use, it can be opened with a foot or knee, allowing operators to have their hands free for measuring tank depth, taking product samples, or recording temperature measurements. This Gauge Hatch is securely bolted to a tank roof flange and features a spark-free design for safe operation.

Setting Range Pressure: Weight-loaded up to 15 mbar Ambient Temp: -20°C to +60°C



#### Model 210 / Gauge Hatch With lock

Storagetech<sup>™</sup> Gauge Hatch functions as a safety device featuring a cover with a pallet/diaphragm combination that works in conjunction with a pressure-responsive liquid seal subassembly. Its locking system is designed to prevent unauthorized access to the storage tank, enhancing security. Typically installed on a flange connecting to the tank's vapor space, these Gauge Hatches can be customized according to specific requirements, allowing the pallet assemblies within the housings to activate at predetermined pressure and vacuum levels.





## **Emergency** Relief Valves & Gauge Hatches

#### Model 220 / Gauge Hatch / Slot Dipping Device. Non-atmospheric, sampling hatch

The Storagetech Model 220 Non-atmospheric Sampling Gauge Hatch is engineered to uphold safety standards and environmental preservation during the management of bulk storage tanks. Specifically tailored for volatile and hazardous liquids, this hatch incorporates a sophisticated chamber system aimed at minimizing product loss and mitigating vapor emissions. Through its innovative dual-chamber design, comprising distinct upper and lower sections, it effectively shields the operational environment from the potentially harmful contents of the tank. Access to the Sampling Gauge Hatch is facilitated by a secure closure mechanism, complete with a bayonet fitting, ensuring both ease of entry and a tight seal to prevent any inadvertent leaks or releases.

Furthermore, the hatch's compatibility with Nitrogen Blanketing (N2 Blanketing) highlights its versatility and adaptability across a spectrum of applications involving sensitive materials. This closedsystem approach adds an extra layer of protection, particularly in environments where the use of inert gas is crucial to prevent oxidation or contamination. With seamless integration of measuring and sampling devices, operators can conveniently insert these instruments through the bayonet fitting into the top chamber. Once inserted, the closure is securely sealed before the chamber sealing disc is opened, maintaining the integrity of the containment system throughout the process.



#### Model 230 / Thief Hatch

Storagetech<sup>™</sup> Thief Hatch Spring Loaded is a safety device that has a cover structure that has pressure and vacuum relief mechanism housed inside the unit. They are typically mounted to a flange, which connects the vapor space of a storage tank or pressure vessel.

Pressure vacuum spring loaded thief hatches can be set to your specifications so that the pallet assemblies in the housings open when specific pressure and vacuum levels are reached.

Setting Range Pressure: Weight-loaded up to 15 mbar Ambient Temp: -20°C to +60°C





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## **Emergency** Relief Valves & Gauge Hatches

#### Model 400 / Emergency Pressure Relief Valve Weight Loaded

Emergency Pressure Relief Valve operates in the last resort when a vessel or storage tank is exposed to a large-scale fire, and the standard pressure relief valve has failed to open or cope with the extreme conditions.

Designed to open in the event of high pressure, the set-pressure should be chosen to be above that of the pressure or pressure-vacuum relief valve. When the set-pressure is reached, the vent cover rises sufficiently to dissipate the pressure in the tank.

#### Model 420 / Emergency Pressure Relief Valve

Emergency Pressure Relief Valve is designed to operate in the last resort in the event that the conventional pressure-vacuum relief valve has failed to operate.

The closure lid is retained in position by a calibrated coil spring. A build up of pressure in the tank will overcome the resistance of the spring and the weight of the closure cause it to open sufficiently to allow the internal pressure to dissipate, thereby preventing the risk of tank rupture or explosion. It will close automatically when the internal pressure is reduced.



#### Model 410 / Manhole Cover Quick Opening Type

Storagetech<sup>™</sup>'s Manhole Cover has a variety of uses within the petro-chemical industry, farming, storage and general manufacture. Model 410 is a flangemounted unit that, as well as allowing the loading of powders, pellets and liquids, it provides access for cleaning the empty vessel.

The hinged cover has an square seal, and is latched down with a locking-screw to prevent unauthorized access. It is installed in the vertical plane at the top of the vessels and storage tanks.





# Floating ROOFS & SEALS

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# Internal Floating Roof & Seals

#### Full Contact Closed-Cell Polyurethane Module Core Type

Storagetech<sup>™</sup> stands as a leading provider of fullcontact type internal floating roofs, fully adhering to API 650 standards. Renowned for their efficacy, these floating roofs represent the market's most effective solution. Designed to significantly reduce the evaporation losses of various stored products including jet fuels, gasoline, diesel, and crude oil, Storagetech<sup>™</sup> offers these roofs in either aluminum or stainless steel.

Beyond their economic advantages, Storagetech<sup>™</sup> floating roofs also contribute to environmental protection by preventing the release of toxic gases into the atmosphere.

#### Full Contact Megafloat Block Panel Type

Storagetech<sup>™</sup> MegaFloat Block Panel Type Internal Floating Roof (IFR) is manufactured to be installed inside fixed roof storage tanks, it's a Full Contact Floating Roof with absolutely no gap, thereby reducing emission and restricting vapor build up.

The differentiating factor between MegaFloat and the other Internal Floating Roof is the space, often there is vapor space between the roof and the product which allows dangerous fumes to collect.

MegaFloat is designed to be much more reliable than other available Internal Floating Roofs.



#### Pantoon Type

Storagetech<sup>™</sup> stands as a prominent provider of pontoon-type internal floating roofs, designed in full compliance with API 650 standards. Recognized for their cost-effectiveness, pontoon-type floating roofs offer an economical solution for minimizing the evaporation of stored liquids like jet fuels, gasoline, diesel, and crude oil. Available in both aluminum and stainless steel, Storagetech<sup>™</sup> internal floating roofs are engineered to reduce evaporation losses efficiently, presenting a durable and cost-efficient option for storage needs.



# **External & Internal Floating Roof Seals**

#### Wiper Seals, Double Seal & Single Seal

Storagetech<sup>™</sup> Wiper Seals is one of the most economical and effective types of rim seal available in the market with tremendous gap sealing ability, maintenance free operation and long service.

It is designed to fit specific tank round anomalies and allows for in-service installation.



### Model 700 / Single & Double Joint Floating Suction Unit

Floating Suction Unit is designed to deliver uncontaminated and sediment free liquid by absorbing the fluid closest to the surface regardless of the surface level. It reduces the time required for extra filtering of the product.

This application is highly used in the storage of aircraft, motor fueling, heating oils and petrochemicals.

Storagetech<sup>™</sup> provides unique and economical solutions including single and double joint suction systems.



#### Model SWV-1 / Swivel Joint Series

Model SWV-1 Swivel Joint is designed for especially storage tank internal equipment such as floating suction units, drain systems, and oil skimmers; however different model are available for various applications.

SWV-1 swivel joints are available in carbon steel, stainless steel and aluminum. Sizes are ranging from 2" to 40". SWV-1 usually sealed with PTFE, but can be modified as per the application and products stores.





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# **External & Internal Floating Roof Seals**

#### Model 800 / Roof Drain System

Storage Tank Roof Drain System is mainly used to drain unwanted rainwater off external floating roof storage tanks.

Flexible and swivel joints are available as per customer design.



#### Model 1100 / Oil Skimmer

StorageTech<sup>™</sup> Oil Skimmers can be used for open water, such as lakes, as well as storage tanks and silos.

Oil Skimmer is a compact easy to use self-adjusting floating oil skimmer for daily and emergency use to clean undesirable oil, filth and dirt. Thanks to its effective design, it is one of the best methods of cleaning the scum. It is the most secure way to operate compared to other methods, such as hand held vacuums, blankets.

#### Model PM-1 / Pivot Master Series

Model PM-1Pivot Master can be used for petroleum, chemical and petrochemical products. Flexible composite hose material provides ultimate resistance to aggressive media.

Stainless steel layer provides extra strength against pressure. PM-1 pivot master is cover with stainless steel plates, which protects against any damages, from both sides.

#### Model 600 / Tank Liquid Level Indicator

Level indicator is a simple and durable mechanical leveling system that can be used for almost any kind of liquids. This type of level gauging system is easy to use and does not require special knowledge to meter the liquid. It can be installed on above ground and underground storage tanks.









# Aluminum DOME ROOF

# Storage Tanks Aluminum Dome Roof

#### **Our Differences**

Superior Engineering: Storagetech uses the latest engineering structural analysis software, 3D CAD design software, and structural design of steel connections as compared to traditional outdated calculation methods.

Designs for Regional Parameters: Storagetech design its domeroofs as per regional environmental, and seismic parameters with keeping regulations in mind.

The Safety Solution: Storagetech considers high-risk factors in our calculation and provides the safest profile design as per international standards.

Water Tightness: The design guaranteed absolute zero leakage. It avoids water penetration, deterioration, and water intrusion.

Tailor-Made Profiles: The usage profiles are designed as per higher risk factors and avoid using lighter noncompliance profiles.

**Right Bolts:** Storagetech always recommends using lock bolts to increase the profile connection stability.

**Right Seal:** Storagetech always recommends using wiping seals to avoid leakage and increase the lifetime cycle.

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consider the customer's storage tank's internal pressure and offer tailor-made solutions to fully meet the requirements.

Internal Pressure: The domeroofs are designed to

**Compatibility:** Whether it is an existing tank or a new tank, Storagetech's design provides custom solutions considering the tank design and local requirements.

Advanced technology for secure seal exceptional performance for water, chemicals, and hydrocarbons.









# **Fire Fighting Equipment** Foam Top Pourer (Foam Chamber)

#### Model 1020 / Foam Top Pourer (Foam Chamber)

Storagetech Top Pourer Set is designed for storage tanks for fire fighting. It is designed for protecting fixed-roof (cone) and internal floating roof storage tanks. Foam Chamber is designed to introduce expanded foam directly onto the surface of a flammable or combustible liquid for fire extinguishing and/or vapor suppression.

It comprises a foam generator, a foam pourer, and a vapor seal (to prevent the escape of product vapors to atmosphere through the foam line) all combined into a single fully integrated unit. Classified as a Type II discharge device in accordance with NFPA Standard 11, foam chambers deliver low expansion foam directly onto the fuel surface with a minimum of foam submergence and fuel agitation.

#### Model 1021 / Rim Seal Foam Pourer (RSFP)

Storagetech<sup>™</sup> Rim Seal Foam Pourer (RSFP) is designed to prevent any potential risk for fire and vapor suppression for external floating roof storage tanks with it's optimized and unique engineering capability.

The RFSP allows the system discharging fully aspirated foam directly to the annular seal area of the open top floating roof storage tanks.

#### Model 1030 / Foam Mixer (Inline Inductor)

Storagetech<sup>™</sup> Inline Foam Inductor provides a simple cost effective means of introducing foam concentrates into the water stream.

It is used for plant fire fighting systems as a foam proportion.









# Fire Fighting Equipment Foam Top Pourer (Foam Chamber)

#### Model 1040 / Foam & Water Cooling Sprinklers

A fire sprinkler is the part of a fire sprinkler system that discharges water or foam when the effects of a fire have been detected, such as when a predetermined temperature has been reached.

Storagetech<sup>™</sup> Foam Sprinklers are designed for firefighting for water and foam applications. Storagetech<sup>™</sup> follows fire sprinkler application and installation guidelines, and overall fire sprinkler system design guidelines, are provided by the National Fire Protection Association (NFPA) 13, (NFPA) 13D, and (NFPA) 13R.

Other Available Models: Model 1041: Cooling Sprinklers



#### Model 1050 / Mobile Foam Monitor Trailers

Storagetech<sup>™</sup> Foam Trailers are designed to launch foam above storage tanks. Storagetech<sup>™</sup> monitor trailers can be used in the first place to back up fixed firefighting systems on oil storage tanks, and in many cases used and applied as the first intervention against the fire where fixed systems have failed, or were not available.

It can be used as mobile or stationary. It has two nozzles, one of the nozzles if for water, the other one to launch the foam.



#### Model 1060 / Foam Bladder Tank

Storagetech<sup>™</sup> Foam Tank is a steel pressure vessel, which is designed as per NFPA FIRE CODE NO: 11 LOW EXPANSION FOAM SYSTEM STANDARDS. The material is chosen as per ASME Sec.VIII div.1.

This steel pressure vessel stores a foam concentrate contained within an elastomeric bladder. Water pressure helps to supply concentrate pressurized and proportional foam.





# Aviation Filter Separators

**Storagetech** 

Storagetech st-Ctlg-02.24/V2

# **Aviation Filter Separators**

#### **Aviation Micro Filter**

ERGIL ERG.MF.V Series Micro Filter Water Separators are expertly crafted to efficiently filter and separate water from stored products like Jet, A1, and A fuel. With a compact vertical design and high-quality internals, they outlast many competitors. The fixed design includes support legs or skirting and optional ladders and platforms. Available in carbon steel, stainless steel, or duplex, vessels are epoxy and prime coated for durability.

Swing bolt head closures or ERGIL RX quick opening closures allow easy maintenance, even under high pressure. Special features include manhole covers and carthage handling systems for large units, ensuring quick maintenance and operational safety.

#### Model: ERG.FSW.V Series (Vertical)

This vertical solution meets EI 1581 6th edition standards, offering efficient water and dirt separation for aviation fuel systems. Customizable and easy to maintain, it ensures reliability and performance across diverse applications.

Crafted in carbon steel, stainless steel, or duplex, with convenient maintenance access through swing bolt head closures or ERGIL RX quick opening closures. Optional safety features like manhole covers and Carthage easy handling systems enhance accessibility and operational efficiency for uninterrupted fuel supply.handling systems, enhancing accessibility and ensuring uninterrupted fuel supply in critical scenarios.

#### Model: ERG.FSW.H Series (Horizontal)

ERG.FSW.H series meets El 1581 6th edition standards, redefining aviation fuel filtration with its Type S variants. Its horizontal design optimizes space, maintenance, and operational efficiency.

With options in carbon steel, stainless steel, or duplex materials, maintenance access is made easy through swing bolt head closures or ERGIL's RX quick opening closures, supported by safety features like manhole covers and Carthage easy handling systems. Trust ERGIL for dependable filtration.













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