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# FLUID GUARD SYSTEM

## FILTRATION & SEPARATION SOLUTION

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Absolute Filtration for Process Integrity



[www.venefilter.com](http://www.venefilter.com)

# FLUID GUARD SYSTEM SOLUTION

The Fluid Guard Filter System Solution is specifically designed for the robust requirements of refinery upstream, midstream and downstream fluid filtration and separation process.

It is important to remove particulates, liquid separation with high efficiency integration solution to protect the fluid refinery process at minimal cost.

For refineries to take advantage of opportunity crudes, the design of the filtration solutions needs to consider the higher variability in contaminants and the importance of optimized filtration systems cannot be overstated.

The Filter Guard solution is designed to stand "Solution" and protect the fluid process. The solution can be tailored to the needs of the plant to suit the specific application.

Skid Integration filters are designed to remove solids from liquids, Gas/Liquid and Liquid/Liquid separation by capturing solids on a permanent reusable filter element and Non reusable filter cartridges. At a predetermined pressure differential, the system reverses flow through each filter element in the system, one element at a time, while the other elements continue filtering to provide continuous operation.

## Market Application

- Refinery
- Gas Industry
- Petro Chemical
- Energy
- Off Shore
- Drilling
- General Industry



## Process Application

- Remove particulate contamination from:
- Feedstocks to protect catalytic reactor beds
- LPG, gasoline, diesel, and jet fuel final products
- Many other contaminated products that can be found in a variety of storage tanks in a plant
- Amine (rich and lean)
- Aromatic extraction solvents
- Dehydration solvents
- Water process
- Pre filtration for liquid/liquid separations
- Filtration for Gas/liquid separations

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## Venefilter Filtration Solutions

Venefilter specializes in developing custom Multi-Fluid Guard System Combinations tailored to meet every customer's unique requirements and industry standards. Our Fluid Guard Systems are designed for optimal fluid treatment while maintaining the integrity of your process. The modular skid and integration units can incorporate multiple filtration and separation technologies to deliver comprehensive solutions.

We engineer and manufacture modules with pre-filters rated for nominal or absolute performance, utilizing pleated filters, high-flow, or self-cleaning units. These can be combined with advanced technologies such as liquid-liquid or gas-liquid separators, ion exchange beds, or cross-flow nano treatment solutions.

Our systems are available in simplex or duplex configurations to ensure continuous, uninterrupted fluid process filtration. All skids are engineered and built in compliance with ASME Section VIII, Div. CE standards.

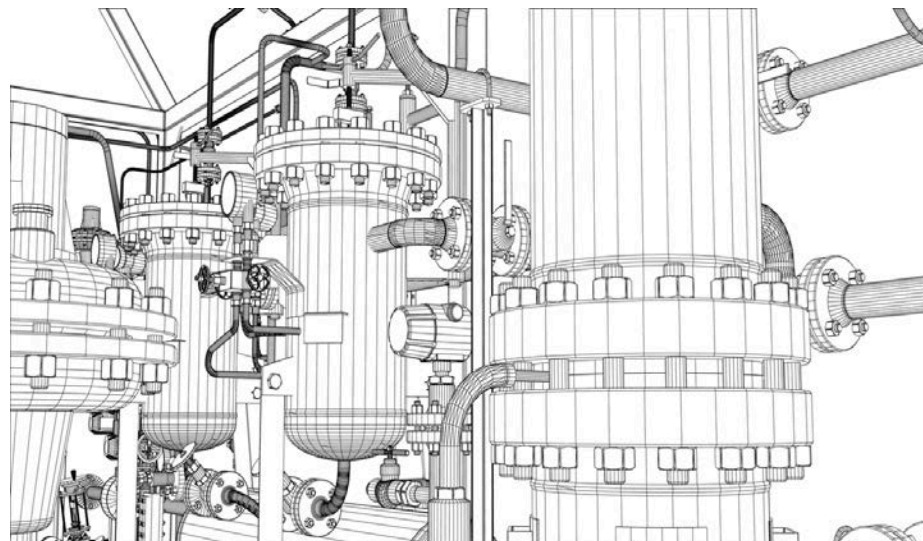
Embracing Industry 4.0, our solutions include remote monitoring capabilities, providing real-time data on fluid parameters, pressure drops, temperature, flow rates, and more—enhancing process control, efficiency, and reliability.

## TECHNICAL DATA

SPECIFICATIONS	
<b>Connection</b>	ANSI 2" to ANSI 12"
<b>Flange</b>	150# & 300# ANSI B16.5
<b>Material</b>	316 Stainless Steel Carbon Steel
<b>Std. max. operating pressure</b>	350 psi
<b>Std. max. operating temp.</b>	450 °F
<b>Filter element</b>	Micro FiberGlass, pleated wire cloth or Tri Slotted wedge wire, Phenolic Resin, others
<b>Filter rating</b>	2 to 1000 µm absolute 99.98% or Nominal
<b>Code Standards (optional)</b>	ASME Section VIII, Div. 1 CE, CRN

## MULTI COMBINATION SOLUTION

FILTER COMBINATION SKID	PROCESS SOLUTION
<b>Self Cleaning Wire Mesh or Slotte</b>	Filter for High Solid Contamination Density
<b>Depth Filter Cartridges Candles</b>	Remove Microorganisms, Jelly, Low cost
<b>High Flow Absolute Cartridges</b>	Remove Particles, High Flow Capacity, Absolute Retention 99.98% Effic.
<b>Pleat PreFilter &amp; Coalescer</b>	Remove particles and Liquid/Liquid Separator
<b>Pleat PreFilter &amp; Gas Coalescer.</b>	Remove particles and Liquid/Gas Separator
<b>Duplex Filtration Skid</b>	Continuous Filtration Process for particles and Separator
<b>Pleat PreFilter &amp; Resins Bounded</b>	Particles Filtration & Ion Exchange Treatment
<b>Pleats Filter &amp; Cross Membrane</b>	Micro Filtration Particles and Nano Filtration Solution



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## Absolute Filtration with Guaranteed Integrity and Reliability

At Venefilter, we take our responsibility to our customers seriously. Our expertise is built on decades of field experience, supported by state-of-the-art in-house laboratory testing facilities. We analyze feeds, spent cartridges, and more to precisely identify current issues and recommend the optimal filtration and process solutions.

Venefilter offers proven, field-tested solutions that can be rapidly customized using standard components. Our in-house engineering and manufacturing teams enable us to design a tailored filtration system specifically suited for your refinery process needs.

Throughout our history, we have successfully addressed numerous refinery challenges by applying innovative solutions. This includes integrating backwashable systems with cartridge-based filters to resolve complex feed filtration issues—delivering dependable, efficient, and scalable results.

**Trust Venefilter for filtration solutions where integrity, reliability, and absolute filtration are guaranteed.**



### Engineering Services

- Process Design Consultation/  
Optimization
- Existing Vessel Evaluation
- Feed Study
- New Vessel Design



### Field Services

- Element Change Out Assistance
- Process Observation / Optimization
- Field Support for Lab Services On-Site
- Training
- Trouble Shooting



### Lab Services

- Dissection & Particle Distribution  
Analysis
- Quality Assurance
- Compatibility & Efficiency Testing
- Contaminant Characterization
- Fluid Quantification

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