



Facet  
Filtration Group®

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# DIESEL FILTRATION SOLUTIONS

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Making the world safer,  
healthier and more productive®





# Facet

Filtration Group®

At Facet, our commitment to innovation, expertise, and knowledge has led us to develop cutting-edge technologies that set the standard for fuel filtration.

With an impressive legacy of 80 years, Facet is renowned for providing high-quality filtration solutions.

Today, we are thrilled to bring our wealth of expertise directly to you. Our in-house research empowers us to create contaminant management solutions that seamlessly integrate technology-driven products, advanced testing, and exceptional service.

Choosing Facet is more than adopting a filtration solution – it's partnering with a company dedicated to enhancing your legacy.

We stand ready to help you build and secure a future of reliability, performance, and excellence in aviation filtration, contributing to making the world safer, healthier, and more productive.



# DIESEL FILTRATION SOLUTIONS



## From the refinery to your vehicle

The key factors to increase the life of your fuel systems are removal of water and debris from the fuel. Major manufacturers of diesel powered equipment are requiring the fuel to meet an ISO standard of 16/13/11 and in this case, less is better.

Facet Diesel Filtration products can help you meet these requirements with cost effective solutions for cleaning your diesel fuel supply. Our experience provides a wealth of knowledge in all types of filtration applications. Discover our line of diesel fuel filters, which ensure clean, dry fuel every step of the way.

## Improve and extend injector life. Lower maintenance cost

As today's diesel engines become more advanced, it is critical to keep the diesel fuel supply to the engine as free from debris and water contamination as possible.

Poor diesel fuel filtration can cause damage to fuel injectors and fuel pumps and result in engine failures and downtime. Install Facet equipment and extend injector life.

## ISO Codes and what they mean to you

The International Organization for Standardization has developed a common test method ISO 4046 for coding the level of contamination by solid particles. It is being used by both engine and fuel system manufacturers to determine the acceptable cleanliness level of the fuel.

ISO 4406 uses a series of three numbers divided by slashes to correlate to a range of particle counts per 1 mL of fluid at three specific micron sizes (4, 6 and 14).

	Particles/mL	
	Code	Up To
	23	80,000
	22	40,000
	21	20,000
	20	10,000
	19	5,000
	18	2,500
	17	1,300
	16	640
<b>4 μm</b>	<b>16</b>	<b>640</b>
	15	320
	14	160
<b>6 μm</b>	<b>13</b>	<b>80</b>
	12	40
<b>14 μm</b>	<b>11</b>	<b>20</b>

**Fuel Quality**  
Typical Fuel Supply  
ISO code: **21/19/17**  
(unacceptable cleanliness level)

Recommended  
Fuel Supply ISO code:  
**16/13/11**  
(acceptable cleanliness level)

**Code Breakdown**

**21=** 10,000 to 20,000 particles/mL  
Size 4 μm & larger

**19=** 2,500 to 5,000 particles/mL  
Size 6 μm & larger

**17=** 640 to 1,300 particles/mL  
Size 14 μm & larger

**16=** 320 to 640 particles/mL  
Size 4 μm & larger

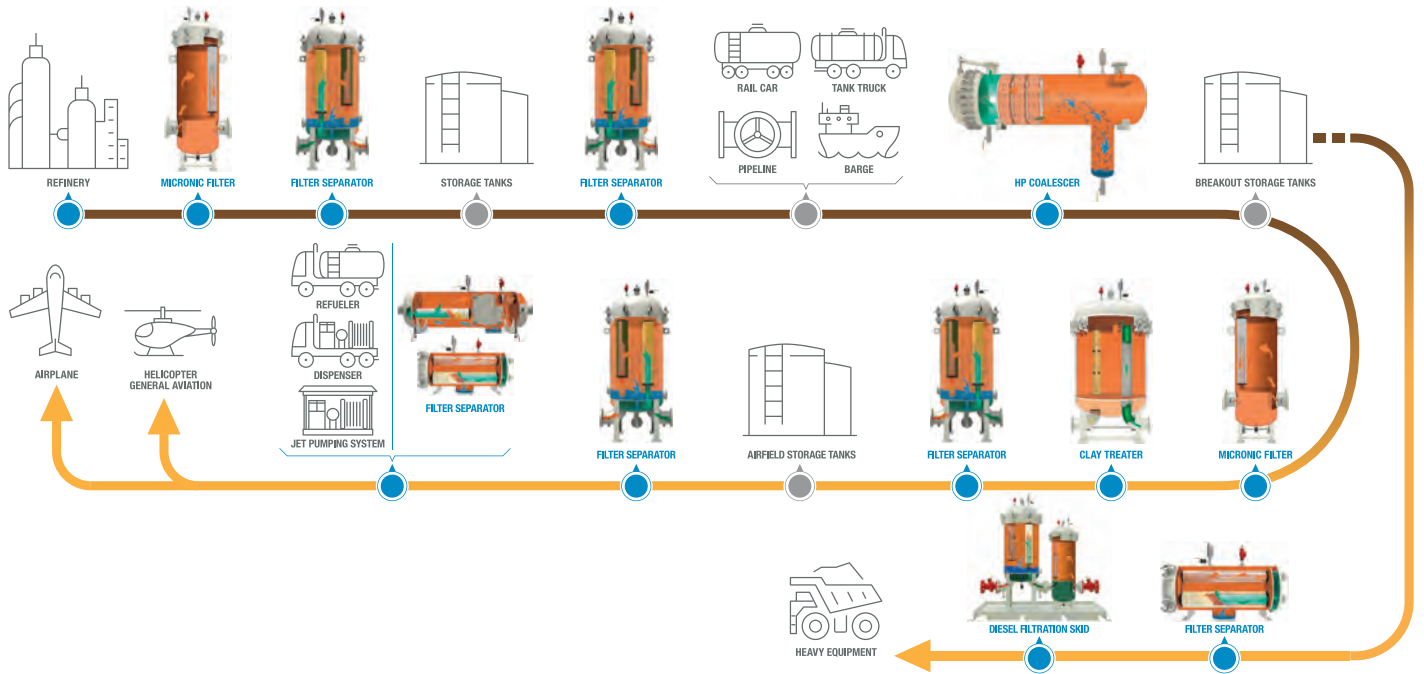
**13=** 40 to 80 particles/mL  
Size 6 μm & larger

**11=** 10 to 20 particles/mL  
Size 14 μm & larger

# FROM THE REFINERY TO THE POINT OF USE

Since 1943, Facet Filtration has been a trailblazer in advanced filtration and separation technologies.

From the initial refinery stages to the final equipment fueling, our cutting-edge line of diesel filtration products ensures the delivery of impeccably clean, dry fuel at every step of the journey.



## Facet Products:

VESSELS		ELEMENTS	
TYPE	FACET SERIES	TYPE	FACET SERIES
Prefilters	M Series	Solids Removal	FI Series   M Series   CIF Series   M&CIF Series
Filter Separators	HCS / VCS Series	Water and Fine Solids Removal	Coalescers: CAA 5 Series   CM Series   CM100 Series Separators: SS Series   SM Series   SM100 Series   ST Series
HP Coalescers	HP Series	Bulk solids and water removal - repacks	
Clay Treaters	F Series	Surfactant Removal	C-766-4 (Canister)   C-727-6 (Bag)   C-727-2 (Bag)



## M SERIES MICROFILTER HOUSINGS

Crafted for diesel filtration needs, our Facet M Series prefilter housings adhere to stringent standards to ensure peak performance. They protect equipment and prolong cartridge life, so these housings play a vital role in maintaining the purity of diesel fuel.

Installed upstream of essential components like filter water separators, these housings offer versatile configurations, including vertical and horizontal options, with a variety of styles and sizes available to cater to the unique demands of diesel filtration applications.

- Solids like rust, dirt, pipe scale, sand and metal removed from fuel in a single pass
- Compatible with high-efficiency filter cartridges for continuous solid removal
- Easy servicing, low maintenance design
- Designed for 150 psi @ 250 °F (10.3 bar @ 121 °C) —higher ratings available on request
- Reliable performance meet the most stringent industry requirements

## SOLIDS REMOVAL ELEMENTS

### FI SERIES

- High efficiency, superior durability
- One-piece construction: reduces downtime and changeout costs
- Micron ratings: 1, 2, 3, 5, 10, 15 and 25
- Manufactured with microfiberglass and cellulose blend media for desired rating



### M SERIES

- Improved efficiency and lifespan result in reduced operating costs
- Superior solids holding capacity
- Lightweight to reduce freight costs
- Metal parts coated against corrosion
- Available in three lengths, simplifying maintenance and changeouts



### CIF SERIES CRUSHABLE INCINERABLE FILTERS

CIF Series offers high-efficiency pleated paper filters specifically engineered to effectively remove solid contaminants from fuels.

- Cost-efficient: Cuts disposal volume by 80% and freight costs by 75%
- Incinerable, metal-free design
- Micron ratings: 0.5 to 75
- Easy alignment, installation and changeout
- One-piece cartridges, lengths: 14" to 56"
- Comparable flowrate to other 6" cartridges

### HAYPACK SEPARATORS

Designed to be installed in HP Series, Single-stage coalescers, these products excel in removing water and solid contaminants (over 0.5 ppm) guaranteeing peak performance and durability.

- Effectively removes large amounts of water and contaminants from diesel fuel
- Variety of medias to meet flow, contaminant and effluent requirements



# FILTER WATER SEPARATORS

## HCS / VCS SERIES

Filter Water Separators employ a two-stage process to ensure high-quality premium fuel for engines. They guarantee reliability and regulatory adherence.

VCS & HCS Series deliver robust performance, safeguarding engine integrity and operational safety.

- Efficient Contaminant Removal
- No Internal Moving Parts
- Customizable Housing
- Easy Servicing and Maintenance



## COALESCER ELEMENTS

Coalescer cartridges are crucial in fuel filtration systems, eliminating ultra-fine solids and water contaminants from fuel.

Facet's cartridges lead the industry with unmatched reliability and efficiency.

- Maximum water coalescence efficiency
- Multi-layered media for increased solids holding capacity
- Removes ultra-fine solids
- Screw base or open-end configurations

## SEPARATOR ELEMENTS

Facet separator cartridges are vital in fuel filtration, ensuring purity by efficiently removing fine water droplets.

They are integral to engine reliability and operational safety, highlighting Facet's commitment to excellence.

- Cleanable and reusable
- Superior water barrier
- High temperature compatibility
- Treated metal components for corrosion protection



# ADDITIONAL DIESEL FILTRATION SOLUTIONS

## Filtration Equipment Selection

Model M and VCS housings remove solid contaminants and water from fuel, handling flow rates of 379 lpm and higher, ideal for large bulk storage systems.

The SuperFlex™ housing, suitable for 114 to 379 lpm, is economical and versatile, serving as a microfilter or filter water separator.

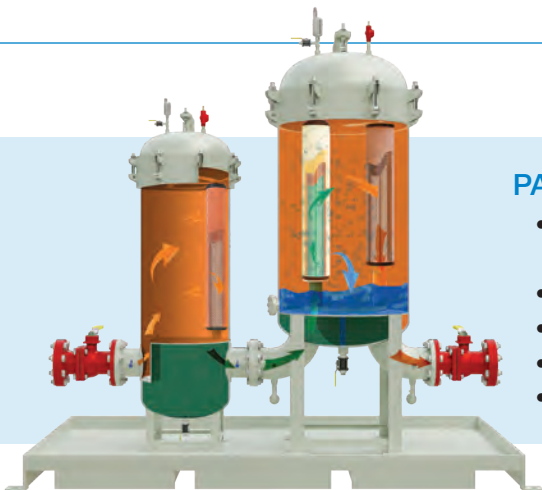
For direct fuel pumping, the Fuel-Gard® VF-21SB/22SB supports up to 114 lpm and can be connected in-line.

The Portable Fuel Filtration Unit, featuring a VF-21SB housing, fueling nozzle, and pump/motor, offers a complete, transportable solution for sites without pumps and motors.

Flow Rate	Equipment
≤114 lpm	<ul style="list-style-type: none"> <li>In-Line Fuel-Gard® VF-21SB/22SB Series</li> <li>Portable Fuel Filtration Unit</li> </ul>
114 - 379 lpm	<ul style="list-style-type: none"> <li>SuperFlex™</li> </ul>
≥ 379 lpm	<ul style="list-style-type: none"> <li>Microfilter M Series</li> <li>Filter Water Separator VCS Series</li> </ul>

## PORTABLE FUEL FILTRATION UNIT

- For use when no pump or motor are available at site
- Fuel nozzle, pump/motor combination and Fuel-Gard® VF-21SB filter housing
- Can operate on 12 VDC (20 gpm) or 120 VAC (15 gpm) power
- VF-21SB housing contains a single cartridge with simple replacement
- Low cost design
- Performance requirements achieved in a single pass
- Easy to move from one job to another



## PACKAGED FILTRATION SYSTEMS

- Facet M, VCS or SuperFlex™ combined housings to meet with your performance requirements
- Maximum performance
- Available from 50 gpm flow rates
- Pilot float control that manages automatic water drain and/or discharge control valve
- Inlet/outlet manual valves to isolate system during change-outs

## MULTIPURPOSE HOUSINGS

They may be used as microfilters or filter water separators depending on the cartridges installed.



## FUEL-GARD® VF-21/22SB Series

- Versatile, compact, lightweight
- 10 bar design pressure
- Water sight glass
- Swing bolt quick opening closure

## SUPERFLEX™ SERIES

- Versatile, economical
- Thermal pressure relief valve
- Liquid level gauge
- Direct reading differential pressure gauge





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Scan QR Code to find our locations



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