



aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



Products for Aviation Fuel Handling



The Velcon Filtration Division manufactures a wide range of filtration and separation solutions and fuel condition monitoring products for use in assuring clean dry aviation fuel.

Velcon's product range includes micronic filters, fiberglass coalescers, separators, water absorbent cartridges, and clay canisters designed to meet required industry standards. This includes a complete line of cartridges qualified to the latest editions of EI specifications (EI 1581, EI 1583 & EI 1590).

Velcon's research, testing and product development team continues to seek solutions to many fuel quality problems and issues. Some of Velcon's innovative products include:

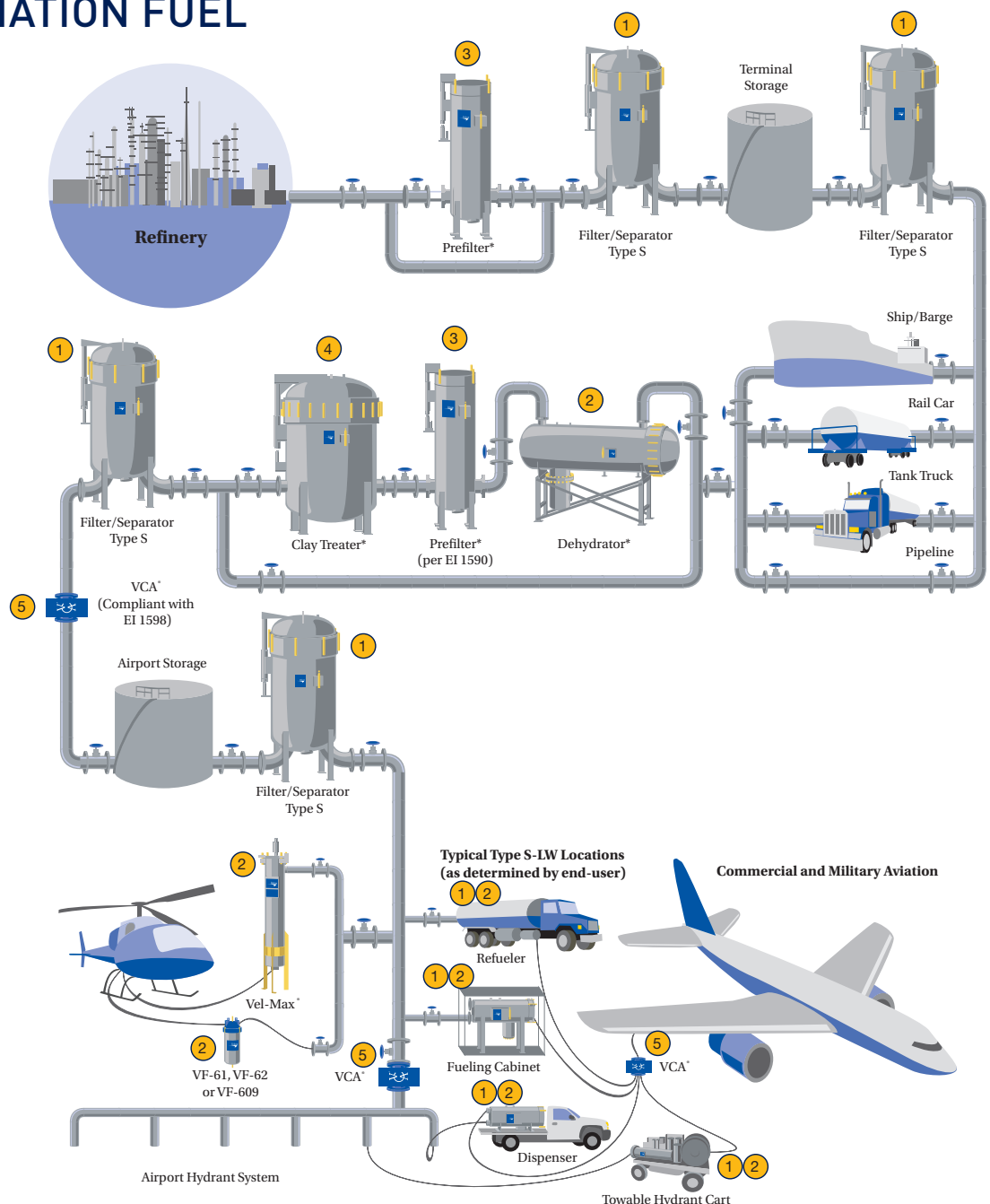
- DPM™ – Differential Pressure Module – monitors differential pressure of filter monitor or filter water separator vessels
- FDPM® MKII – Flow Differential Pressure Module, Mark II – provides automatic reporting of corrected differential pressure for varying flow rates.

- VCA® – Velcon Contaminant Analyzer for real-time fuel quality analysis in the field.
- VCA-CV – the VCA combined with a Cla-Val valve.
- Sump Recovery System – for fuel savings and environmentally sound handling of sumped fuel.

For more information about any of Velcon's products and to discuss your specific filtration requirements and fuel handling needs, please contact your local Velcon Representative.

TYPICAL DISTRIBUTION SYSTEM FOR CLEAN DRY AVIATION FUEL

EI 1581 Spec., 5th Edition



* Optional EI-1583 Qualified Vessels/Absorbent Type Cartridges for jet fuel without anti-icing additive.
EI 1590: Specifications & Qualification Procedures for Aviation Fuel Microfilters.

1 Filter/Separator

Filter/Separators are two-stage vessels designed to remove dirt and separate water from fuel at refineries, product terminals, fuel farms, and on refueling vehicles.

They continuously coalesce and separate water, which collects in the vessel sump where it can be drained. Velcon Filter/Separators have passed numerous tests qualifying them to the latest EI 1581 edition. Construction is to ASME Code. Units qualified to military specifications are also available.

Vessels

- Fixed Installations
 - VV Vertical Vessels
 - HV Horizontal Vessels
 - V Vertical Vessels Mobile
- Mobile Fueling Equipment
 - HV Horizontal Vessels
 - HVS Horizontal Vessels

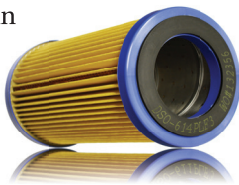
Coalescer Cartridges

Used as a first-stage cartridge in Filter/Separators. Remove particulates and coalesce water into large water drops. Also available in threaded base design.



Separator Cartridges

Second stage cartridges in Filter/Separators repel coalesced water drops which then collect in the sump for easy removal. Available in Teflon® Coated Screen, Synthetic Media or Pleated Paper Media.



2 Water Absorption

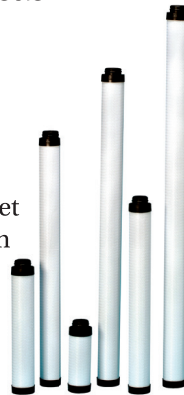
Velcon's Water Absorbent Filters are single-stage filter vessel systems which remove water and dirt from Avgas and Jet Fuel and provide protection from water at the point of final fuel filtration. When a monitor system's water holding capacity is reached, the flow of fuel is restricted. Units meet all EI Specifications. Construction is to ASME Code Section VIII.

Vessels

- Fixed or Mobile Units
 - AHM or HM Horizontal Monitor Vessels
 - AVM or VM Vertical Monitor
- High Capacity Aquacon® Units
 - HA Horizontal Vessels
 - VA Vertical Vessels

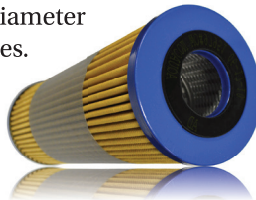
CDF® Fuel Monitor

Absorb water and filter solids from Avgas and Jet Fuel. Provide protection against water slug transmission.



Aquacon®

Filter particulate matter and absorb water with great efficiency. Water capacity is approximately 40 times greater than 2" diameter monitor cartridges. Also provide protection against water slugs.



3 Micronic Filtration

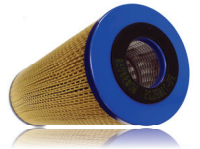
Micronic vessels offer economical particulate prefiltration upstream of clay units or Filter/Separators. Construction is to ASME Code Section VIII.

Vessels

- Fixed Installations
 - VF, VFA Vertical Filter Vessels
 - HF Horizontal Filter Vessels

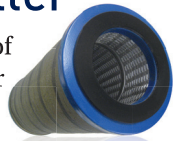
Pleated Filter

Corrugated pleated media with large surface area for filtration of granular contaminants. Also available in threaded base design.



Fiberglass Filter

Progressively finer layers of fiberglass filter colloidal or slimy contaminants.



Commissioning Cartridges

Commissioning Cartridges (FI-xxx series) can be used in place of coalescers to remove heavy solid contaminants during start up. Our FO-754PL05 and other shorter length filter elements can be used in place of clay canisters for initial system flush.



4 Surfactant Removal

Clay Vessels & Elements are placed prior to pre-filtration to remove surfactants. Construction is to ASME Code Section VIII.

Vessels

- Fixed Installations
 - VC Clay Elements Vessel

Clay Cartridges

Attapulugus clay canisters for removal of surfactants from jet fuel and other petroleum products.



5 Fuel Condition Monitoring

VCA® (Velcon Contaminant Analyzer) Military grade in-line full flow sensor system that simultaneously detects and differentiates between particulate and water contaminants in real time. Can detect pipe scales, particulate and water from truck pipelines, dirt and water from storage



Worldwide Filtration Manufacturing Locations

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www.parker.com/balston

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Airtek/domnick hunter/Zander**
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desalination.parker.com

Parker Sea Recovery
Carson, CA
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www.searecovery.com

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www.parker.com/hydraulicfilter

Laval, QC Canada
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www.scilog.com

Phoenixville, PA
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