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Velcon Receives Trademark Rights for FDPM®

Velcon Filters, LLC recently announced the Notice of Acceptance of US Trademark for “FDPM” (Flow Differential Pressure Module), thus making “FDPM” a registered trademark of Velcon Filters, LLC.

FDPM® is a computerized system designed to calculate the corrected differential pressure (DP) (corrected for flow and change-out DP) of a fuel filter vessel and determine if the filtering media inside has surpassed its useful life. Newly revised Air Transport Association (ATA) specification ATA 103 “Standards for Jet Fuel Quality Control at Airports” requires monthly corrected differential pressure checks as part of a fuel facility’s quality control program.

The differential pressure (DP) across a filtration system indicates the condition of the filter cartridges inside the vessel. When DP rises above a certain threshold the cartridges need to be changed because they have reached their dirt and water holding capacity. If the fuel is being pumped at lower flow rates than the vessel’s maximum flow rate, a correction must be made for measuring the DP across the system. Therefore when a fuel facility operates its systems at lowered flow rates they must calculate the corrected differential pressure.

Velcon’s FDPM® is an excellent solution to this problem. In addition to calculating the corrected DP across the filter vessel, the FDPM® system is capable of initiating an alarm sequence, which can also transmit a shutdown signal to a deadman circuit to halt the flow of fuel, when the corrected DP exceeds a preset threshold. Another feature of Velcon’s FDPM® is the capability to display average and maximum corrected DP’s after a fueling. Velcon’s FDPM® takes the guesswork out of calculating the corrected differential pressure, as well as stopping the flow of fuel when filters approach changeout limits.

Please see see Data Sheet 1966 and/or our web site for more information: <http://www.velcon.com/aviation/fdpm.html>



FDPM® (Flow Differential Pressure Module)

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Velcon®

Vessels in Stock!

The following Velcon filter vessels are currently in stock for quick delivery (subject to change).

Model Number	Flow Rate (Jet)	Type of Vessel
VX-1	50 GPM	Vel-Max®
VX-2	100 GPM	Vel-Max®
VX-3	150 GPM	Vel-Max®
HM1030M150S	300 GPM	2" Horizontal Monitor
VC4854285	600 GPM	Vertical Clay Treater
VV2838285A	605 GPM	Vertical Filter Separator
VV2328150B1	335 GPM	Vertical Filter Separator
HV1633150	240 GPM	Horizontal Filter Separator
HV1633M150N3	300 GPM	Mobile Horizontal Filter Separator
HV1633M150DWX2	300 GPM	Mobile Horizontal Filter



HV1633150: Stationary Horizontal Filter/Separator

For more information and quote and availability, please contact your local distributor or Velcon Filters at vfsales@velcon.com /719.531.5855

Large Particle Sensor (LPS)



Velcon Filters, LLC has designed and developed a large particle sensor (LPS). Velcon has drawn from its knowledge and experience learned from the development of other sensor products, especially the VCA® (Velcon Contaminant Analyzer).

The LPS has a few distinct advantages over conventional particle counter devices. Because the LPS samples 100% of tested fluid, rather than taking a side stream sample, it is able to provide absolute quality data. The sensor will not miss portions of the fluid flow or particles of contamination. Since the LPS is a full flow device, it can handle flow rates of up to 2 gallons per minute, whereas normal particle counters can only handle about 0.02 gallons per minute. This large difference is accomplished by a proprietary sensor head configuration (patent pending). Also, the LPS is capable of reading particles greater than 50 microns, whereas conventional particle counters are not suited to such large particles.

Contact Velcon for more information about the wide variety of applications for which this LPS device is suited.

Q and A

Q What is the difference between Teflon® Coated Separators and Synthetic Separators?

A Teflon® Coated Separators are suitable for **unlimited life provided they are maintained and cleaned in accordance with instructions included on data sheet #1242**. Velcon manufactures both. Teflon coated separators and synthetic silicone coated separators. The primary difference is that the Velcon Teflon coating uses a permanent application of Teflon that is sprayed and baked on by Velcon. The silicone treatment is just sprayed on by the mesh manufacturer. This means that after a number of washings the silicone coating is worn away. This applies to all silicone coated meshes. Many operators that have experience with both types of separators support these comments. **Velcon recommends that synthetic separators with silicone treatment are changed out after they have been cleaned a maximum of two (2) times**, per data sheet #1521. An additional factor is that it is very easy for an operator to visually examine a Teflon coated separator as the Teflon coating is green and any removal of the green Teflon would show bare metal. Silicone, however, is a clear coating; thus it is impossible to visually determine the integrity of the coating.

Portable Skid-Mounted Filtration Units

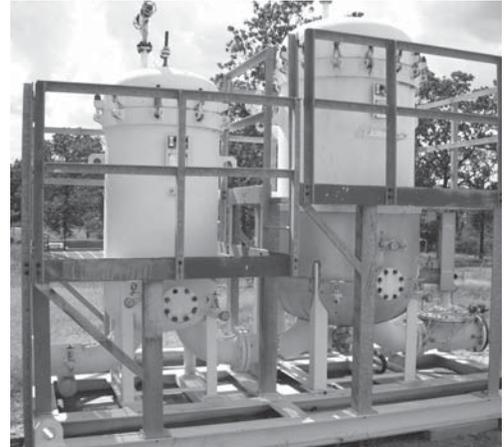
The following units are available immediately for lease or rent, for upset conditions, emergency clean-up of contaminated fuel or oil, or for a temporary filtration need:

- 1) 1800 GPM skid unit
- 2) 3000 GPM skid unit

(Flow rates are based gasoline)

Each filter skid is configured as follows:

- One pre-filter vessel and one filter separator vessel for optimum water and solid removal
- 150 psi ASME code construction
- Epoxy coated interior, finish coated exterior
- Complete with recommended accessories (automatic air eliminator, pressure relief valve, differential pressure gauge, drain valves, sampling probes)
- Water defense system on each filter/separator
- Can be used in a variety of hydrocarbon applications (diesel, naphtha, jet-A, etc...)
- Choice of filtration efficiency from .5 micron to 25 microns



Above is of the 1800 GPM skid unit

Other options may be available – contact Velcon with your specific needs.

AVIATION INDUSTRY EXPO™
March 16 - 18, 2010 - Las Vegas Convention Center - Las Vegas, NV

Ground Support FBO/Aviation Services Aircraft Maintenance

AIE Show 2010

Show Dates & Hours:

Tues., March 16, 10:00 am - 5:00 pm

Wed., March 17, 10:00 am - 5:00 pm

Thurs., March 18, 10:00 am - 2:00 pm

The 2010 Aviation Industry Expo will be held at the Las Vegas Convention Center. Please stop by **Velcon's booth (# 5001)** and see demo units of the SRS and VCA® units.

We look forward to seeing you there!



The Velcon Team at the 2009 AIE Show

For more information please see aviationindustryexpo.com

ATA 103 Notice

In the latest revision of ATA 103 (ATA Spec 103 Revision 2009), many of the changes directly impact fuel filtration. Below are some of the major changes and what they mean for those in the fuel handling industry.

Chapter 2. General

2-4 Fuel Storage Facilities

3. Filters: “Filter/Separators are required for receiving fuel into and dispensing fuel from storage which will supply fuel directly into aircraft, refuelers, or hydrant systems. Existing full-flow monitors at fuel facilities must be replaced within 1-year from the date of ATA 103 revision 2009.1.”

What this means:

Fuel filter monitors with absorbent type elements

- both 2 inch and 6 inch monitor type (EI 1583) **are now prohibited from use in fuel storage on either inbound or outbound filtration.** Existing systems are okay until February, 2010.

2-5 Fuel Facility Checks

4. Monthly checks

4.1 Filtration (Millipore) & Free Water Test

“Perform a membrane color/particle (Millipore) simultaneously, under flow, upstream and downstream of each filter/separator and monitor vessel. Perform a free water test downstream of each filter/separator and monitor vessel. Record results.”

4.2 Corrected Filter Differential Pressure

“Under normal flow conditions, check and record observed differential pressure, flow rate, and corrected differential pressure across each working filter.”

What this means:

Velcon Filters, LLC has developed a couple of solutions for calculating corrected differential pressure. One is the FDPM®, Flow Differential Pressure Module, which has now been successfully installed in a few locations in the US. The FDPM® advantage is ease of use and simplicity of operation. (See page 1 for more information.)

Another solution, also available on our web site, is a spreadsheet that calculates corrected differential pressure. To download this spreadsheet, please go to this address:

<http://www.velcon.com/aviation/aviTechInfoSelect.html>
- see the last item on that page: “Corrected Differential Pressure Calculation Spreadsheet”.

Chapter 3 Procedures and Tests

Section 3-9, Filter Vessel Differential Pressure

“The filter elements must be replaced when a sudden drop in differential pressure occurs under similar flow conditions or the filter vessel differential pressure exceeds the following limits:

Coalescer elements - 15 psi.

Monitor elements - 15 psi.”

What this means:

This is a **decrease** for monitor elements - previously the changeout was 25 psi. Velcon has accordingly updated the decals of cartridge changeout curves. Decal #1979 is a 15 psi changeout curve that can now be used for both coalescer cartridges and monitor cartridges at locations complying with ATA 103. Decal #1846 for 25 psi changeout for monitor cartridges is still available for locations that do not need to comply with ATA 103. (Decals are provided at no charge.) Along with changes to the decals, Velcon has also updated the Operating Procedures, PN 09-923, Form 1839, to reflect the new information. This form is also available on our web site, on the Installation Instructions page: <http://www.velcon.com/library/install.html>

Please note that Velcon no longer carries the DP Calculators (Form 1871). Instead we recommend customers use the decals with the appropriate curves. Another option is to use the FDPM® (Flow Differential Pressure Module), mentioned previously.

3-13 Filter/Monitor Element Change Procedures

Revised to include monitors. Guidance for circulating product after a filter changeout is changed to “per filter manufacturer’s recommendations” Velcon recommends recirculation for at least 3 minutes.

Also, on the “FILTER VESSEL INSPECTION/CLEANING RECORD” Form, page 91, the following statement is made:

“Tighten nuts on tie rods (washer should curl)”...

Please note that **the nuts should be torqued according to the manufacturer’s recommendations.**

ATA Specification 103 is copyrighted by the Air Transport Association of America and is used here with ATA’s permission. For more information or to purchase the specification, please visit <http://www.airlines.org/products/pubs/product-detail.htm?Product=82>

Velcon Filters and The Sterling Group - Partners for Success



From left to right: Karl Hinkle (Velcon CFO), Brad Staller (Sterling), Denise Canfield (Velcon IT Dept), Robin Mason (VP Sales & Marketing), Greg Elliott (Sterling), David Taylor (Velcon CEO), John Hawkins (Sterling)

In late April 2009, The Sterling Group, L.P. announced its partnership with Velcon Filters. This included setting up Velcon as a new limited liability company (LLC), therefore Velcon is now officially “Velcon Filters, LLC”.

The day to day operations at Velcon have not changed. “We are excited about the opportunity to partner with The Sterling Group given their proven track record. The Velcon team believes this partnership will provide significant opportunities to further develop and expand the company’s reach,” said David Taylor, who will remain CEO of Velcon. The management team of Velcon along with their new partners at Sterling look forward to a prosperous and successful relationship.

VCA[®] Unit at Inter Airport Show

Jed Stevens demonstrates the features and function of Velcon’s VCA[®] unit at the Inter Airport Show in early October, in Munich. Velcon’s European affiliate, Warner Lewis, Jr. Industrie-Filter GmbH, was an exhibitor at the popular show.



Velcon Service Awards

Congratulations to these Velcon employees who have recently celebrated special anniversaries with Velcon:

35 Years Sheryl Farris (CO)	15 Years David L Cottingham (AL)	5 Year Latanya Bates (AL) Jeanette Godfrey (AL) James Marbury (AL) Donetta Stroud (AL)
30 Years Joan Scher(AL)	10 Years Janice Rudd (AL)	
25 Years Patsy Holmes (AL)		

Holiday Shutdown

Please note that Velcon will be closed on the following dates for 2009/2010

Christmas Eve: December 24th
Christmas Day: December 25th

New Years Day: January 1st

M.L. King Birthday: January 18
CO Open / AL Closed

Presidents' Day: February 15
CO Closed / AL Open

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We also welcome your comments and suggestions on topics covered in *The Clarifier*.

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