

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/separators and monitor vessel. Perform a free water test downstream of each filter/separators 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.**

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