



# Aviation Fuel Filter/Separator Cartridges

## Upgrading Commercial Aircraft Fuel Filtration Equipment

to meet the requirements of  
**Air Transport Association of America  
Jet Fuel Quality Control Standard ATA 103  
and API/IP-1581 Group II, Third Edition**

### WHY UPGRADE

Air Transport Association of America Standard No. 103 requires that filter/separators must meet current API/IP-1581, Group II specifications. These API requirements for filter/separators also apply to international oil companies and airlines.

Velcon Filters has successfully completed numerous qualification tests to the Third (current) Edition of API/IP-1581 Group II using Velcon "85" and "87" Series Coalescer Cartridges.

### COMPLIANCE REQUIREMENTS

In some cases, bringing equipment into compliance with API/IP-1581 Group II may be as easy as simply installing "85" or "87" coalescer cartridges at the next regular changeout. However, in many cases it will be more complicated. It may involve changes in the second stage elements, changes in element mounting hardware, or even blinding-off some existing element positions.

The reason for this is that API/IP-1581 covers the complete filter/separator assembly and not just the elements.

In order to comply, the filter/separator must be identical or **similar** to a unit that has been successfully tested to the specification. Because of the wide variety of existing sizes and shapes, it is unlikely that a particular filter/separator will be identical to one that has been tested. However, it is highly probable that it is **similar** enough to a vessel Velcon has tested so that it can be qualified to API/IP-1581 by **Similarity Data**.

### SIMILAR FILTER/SEPARATORS DEFINED

The API/IP-1581 Specification contains a set of formulas for determining if an assembly qualifies. In general, an acceptably similar filter/separator is one in which:

- The coalescer and separator media are the same as those in the tested filter/separator, and...
- The coalescer and separator flow rates do not exceed those of the tested filter/separator, and...
- The coalescer and separator layout is the same as the tested filter/separator, and...
- The spacing between elements is not less than and the open area available for water fallout is not less than the tested filter/separator.

### VELCON FAST FAX UPGRADE COMPLIANCE PROCEDURE

The procedure for determining whether a particular filter/separator is in compliance can be quite complicated. However, Velcon Filters has developed a computer assisted program which can do the job for you very quickly and easily –

**Simply fill out the form on the reverse side of this sheet – one section for each type of filter/separator assembly in use – and FAX a copy to us. We will advise you about the cartridges and conversion hardware, if any, you require. That's all there is to it – pure and simple.**

**General Aviation Fueling** If the facilities are being used only for general aviation fueling, the oil company supplying fuel should be consulted. Some oil companies specify API/IP-1581 Group I elements for filter/separators that are used for general aviation only. In this case, Velcon "83" or "6" series coalescer cartridges with appropriate separator elements will meet the specifications.

**Ordering Note.** When ordering cartridges to meet API/IP 1581, Third Edition, for the first time, request our **API Conversion Decal No. 1448**. This Decal indicates requirement compliance and lists installed elements.

Fischer-Robertson, Inc.  
3890 Symmes Road  
Hamilton, Ohio 45015  
p: 513-860-3445  
f: 513-860-4744  
sales@fischer-robertson.com  
www.fischer-robertson.com

COMPANY HEADQUARTERS:  
Velcon Filters, Inc. 4525 Centennial Blvd.  
Colorado Springs, CO 80919-3350  
Phone: 1.800.531.0180  
Fax: 719.531.5690  
e-mail: vfsales@velcon.com  
www.velcon.com

MANUFACTURING PLANTS LOCATED AT:  
Colorado Springs, Colorado  
Sylacauga, Alabama  
Harlingen, Texas

OVERSEAS AFFILIATES:  
Frankfurt/M., W. Germany & Singapore

**Liquid Filtration  
and Separation  
Specialists**

# Velcon Fast FAX Upgrade Form

**FAX No.:** 719-531-5690

**From** \_\_\_\_\_

**To:** **Velcon Filters Inc.**

**Company** \_\_\_\_\_

4525 Centennial Blvd.

**Address** \_\_\_\_\_

Colorado Springs, CO 80919-3350

**Attn:** **Aviation Product Manager**

**FAX No.** \_\_\_\_\_

Please recommend coalescer cartridges, separators, and conversion hardware, if any, for the filter/separator vessels listed below to qualify them to API/IP-1581, Third Edition, Group II and satisfy the requirements of ATA 103.

**Example:**

Unit No. <u>501</u>	Filter/Separator	Model No. <u>FCS - 1264 - 20N11</u>	
Serial No. <u>45601</u>			
Presently Installed	Qty <u>10</u>	Model No. <u>1 - 6286TB</u>	Coalescer Elements
	Qty <u>12</u>	Model No. <u>50 - 616C</u>	Separator Elements
Cover Gasket <u>G - 0081</u>		Maximum Flow Rate <u>600</u> GPM	Fixed [ ] Mobile [ <input checked="" type="checkbox"/> ]

**1**

Unit No. _____	Filter/Separator	Model No. _____	
Serial No. _____			
Presently Installed	Qty _____	Model No. _____	Coalescer Elements
	Qty _____	Model No. _____	Separator Elements
Cover Gasket _____		Maximum Flow Rate _____ GPM	Fixed [ ] Mobile [ ]

**2**

Unit No. _____	Filter/Separator	Model No. _____	
Serial No. _____			
Presently Installed	Qty _____	Model No. _____	Coalescer Elements
	Qty _____	Model No. _____	Separator Elements
Cover Gasket _____		Maximum Flow Rate _____ GPM	Fixed [ ] Mobile [ ]

**3**

Unit No. _____	Filter/Separator	Model No. _____	
Serial No. _____			
Presently Installed	Qty _____	Model No. _____	Coalescer Elements
	Qty _____	Model No. _____	Separator Elements
Cover Gasket _____		Maximum Flow Rate _____ GPM	Fixed [ ] Mobile [ ]

**4**

Unit No. _____	Filter/Separator	Model No. _____	
Serial No. _____			
Presently Installed	Qty _____	Model No. _____	Coalescer Elements
	Qty _____	Model No. _____	Separator Elements
Cover Gasket _____		Maximum Flow Rate _____ GPM	Fixed [ ] Mobile [ ]

Please send the API *Qualification Data Sheets* on which these conversions are based.

My phone number is \_\_\_\_\_