

CONVERTING HORIZONTAL CLASS C FILTER/SEPARATORS TO INSIDE/OUT FLOW ACI-6XX01LTB AQUACON® CARTRIDGES

1. Remove all coalescer elements.
2. Remove separators, separator tie rods and mounting adapters. **(We recommend removal of separators to avoid inspection problems. Check with your quality assurance department for your company's policy on this matter if in doubt.)**
3. The ACI-6XX01LTB threaded base **Aquacon** cartridges will be installed in place of the threaded base coalescers. If open-end coalescers were previously used, install one each 6000T adapter per ACI-6XX01LTB. If open-end ACI-6XX01L cartridges are desired to be installed, see page 3.

GENERAL GUIDELINES

1. Flow rates, prices, and the coalescers they replace are shown on the next page for the ACI-6XX01LTB screw base **Aquacon** cartridges.
2. Determine maximum operating flow rate for the F/S vessel. Determine which size ACI-6XX01LTB will be used. Then divide F/S operating flow rate by the flow rate of the applicable ACI-6XX01LTB. Round up to the next full number of cartridges if a decimal amount occurs (i.e. - if 3.42, round up to 4).
Example:
 - a. FCS-1264-20N11 will flow at a maximum 550 USGPM.
 - b. $\frac{550}{100}$ each ACI-62901LTB will be used in place of the 7 installed I-62887TB coalescers.
 - c. Quantity of ACI-62901LTB = $550 \div 100 = 5.5$, round to 6.
Thus, 6 each ACI-62901LTB will be installed.
 - d. Blind the top most open stool with one P/N 60464 blind cap (see #3 below).
3. In general, there will be the same amount or less ACI-6XX01LTB cartridges versus the coalescers. When installing the ACI-6XX01LTB, be sure to install on the bottom-most stools, so that water will not build up on the opposite side of the bulkhead. Blind the top stools, if blinding is necessary.

NOTE

When converting a mobile filter/separator vessel to ACI cartridges, it is recommended that the water defense system be removed. If not removed, an airline inspector may still require the quarterly water defense system check. Velcon can supply new sump cover plates with water drain connections to replace the bottom-mounted float controls.

CONVERTING HORIZONTAL CLASS C FILTER/SEPARATORS TO INSIDE/OUT FLOW ACI-6XX01L OPEN-END AQUACON CARTRIDGES

Enclosure (1) CONVERSION CHART

Coalescer Length Per Stack (in.)	Typical Installed Coalescers	Equivalent I/O (1) Aquacon Part No.	Tie Rods	
			3/8"	1/2"
			Part No.	Part No.
14	CC-N11, I-61487	ACI-61401L	T17.0-6	T18.5-8
22	CC-K21, I-62287	ACI-62201L	T26.0-6	T26.5-8
28	CC-N21, I-62887	ACI-62901L	T32.5-6	T33.5-8
33	CC-K31, I-63387	ACI-63301L	T38.0-6	T37.5-8
44	CC-N31, I-64487	ACI-64401L	T47.0-6	T47.0-8
56	CC-N41, I-65687	ACI-65601L	T61.0-6	T61.0-8

(1) In a side-opener, the stack may be a total of 28" high, for example: 2 each CC-N11 cartridges. In these cases, use 2 each ACI-61401L cartridges.

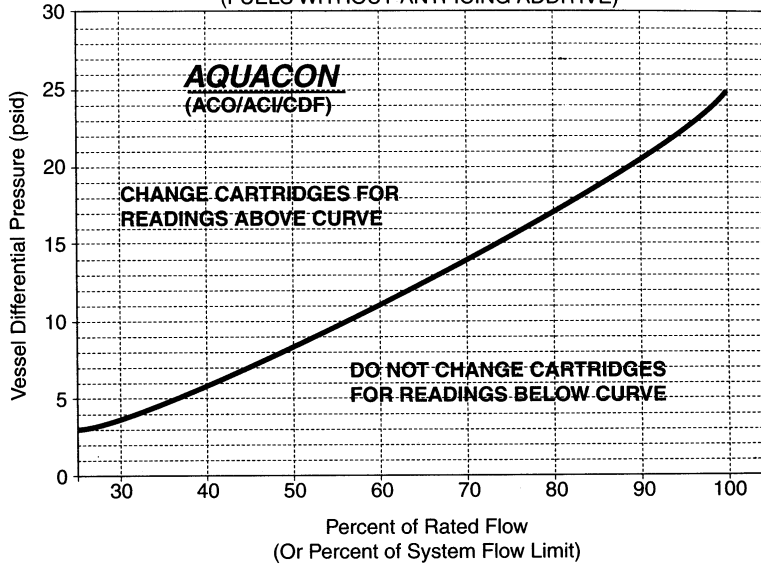
OPEN-END HARDWARE ASSEMBLIES (one per tie rod)

- A. Per 3/8" Tie Rod - Part No. S61239. This assembly does not include a mounting adapter. This assembly is for vessels with manifolds (HV-14 and HV-16).
- B. Per 3/8" Tie Rod - Part No. S61163. This assembly includes a mounting adapter. It is used in flat deckplate vessels (HVS, HV-22, HV-28).
- C. Per 1/2" Tie Rod - Part No. S61164. This assembly includes a mounting adapter. It is used in Facet/Fram flat deckplate vessels.

SPACERS (when stacking ACI cartridges in side-opener vessels)

- A. For 3/8" Tie Rod - Part No. 12-02K
- B. For 1/2" Tie Rod - Part No. 12-02T

**CARTRIDGE CHANGEOUT CURVE
SPENT CARTRIDGES AT REDUCED FLOWRATES
(FUELS WITHOUT ANTI-ICING ADDITIVE)**



EXAMPLE: A 600 GPM monitor vessel is operating at 300 GPM (50% of system flow limit). If the pressure differential is less than 8 PSID, the cartridges do not require changing; however, if the pressure differential is 8 PSID or more, the elements are due for changeout.