

# Cartridge Changeout Curve

For Cartridges at Reduced Flow Rates



Parker AFD recommends changing coalescer and monitor cartridges when the differential pressure reaches 15 PSID and the filter/separator is being operated at its rated flow. The system, however, will often be operating at lower flow rates with a corresponding lower differential pressure. If, for example, a 600 GPM filter/separator shows a differential of 12 PSID at 300 GPM and the flow rate increases to 600 GPM, the differential would be about 28 PSID, which is considerably above the recommended pressure drop for changing cartridges.

Therefore to know the pressure differential characteristics at lower flow rates for a set of coalescer cartridges which are plugged to the extent that the differential pressure would read 15 PSID. The graph reflects differential pressure and percentage of rated flow information for Parker Velcon cartridges.

## Contact Information:

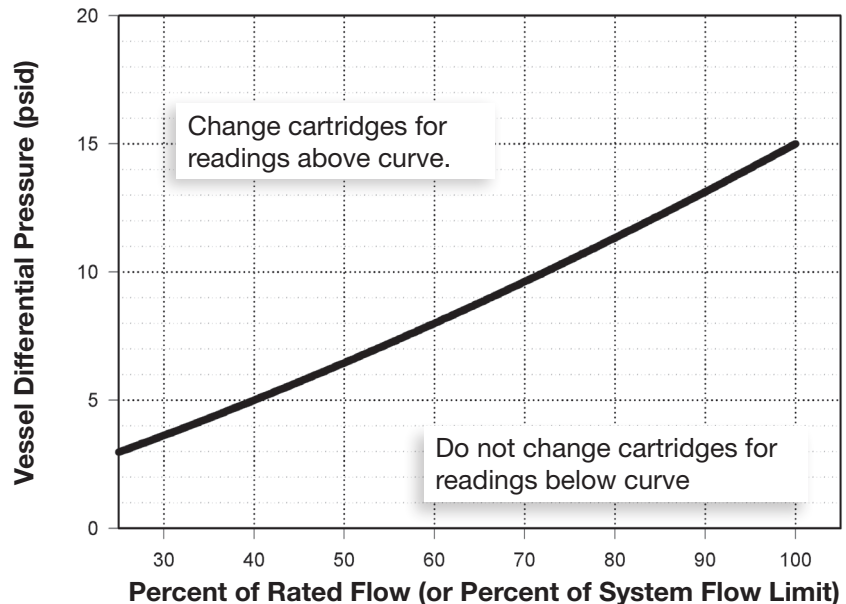
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**Coalescer and Monitor Cartridges Changeout Curve For Cartridges at Reduced Flow Rates**



**Vessel pressure drop characteristics for coalescer and monitor cartridges complying with ATA-103 guidelines.**

### EXAMPLES:

A 1000 GPM filter/separator operating at 600 GPM (60% of rated flow) with a differential pressure less than 8 PSID, the cartridges do not require changing. If the differential pressure is 8 PSID or more, however, the elements are due for a changeout.

### EXCEPTION:

If the system in the Example is limited to a maximum flow of 750 GPM by pump capacity or some other factor then 750 GPM should be considered 100% of rated flow rather than higher

rating of the filter/separator. In this case, the 600 GPM flow would be 80% of rated flow and the differential pressure at this rate can be as high as 11.50 PSID without changing elements.

### NOTE:

Decals of the above graph can be obtained from Parker AFD at +1 719 5310180 and requesting decal VEL1979. These labels can be affixed to the vessel near the differential pressure gauge.

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