



Please provide the following information needed to specify a side steam filter.

1. What is the process that will be filtered (cooling tower, closed loop or other)?
2. What is the system maximum flow rate GPM or the system water capacity in gallons?
3. What is the system maximum pressure (PSI)?
4. What is the system maximum temperature?
5. Do you require an ASME certified housing?
6. Do you have a particle analysis?
7. What micron filters are needed? It is recommended to start with a high micron and work your way to the desired lower micron.



Side Stream Filter Housing Sizing

Method 1 - System Flow Rate

System Flow Rate X 5 to 10% = Recommended Housing Flow Rate.

Example, 120 GPM System Flow X 5 % = 6 GPM

Example, 120 GPM System Flow X 10 % = 12 GPM

Choose a Filter Housing/ Cartridge rated for 6 to 12 GPM.

Method 2 – System Volume

Goal is to turn the entire system volume 4 times per day.

System Volume / 360 Example 9000 Gallon System Volume / 360 = 25 GPM

Choose a Filter Housing/Cartridge rated for => 25 GPM.

The QFP Series Housing Brochures can be used to choose a filter housing that meets the calculated flow requirement. It is better to oversize than undersize. The extra capacity at a given flow rate will provide less pressure drop, more dirt holding capacity, longer filter runs and reduced maintenance. Only negative is the higher capital cost.

Housing Flow Rate is calculated using the figures below:

5 GPM per 10" string wound and melt blown filter cartridge

7.5 GPM per 10" pleated filter cartridge

150 GPM High Flow pleated cartridge

120 GPM per each size #2 filter bag

Make sure that the temperature and pressure of the system fall within the specifications of the housing and cartridges.

Multi-Round QFP Series Cartridge Housings with QFP Series String Wound Cartridges are the most popular choice for closed loops. Micron sizes are typically, 50, 20 or 10. For dirty systems start with a 50 micron and work your way down. Use tin core for hot or cold water and poly core for cold water only. Some facilities have hot and chilled or dual-purpose loops. Consider using tin core for both. You will have no worries about mistakenly using poly cores in a hot water application. That said, many prefer the simplicity and inside / out flow pattern of the QFP Series Bag and High Flow housings.

