Tangential Flow Filtration Technology

Glossary of TFF Terms for Mobius[®] FlexReady Solution with Smart Flexware[®] Assemblies for TFF Systems (TF2S and TF3S) and for Cogent[®] Process Scale TFF Systems

TF2S and TF3S

Hold-up Volume (cassettes excluded):

Volume contained within the concentration loop (feed line, feed pump, membrane holder without cassettes, retentate line back to the recycle tank).

Minimum Working Volume:

Volume of water that must remain inside the system at a selected feed flow rate to prevent air from getting into the system. This amount of fluid is closely linked to the system design, to the filter hold-up volume, to the operating crossflow, to the mixing speed, and to the product viscosity.

Note: Operating crossflow decrease may reduce the minimum working volume at process end.

Unrecoverable Volume:

Volume left inside the system after system drain and air blow down.

Note: The unrecoverable volume may not cause product loss depending on recovery method such as buffer flush or buffer displacement.





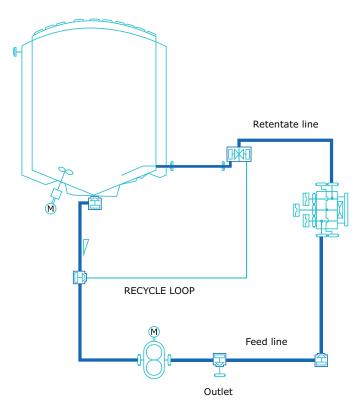




Cogent® Process Scale TFF Systems

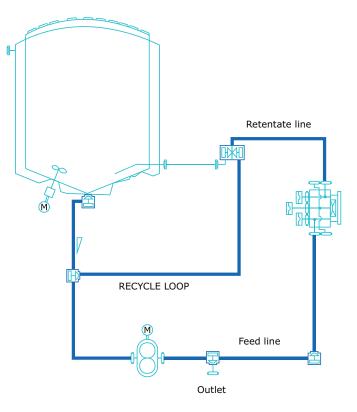
Hold-up Volume with Tank Option (cassettes excluded):

Volume contained within the concentration loop when using the tank option (feed line, feed pump, membrane holder without cassettes, retentate line back to the recycle tank).



Hold-up Volume with Bypass Option (cassettes excluded):

Volume contained within the concentration loop when using the bypass option (feed line, feed pump, membrane holder without cassettes, retentate line back through the bypass).



Minimum Working Volume with Tank Option:

When using the tank option, this is the volume of water that must remain inside the system at a selected feed flow rate to prevent air from getting into the system. This amount of fluid is closely linked to the system design, to the filter hold-up volume, to the operating cross flow, to the mixing speed, and to the product viscosity.

Note: Operating crossflow decrease may reduce the minimum working volume with tank option at process end. Bypass option use allows further minimum working volume decrease.

Minimum Working Volume with Bypass Option:

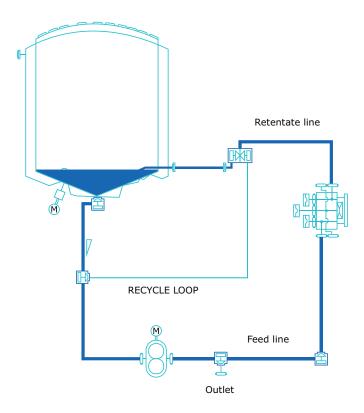
When using the bypass option, this is the volume of water that must remain inside the system at a selected feed flow rate to prevent air from getting into the system. This amount of fluid is closely linked to the system design, to the filter hold-up volume, to the operating cross flow, and to the product viscosity.

Note: Bypass option use allows further minimum working volume decrease.

Transition Volume (cassettes excluded):

When using the tank option, this is the minimum volume that must remain inside the system to keep the retentate line submerged.

Note: Operating crossflow or mixing speed may increase this volume.



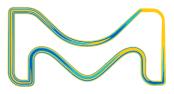


Unrecoverable Volume:

Volume left inside the system after system drain and air blow down.

Note: The unrecoverable volume may not cause product loss depending on recovery method such as buffer flush or buffer displacement.

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