# **Tangential Flow Filtration Technology**

Glossary of TFF Terms for Mobius<sup>®</sup> FlexReady Solution with Smart Flexware<sup>®</sup> Assemblies for TFF Systems (TF2S and TF3S) and for Cogent<sup>®</sup> 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.





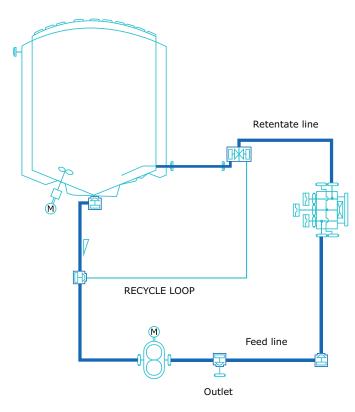




### **Cogent® Process Scale TFF Systems**

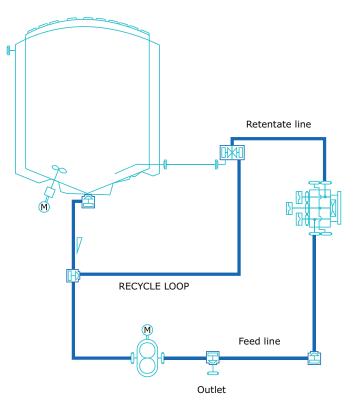
# Hold-up Volume with Tank Option (cassettes excluded):

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:

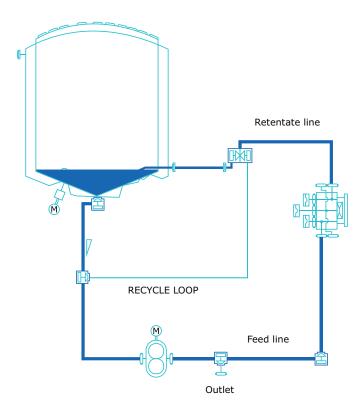
When using the bypass option, this is the volume of water that must remain inside the system at a selected feed flow rate to prevent air from getting into the system. This amount of fluid is closely linked to the system design, to the filter hold-up volume, to the operating cross flow, and to the product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



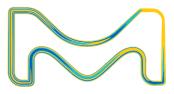


### **Unrecoverable Volume:**

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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#### Lit. No. TN1828EN Ver. 1.0 2018 - 10859 07/2018

### To Place an Order or Receive Technical Assistance

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