



## FILMTEC Membranes System Operation: Operation Start-Up

### Operation Start-Up

Once a membrane system has been started up, ideally it should be kept running at constant conditions. In reality, membrane plants have to be shut down and restarted frequently. Start/stop cycles result in pressure and flow changes, causing mechanical stress to the membrane elements. Therefore, the start/stop frequency should be minimized, and the regular operation start-up sequence should be as smooth as possible. In principle, the same sequence is recommended as for the initial start-up. Most important is a slow feed pressure increase, especially for seawater plants.

The normal start-up sequence is typically automated through the use of programmable controllers and remotely operated valves. The calibration of instruments, the function of alarms and safety devices, corrosion prevention and leak-free operation have to be checked and maintained on a regular basis.

**FILMTEC™ Membranes**  
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