

Retrofit Solutions

Direct Retrofit Modules Retrofits for every major membrane supplier



In the last twenty years, the UF industry has been dominated by system manufactures who provided their own proprietary membrane modules and unique system designs. While this has changed somewhat in the past few years with the advent of the universal UF rack, a need has emerged from the base of installed capacity. Customers are looking for choices when purchasing replacement modules particularly when performance of the original membranes was less than satisfactory or the cost of the replacement is too high. Scinor provides economical retrofit solutions for all major membrane vendor equipment.

Scinor modules provide a direct retrofit option for all major membrane vendors' installations; that is, Scinor's modules can retrofit installations with no special hardware, no programming changes, and no process or cleaning protocol adjustments. This means that Scinor offers a choice when replacing what once was a proprietary system – this lowers replacement costs to the end-users and also provides a TIPS PVDF membrane and all the benefits that TIPS brings – greater mechanical strength, higher chemical tolerance, and greater permeability.

Scinor Direct Retrofit Modules

- ☑ No Special Hardware
- No Process Adjustments
- ☑ No Programming Changes
- ☑ No Cleaning Protocol Changes



The TIPS Difference

Scinor's patented Thermally Induced Phase Separation (TIPS) manufacturing technique provides for the strongest, most chemically tolerant, and most permeable membrane in the industry. TIPS PVDF membranes are isotropic, meaning they have the same mechanical properties in all directions and throughout the depth of the membranes. This adds a level of integrity and durability robustness not seen in other membranes on the market.

SEM s of Scinor TIPS fiber showing the isotropic nature of the PVDF produced by TIPS at 50x (above) and 1000x magnification (below).

Reasons for Module Replacement

Ultrafiltration systems, in general, are expected to last twenty to thirty years but module life is only expected to be 3–10 years depending on the application and the quality of the membrane. As service life continues, permeability decreases (eventual capacity issues) and the module becomes more susceptible to cracking and fiber breakage (integrity issues).

