

Microfiltration Test Unit for Fine Particle Separation



TECHNICAL BULLETIN

TB-MS-101

The **XP-100** unit is a benchtop system ideal for evaluating cross-flow microfiltration applications. It can be used to generate representative samples of concentrated feed and filtrate that demonstrate particle separations as small as 0.1 micron. The unit can accept a wide variety of feeds, including flammable liquids. Pressure and temperature can be varied to obtain performance data as filtrate is withdrawn and concentration increases.

A Microsoft EXCEL spreadsheet is provided for data recording and reduction and to chart test results.



The **XP-100** is designed to demonstrate separation quality on small samples. It is ideal for screening tests where one to five gallons are available for testing.

Features

- Filter modules are stainless steel tubes with a patented sintered TiO₂ filter surface in an all-welded, no-tube-seal unit.
- Up to 150 psig, 250°F, operation
- NFPA Class 1, Division I, Groups C&D electrical construction
- 5 gallon cone bottom feed tank, system minimum volume 0.5 gallon
- Diaphragm sealed Bourdon tube gauge, 0-300 psig
- T-316 stainless steel construction with Viton elastomers
- 120 VAC, 60 Hz single phase, 1 HP



The XP-100 features the same Scepter[®] microfiltration technology used in this large production system. In full-scale systems, filter modules consist of large diameter stainless steel tubes with Scepter's patented sintered TiO₂ filter surface in an all-welded, no-tube-seal unit.