Sterlitech™ Membrane Test Skids are designed to evaluate the performance of membranes widely used in Reverse Osmosis, Nanofiltration, Ultrafiltration, and Microfiltration applications by simulating the flow dynamics of larger, commercially available membrane systems. This test skid offers experimental control by allowing adjustment of the flow parameters to accommodate a wide range of applications. This system has been specifically configured for use with Sterlitech™ cross flow cells, including Sepa, CF042, and CF016.

The unique design of the Sepa test cells allows flat sheet membranes to be quickly changed out, thus reducing time between trials. Bench systems are available in single or multiple cell configurations in both parallel and series modes.

The Skid also displays and records the data collected by the integrated sensors in real-time. Collected data can be accessed and retrieved using USB or Ethernet connections.

Note: Available in analog version as well.

APPLICATIONS:
- Biological or Biopharmaceutical Processing
- Concentration of Fruit Juices and Extracts
- Food and Beverage Processing
- Desalination of Brackish Water or Seawater
- Purification of Rinse Water in Electroplating Tanks
- Municipal or Industrial Water and Wastewater Purification

STANDARD FEATURES:
- Sea Water Rated Plumbing
- Operates as 1 or 2 Lines in Parallel
- High-Pressure, Stainless Steel Diaphragm Pump
- Digital or Analog Pressure and Flow Meters
- Digital Temperature and Conductivity Sensors
- Stainless Steel Frame with Heavy Duty Casters
- Configured with Parts and Instruments Resistant to Harsh Environments and Corrosive/Hazardous Chemicals

SPECIFICATIONS:

**Cell Type**
- Sepa: Available in Stainless Steel and Acrylic

**Number of Cells**
- 1 or 2
  - Can be Customized with Combinations of Cross Flow Cells

**Membrane Sample Size**
- Sepa CF: 7.5 x 5.5 in (19 x 14 cm)

**Effective Membrane Area**
- Sepa CF: 24 in² (140 cm²)

**Feed Flow Rate**
- 1.8 GPM (6.7 LPM) max.

**Feed Controls**
- Bypass Valve
- Concentrate Pressure Control Valves: 0-1000 psi (0-69 bar)

**Data Monitoring**
- Includes 1 Ethernet and 1 USB connection for data retrieval

**Operating Pressure Range**
- SS: 0-1000 psi (0-69 bar)  
- Acrylic: 0-400 psi (0-27.5 bar)

**Electrical Supply**
- 110V/60Hz, 1 Ph or 220V/60Hz, 1 Ph

**Pump and Motor Rating**
- Washgaurd Electric Motor
- Positive Displacement Pump

**System Dimensions/Weight**
- 67 x 41 x 59 in (170 x 104 x 150 cm)
- 650 lbs (295 kg)

**Optional Accessories**
- Temperature Controller, pH Sensor, Digital Balance

Footnotes:
1. Per Cell
2. Includes 1 Ethernet and 1 USB connection for data retrieval
3. Optional
Sterlitech™ Sepa Membrane Test Skid

Skid Configured with Sepa CF Cells in Parallel

Legends

V1: Feed pressure relief valve
V2: Feed by-pass valve
V3: Low pressure control valve
V4: High pressure control valve
V5: Drain valve
V6: Bank valve #1
V7: Back flow preventor valve #1
V8: Bank valve #2
V9: Back flow preventor valve #2
PT1: Feed pressure transmitter
PT2: Concentrate pressure transmitter
FT1: Feed by-pass flow rate transmitter
FT2: Concentrate flow rate transmitter
CT1: Feed inlet conductivity/temperature transmitter
CT2: Remote conductivity/temperature transmitter
L1: Level switch

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