Sterlitech™ Hybrid 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 CF, CF042, and CF016. Sterlitech™ Hybrid Membrane Test Skids can be operated as 1812 element and cross flow cells in parallel.

The Skid System 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
- Sepa CF Cell in Parallel with 1812 Stainless Steel 316 Housing
- Operating Pressures to 1000 psi (69 bar) for Sepa CF Cell and 600 (41 bar) psi for 1812 Housing

SPECIFICATIONS:

Cell Type
- Sepa CF in Parallel with 1812 Stainless Steel 316 Housing

Number of Cells
- 1 of Each
  - Can be Customized with Combinations of Cross Flow Cells

Membrane Sample Size
- Sepa CF: 7.5 x 5.5 in (19 x 14 cm)
- 1812 Housing: 1.8 in dia. x 12 in length spiral wound element

Effective Membrane Area
- Sepa CF: 24 in² (140 cm²)
- 1812 Spiral Wound Element: Variable (max. 0.45m²)

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
- Flow Rate, Pressure, Temperature, Conductivity, Weight

Operating Pressure Range
- 0-1000 psi (0-69 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™ Hybrid Membrane Test Skid

Skid Configured with Sepa CF Cell and 1812 Housing

Legend

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

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