

Sanitary Ultrafiltration System for Food & Beverage Processing (UF400 Series)

System Components:

- Stainless Steel Tubular Filtration Modules
 - o Available with 13.2 to 52.8 ft² filtration area
 - O Available with 0.02 or 0.1 μm rated elements
- Sanitary recirculation pump and feed pump, with VFDs
 - o Pump run-dry protection level switch
- Flow meters for feed, recirculation, and permeate
- Pressure sensors for module inlet/outlet and permeate
- Automated concentrate flow control valve
- UF permeate sight glass
- Hand valves for process controls and Clean-in-Place
- Tubular heat exchanger for chilling or heating
- NEMA-4X electrical enclosures
- PLC/HMI for easy operation, data logging, and remote access (internet connection required)
- Powder coated steel skid on leveling brackets or casters
- Dimensions: 120"L x 84"'W x 76"H

Onsite Utilities Required:

- Water (hot preferred)
- Electrical: One 50-amp breaker, 460V, 3-phase
- Level surface for skid
- Floor drain or sump for gravity draining and rinsing

Capacity

Every material will filter at different rates, but with common food and beverage items an average rate of about 2 GFH (gallons of permeate per square foot per hour) can be expected. With 52.8 ft² of filtration area, this system will produce about 105 gallons of permeate per hour. For example, if the feed tank was filled with 200 gallons of material, it could be concentrated about 2x (removing half the volume) in approximately 1 hour.

Scale-Up

This system will log all the relevant performance data so we can provide recommendations for full-scale equipment for unique applications. If an internet connection is provided (can we wired or cellular), we can remotely collect data, provide support, and update the software as needed.

Please contact us today for a customized quote for your application!