

Mobile Ultrafiltration

Aquatech Mobile Solutions

Aquatech's mobile ultrafiltration system uses Q-SEP™ outside-in hollow fiber ultrafiltration modules containing PVDF membranes with high mechanical strength and chlorine tolerance. Our ultrafiltration can handle feed turbidity for a wide range of applications. Applications of mobile ultrafiltration include pretreatment to reverse osmosis (RO) systems, purification of surface and well water for potable applications, filtration of industrial water, and wastewater reuse. Our mobile ultrafiltration system comes complete with automation, clean-in-place (CIP) and a chemical dosing system. The ultrafiltration can produce up to 800 gpm* of filtered water.



Salient Features:

- Outside-in PVDF membrane
- Product capacity up to 800 gpm*
- PLC-based automated system
- Touch screen controlled
- Optional remote monitoring available

Applications:

- Suspended solids removal
- Organic colloid removal
- Tertiary treatment for wastewater
- Pretreatment for RO & demineralization treatments

System Requirements:

- Feed water turbidity: ≤ 100 NTU (peak, intermittent 300 NTU)
- Max feed water temperature: 100° F
- Max feed water pressure: 70 psig
- Min feed water pressure: 50 psig
- Electrical requirements:
 - 120 VAC/1 Ph/ 60 Hz
 - 480 VAC/3 Ph/ 60 Hz

System Details:

- Trailer (L x W x H): 53' x 8.5' x 13.5'

System Equipment Details:

- UF trains: Two x 100% product flow 400 gpm, two x 50% product flow 800 gpm
- Design flux: ~35 GFD (varies with feed water quality)
- Chemical dosing: Coagulant, sodium hypochlorite & sulfuric acid
- Piping: PVC SCH 80 & SS 304 SCH 10
- Instruments: Flow transmitter, differential pressure switch, pressure gauge
- VFD controlled pumps

Product Water:

- System Flow: up to 800 gpm*
- Turbidity: ≤ 1 NTU
- Silt density index (SDI): ≤ 3
*Product water flow depends on feed water quality

System Connections:

- Feed water: 6" flange connection
- Product water: 6" flange connection
- Wastewater outlet: 6" flange connection

