



HYDRAcap[®] MAX

Maximum Performance, Optimal Solution

HYDRAcap[®] MAX is used to treat a wide range of highly variable waters as either primary treatment or as pretreatment to reverse osmosis (RO) and nanofiltration (NF). Compared to conventional pretreatment, the HYDRAcap[®] MAX offers the combined benefits of high recovery and low footprint requirement due to its optimized membrane area and novel cleaning regimes. High strength PVDF membrane minimizes fiber breakage rate and ensures consistently superior filtrate quality, which enables RO and NF systems to be operated at higher fluxes, while maintaining longer intervals between cleanings.

HYDRAcap[®] MAX Product Offerings:

✓ HYDRAcap[®] MAX 80 – 105 m²
✓ HYDRAcap[®] MAX 60 – 78 m²



Capillary Technology vs. Conventional Pretreatment

- Smaller footprint
- Reduced chemical consumption, especially of coagulants
- ✔ Wastewater disposal is less problematic due to lower volume and decreased chemical consumption
- Better filtrate quality, which is stable regardless of feed water quality variation
- Increased efficiency of RO membrane system design and operation, contributing to reduced capital and operational cost
- Maximizes RO performance by allowing elements to operate longer with less cleaning

Applications:

- Drinking water
- Desalination pretreatment
- Industrial process water treatment
- Municipal waste water

Performance:

- Consistent filtrate quality with turbidity below 0.1 NTU
- High filtration flux operation up to 120 Lmh
- Maximized recovery up to 98%

Key Benefits:

- Lower CAPEX
- Lower OPEX
- Simplicity and reliability

Key features:

- High membrane area
- TIPS fiber technology
- Process design simplicity



Key advantages of the high membrane area:

- Reduced footprint
- Skid cost reduced
- Fewer seals / connections

Basis: 20,000 m³/day production with one rack Hydranautics: 120 HYDRAcap MAX 80 modules Competitor A: Outside / In flow configuration Competitor B: Inside / Out flow configuration Hydranautics HYDRAcap[®] MAX 80 105 m² modules

Competitor A:Outside / In Module Competitor B:Inside / Out Module



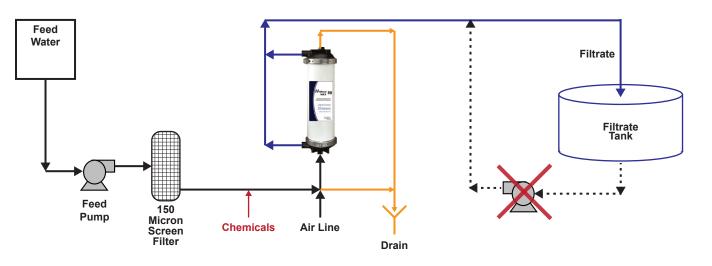
Key advantages of the TIPS fiber technology:

- Increase tensile and fatigue strength which minimizes integrity issues
- ✓ Increase chemical resistance which allows for more effective cleans at pH extremes
- Increase tolerance to chlorine, peroxide, ozone and other oxidants

Fiber Cross Section

Key advantages of not having backwash requirement

- Higher recovery
- No backflush pump nor ancillary equipment required



Solutions You Need. Technologies You Trust!

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