MEMFILL's H_2OLLOW-FIBER®

MEMFILL
Hollow Fibers. Smarter Solutions.

Aruvi® UF4-F3

ULTRAFILTRATION

PVDF Hollow Fiber Membranes

The Aruvi® series PVDF hollow fibers are indigenously produced using a proprietary membrane process know-how to have a unique asymmetrical pore structure with uniform distribution which ultimately provides not only high flux but also longevity of service

PRODUCT UNIQUE FEATURES

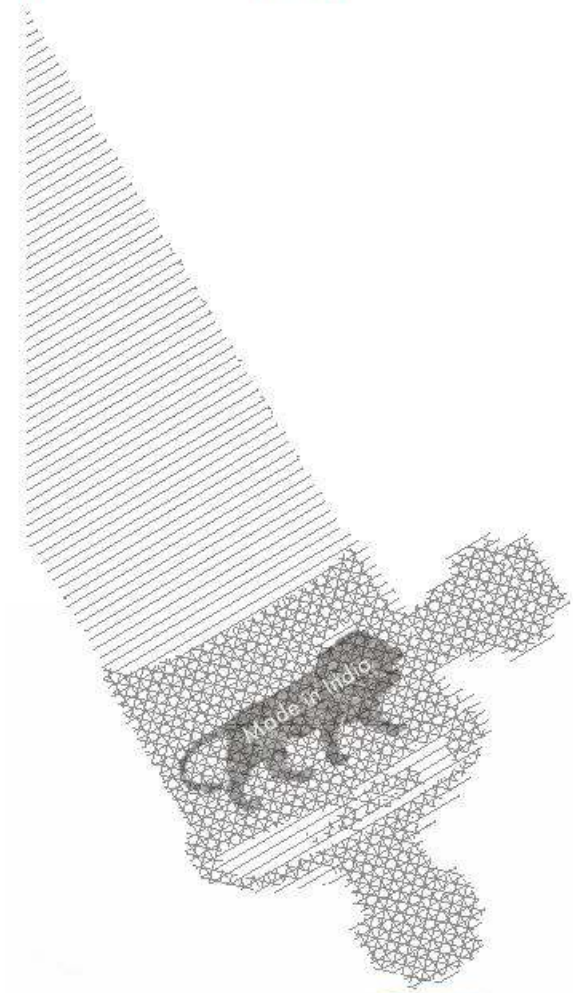
Indigenous PVDF Hollow Fibers
Asymmetric Membrane Structure
Enhanced Hydrophilicity
Uniform & Consistent Pore Distribution
Durable Hollow Fibers

OPERATIONAL BENEFITS

High Temperature Resistant
Improved Chemical Resistant
Enhanced Permeability
Low Fouling
Low Energy Consumption
Low Operating Pressure

KEY APPLICATIONS

RO Pre-Treatment
Municipal Water & Wastewater
Industrial Wastewater



MEMFILL TECH PVT LTD

Entrepreneur Incubator Seed fund Won From | Department of Science & Technology (DST) Government of India | Tiruchirappalli Regional Engineering College Science and Technology Enterpreneurs Park TREC-STEP

MEMFILL - COMPANY BACKGROUND

We are expert in membrane technologies and manufacturing composite hollow fiber membranes for water, wastewater and water reuse applications covering various industries. Our extensive R&D activities have resulted in indigenously producing a range of high quality and durable hollow fiber membranes. Further, we offer our innovative process know-how, tailor-made turnkey solutions to markedly reducing the operating expenses

PROPRIETARY REINFORCED PVDF MATERIAL

Reinforced polymer material, Polyvinylidene fluoride (PVDF), was used manufacture the hollow fibers that provide superior permeability and strength and better performance. The high-grade PVDF ultrafiltration membranes can withstand harsh chemical conditions and at the same time promises better hydrophilic behavior for better filtration flux. Combined with the upgrades in design that embodies stability and efficiency improvements, HighFlux® ultrafiltration membrane is set to be at the forefront in the market for superior performance

ASYMMETRIC MEMBRANE STRUCTURE

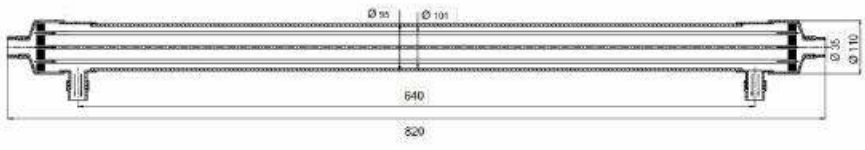
The asymmetric structure of the HighFlux® hollow fiber membranes allows more efficient cleaning and smooth filtrate flow at low transmembrane pressure, which in turn effectively enhances overall performance and flux rates thus reducing operating costs

SUPERIOR HYDROPHILICITY & LOW FOULING

Membrane material, surface properties and structural make-up are crucial for membrane's performance. Our hollow fiber membranes has high hydrophilicity that helps to reduce the fouling rate. Coupled with HighFlux® proprietary technology, they provide not only low fouling rates but enhanced chemical resistance, which requires less-frequent chemical cleaning

HIGHFLUX® ARUVI® SERIES UF MEMBRANE - TECHNICAL SPECIFICATIONS

Product Model - HighFlux®	Aruvi® UF4-F3
Hollow Fiber Membrane Material	Proprietary Reinforced PVDF
Housing and Seal Materials	PVC/UPVC & Epoxy Resin
Module Diameter x Length (mm)	101 x 820
Hollow Fiber Membrane Dimensions & Effective Membrane Area	OD: ~1.2 mm / ID: ~0.6 mm & ~3 m^2
Design Flux	~ 40 - 160 $L/m^2/h$ (output flux may vary depending on feed water quality)
Molecular Weight Cut Off	100,000 Dalton
Bacteria Removal Rate	> 4 log
Operating Mode	Cross Flow or Dead-end Flow
Flow Type	Out-In
Operating Temperature	5 - 40 °C
pH Range	2 - 12
Max Operating Pressure	~ 3 bar
Suggested Operating Pressure	< 2 bar
Max Transmembrane Pressure	< 2 bar
Backwash Pressure	0.5 - 1 bar
Permeate Turbidity	< 0.1 NTU



(Schematic of 4" dia - 3 m^2 membrane area - HF UF Cartridge; only for reference purpose)

Note:
Based on the source/quality/fluctuation of feed water the duration of backwash frequency may change

Chlorine tolerance for an hour: ~200000 ppm
Chemicals for cleaning: NaOCl, NaOH, HCl

Although our membrane is made durable, customers are responsible for the use of incompatible chemicals which may affect the performance so failure. For guidelines and clarifications please contact our technical staff

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