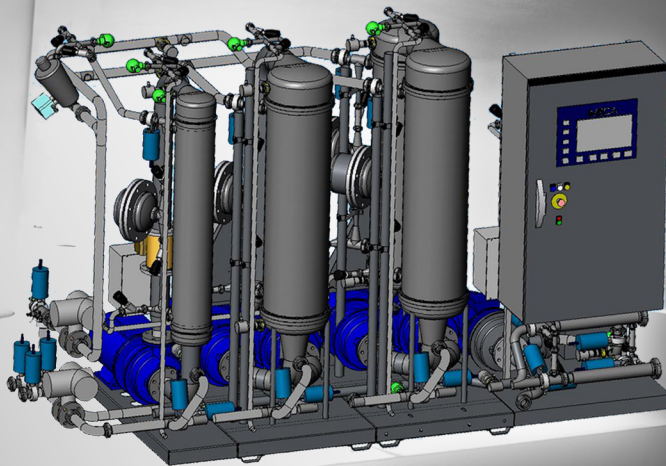


CERAMIC NANO FILTRATION (NF) UNITS



Our range of CERAMIC NANO-Filtration (NF) units are designed to be the most compact & efficient solution where high quality water is required. The skid mounted units are installed like a Plug & Play device, with automated operation & cleaning (CIP).

TYPICAL APPLICATIONS

- Process Water for industrial use.
- Process Water for laundries, hotels, hospitals or buildings.
- Greywater recycling, irrigation water.
- Reverse Osmosis (RO) Feed Water.

OPERATING PARAMETERS

- Feed Turbidity < 1'000 NTU
- Filtrate Turbidity < 1 NTU
- Recovery Rate < 90% (from waste water)
- Bacteria Removal > 99.9999% (> Log 6)
- Virus Removal > 99.99% (> Log 4)
- COD reduction 80% - 90%
- pH 0 - 14
- Temperature 10°C - 99°C
- Operating Pressure < 10 bar
- Design Pressure PN 16

QUALITY ASSURANCE

- **CE** Certified.
- Ceramic Membrane Barrier
- HILLSBRIDGE Continuous Integrity Test.
- HILLSBRIDGE Remote Monitoring & Alarm System.
- In-Line monitoring of Key-Parameters.
- 3rd Party Laboratory Analyses.

PLANT FEATURES

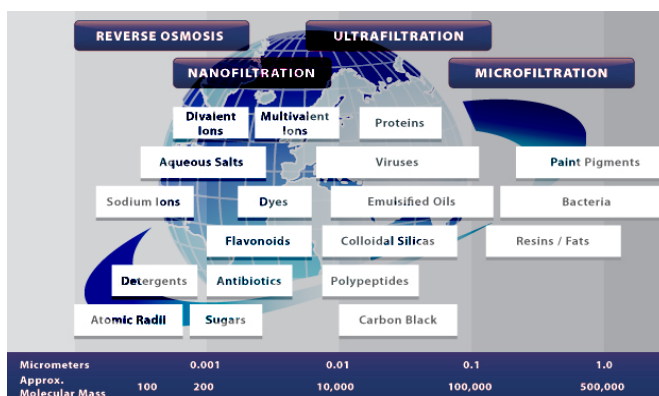
- Complete Nano-Filtration units with nominal permeate capacities of 2 m³/h to 20 m³/h per module.
- Plug & Play installation and Lowest Footprint on the Market.
- Automated Feed & Recovery Control.
- Automated Operation & Cleaning In Place (CIP).
- Easy Maintenance & Off the Shelf Equipment.
- Closed Process, No Dismantling, No Odor Emissions.
- Touchscreen HMI with PLC for Easy Monitoring & Control.
- Remote Access & Control.
- Customized Alarm System (e.g. SMS based).

MATERIALS USED

- Piping: Stainless Steel 316 / HDPE / PP
- Frame: Stainless Steel 304
- Pump Hydraulics: Stainless Steel
- Membranes: Ceramic

INSTRUMENTATION & CONTROLS

- Pumps: KSB / Grundfos
- Flow Meters: Krohne
- Pressure & Level: Krohne
- Valves: Burkert
- Inline Metering: pH, Temp., Turbidity, Pressure, Flow, Conductivity, Levels
- Air Pressure: Wika, various
- Software: HILLSBRIDGE
- Schneider PLC & Touchscreen HMI



CERAMIC NF-UNITS

MODEL	CeramNF-2.0	CeramNF-5.0	CeramNF-10	CeramNF-20
Filtrate Flow Rate *	2.0 m³/h	5.0 m³/h	10.0 m³/h	20.0 m³/h
Feed Flow Rate	2.5 m³/h	6.2 m³/h	12.5 m³/h	25.0 m³/h
Recovery Rate	80%	80%	80%	80%

CERAMIC MEMBRANES				
Housing	SS 316	SS 316	SS 316	SS 316
Pressure	< 10 bar	< 10 bar	< 10 bar	< 10 bar
Operating Mode	Turbular	Turbular	Turbular	Turbular
	Cross Flow	Cross Flow	Cross Flow	Cross Flow

WEIGHT & DIMENSIONS*				
Width	1'000 mm	1'000 mm	1'800 mm	1'800 mm
Length	1'800 mm	1'800 mm	2'500 mm	3'500 mm
Height	2'500 mm	2'500 mm	2'500 mm	2'500 mm
Weight	750 kg	900 kg	1'500 kg	2'600 kg

*indicative values, all units are custom designed

