



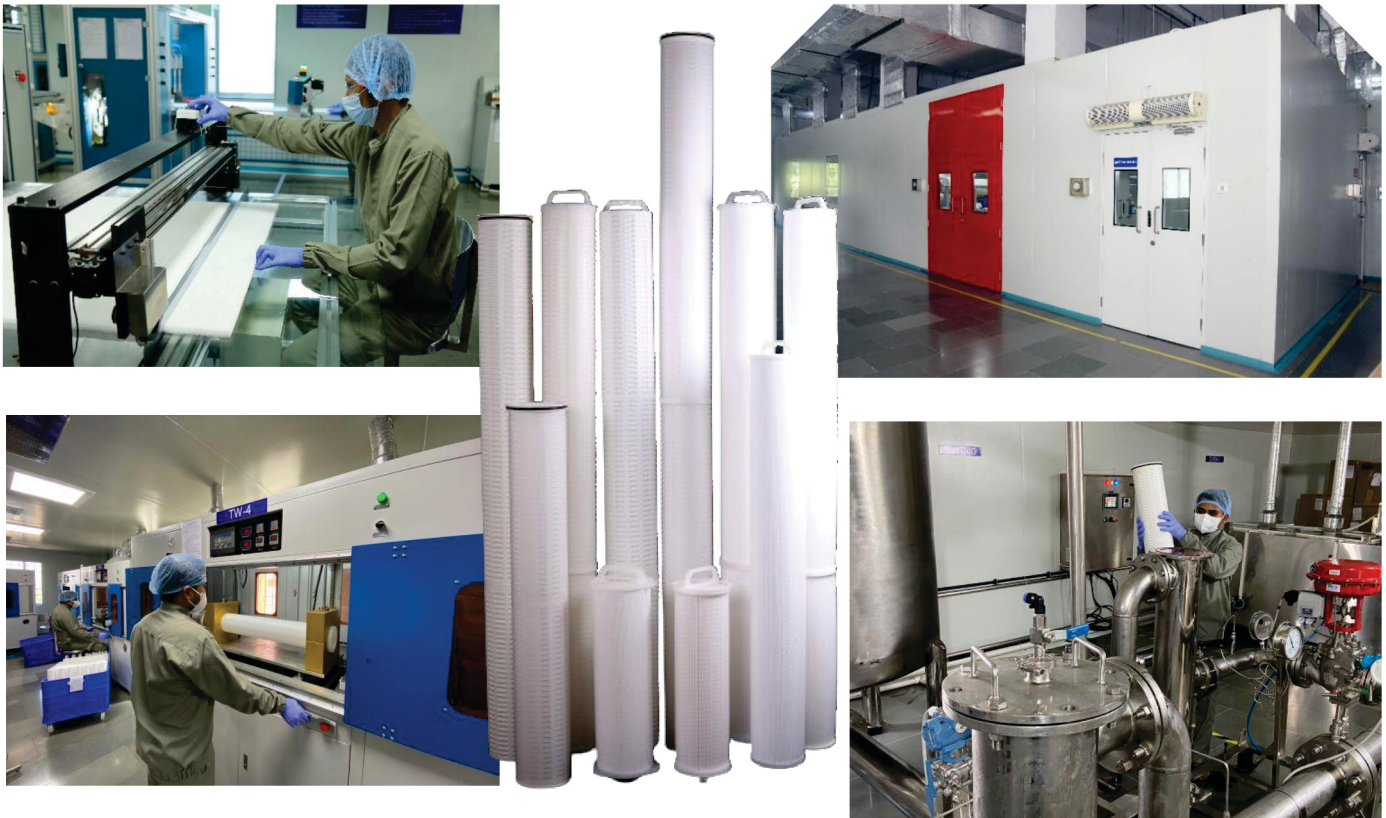
# Advancing Water Security: Desalination Solutions





## MICROFILTRATION FOR SEAWATER REVERSE OSMOSIS (SWRO) PLANT

ADG Filter focusing on the creation of "SCIFIL" filters that address the critical demands of diverse industries, Like water **treatment, chemicals, power plants, microelectronics, food & beverages, pharmaceuticals, oil and gas, etc.** Our products are pivotal in addressing the stringent demands of diverse sectors. Our team's innovations are designed to enhance both filter efficacy and lifespan while significantly reducing the ecological footprint. It's our goal to continuously deliver cutting-edge, eco-friendly filtration technologies that promote both industry advancement and ecosystem preservation. With sustainability as a guiding principle, our team's commitment is to bolster global health and preserve ecological balance. This mission is embodied in delivering innovative filtration solutions, always ensuring exceptional quality and pioneering advancements in our field. Our expertise lies in enhancing filter performance and longevity **while minimizing environmental footprint.**



## HIGHFLOW PLEATED FILTER CARTRIDGE

ADG's high-flow pleated filter cartridges are the premier solution for the critical pre-filtration stage in Seawater Reverse Osmosis (SWRO) plants. Specifically engineered for Maintenance, Repair, and Operations (MRO) needs, these cartridges are essential for enhancing plant reliability, protecting sensitive downstream RO membranes, and significantly reducing the Total Cost of Ownership (TCO). Featuring a unique pleated media design, they deliver an outstanding 99.9% filtration efficiency at 5µm, transforming variable raw seawater into a consistent, low-SDI effluent that safeguards your entire RO system.

ADG/HFC/SWRO/Y5H15

AN ISO 9001:2015 CERTIFIED COMPANY

1. **Longer Service Life:** The pleated design maximizes surface area, allowing the filter to capture more contaminants like silt, sand, and organic matter, leading to a longer, more predictable service life.
2. **Unmatched Efficiency for Absolute Fluid Purity:** With 99.9% removal efficiency at 5 microns, these filters act as an almost absolute barrier against particulates that can foul expensive RO membranes. This ensures consistently high-quality water by drastically lowering the Silt Density Index (SDI) upto a target of SDI <3. This is crucial for meeting RO membrane warranties, achieving absolute fluid purity, and reducing unscheduled shutdowns.
3. **Enhanced Durability for Consistent Performance:** *ADG's unique filter media* creates a rigid, stable pore structure that resists compression and deformation under high-pressure conditions. Reinforced by robust internal support layers, the cartridge prevents particle unloading and media collapse, ensuring consistent filtration efficiency throughout its extended life with high dirt holding capacity.
4. **Reduced Total Cost of Ownership (TCO):** The extended lifespan of our cartridges leads to lower consumable costs, reduced labor for filter change-outs, maximized plant uptime, and extended RO membrane life due to superior protection against fouling.
5. **Lower Energy Costs:** The high-flow, low-resistance design results in a lower initial pressure drop, which increases slowly as the filter loads. This directly reduces the energy needed by your feed pumps, leading to tangible savings on electricity costs.

## MATERIAL OF CONSTRUCTION

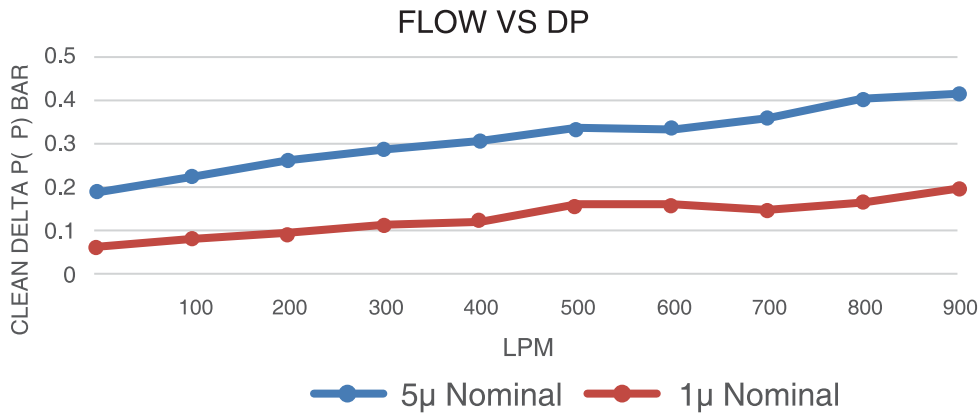
<b>ADG's unique filter Media</b>	Polypropylene micro fibre
<b>Support Media</b>	Polypropylene
<b>Inner And Outer Core</b>	Polypropylene
<b>End caps</b>	Polypropylene
<b>Gaskets/O-rings</b>	EPDM, Nitrile, Silicone



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TECHNICAL SPECIFICATION

Lengths :	60/40/20inch
Outside Diameter :	Ø7.75" (197 mm) & Ø6" (152 mm)
Typical surface area :	Up to 10.5 m² @60inch
Micron Rating	1 to 100 µm
Max DP	50 psid at 180°F (3.4bar at 82°C)
Recommended Change out DP	2.4bar
Max Flow per Cartridge (60")	1000 LPM



ORDERING INFORMATION

ADG + HF + MOC + GRADE + MICRON RATING + <b>DIAMETER</b> + LENGTH + END CAPS + SEAL + APPEARANCE
EXAMPLE - ADG - HFC - PP - N - 50 - <b>6</b> - 60 - PL - E - IC

TABLE 1 - MOC	
MATERIAL	CODE
POLYPROPYLENE	PP

TABLE 2 - GRADE	
CONFIG.	CODE
ABSOLUTE	A
NOMINAL	N

TABLE 3 - MICRON	
MICRON RATING	CODE
1	10
2	20
5	50
10	100
20	200
30	300
40	400
50	500
100	1000

TABLE 4 - LENGTH	
LENGTH	CODE
20"	20
40"	40
60"	60

TABLE 5 - CONNECTIONS	
CAPS	CODE
OUT TO IN	AQ
IN TO OUT	PL

TABLE 6 - SEAL	
SEAL	CODE
EPDM	E
SILICONE	S
NITRILE	B

TABLE 7 - APPEARANCE	
APPEARANCE	CODE
INNER CORE & BELT WRAP	BW
INNER CORE & OUTER CAGE	IOC
INNER CORE ONLY	IC

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