

HELIX HYDRO



FILTAWORX[®]

Self Cleaning Filters

Automatic Self-Cleaning Water Filters

FW100EX – FW450

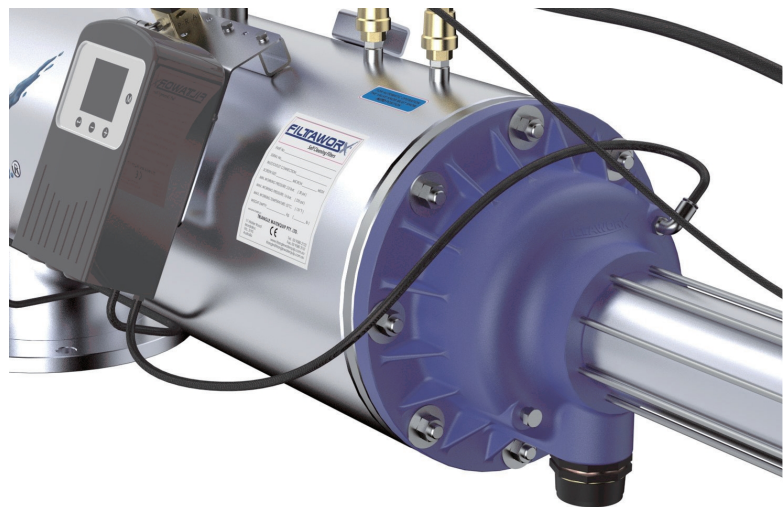
100 - 450mm (4"-18")





FILTAWORX® range of fully automatic self cleaning filters have been designed and built in Australia by an experienced team of engineers using the latest 3D CAD software.

FILTAWORX® filters are one of the most technically innovative self-cleaning filters available, combining proven high performance, reliability and economy in a compact robust design.



Features include:

- Stainless steel filter body as standard.
- All parts are made of corrosion resistant materials.
- Fully automatic back flush operation.
- Available with hydraulic or electric controls.
- Large filtration area.
- Wide range of fine screen sizes, 50 to 800 microns.

- DN100 - DN450 (4" - 18")
- PN16 available on request
- Pressure rating of PN10 as standard.
- Simple and quick installation.
- Full support and after sales service.
- Designed, built and tested in Australia.

Advantages of FILTAWORX® Automatic Filters

Stainless Steel body for corrosion resistance in most environments.

Cleaning Mechanism:

The key feature to FILTAWORX® performance and reliability is the use of the escaping backflush water to rotate the internal cleaning mechanism inside the filter vessel. No external motor, mechanism or power is required, reducing the number of moving/wearing parts to a minimum.

Automatic Operation

of the self cleaning backflush cycle is achieved when a pre-set pressure drop (40 – 50 kPa) across the filter is reached. 100% cleaning as every spot on the fine screen surface is cleaned with a high velocity, aggressive backflush flow.

No External Power

is required (when using the hydraulic controlled filter). All functions are powered by the line pressure only. All controls required come complete with the filter.

Uninterrupted Flow

during the backflush cycle.

More Screen Area

than any other comparable filter available.

Positive Filtration

using a precision 316 stainless steel mesh screen.

Wide Range of Filtration screen sizes available from 50 to 800 micron enabling correct selection for each application. Screens can easily be replaced on-site to alter the degree of filtration if required.

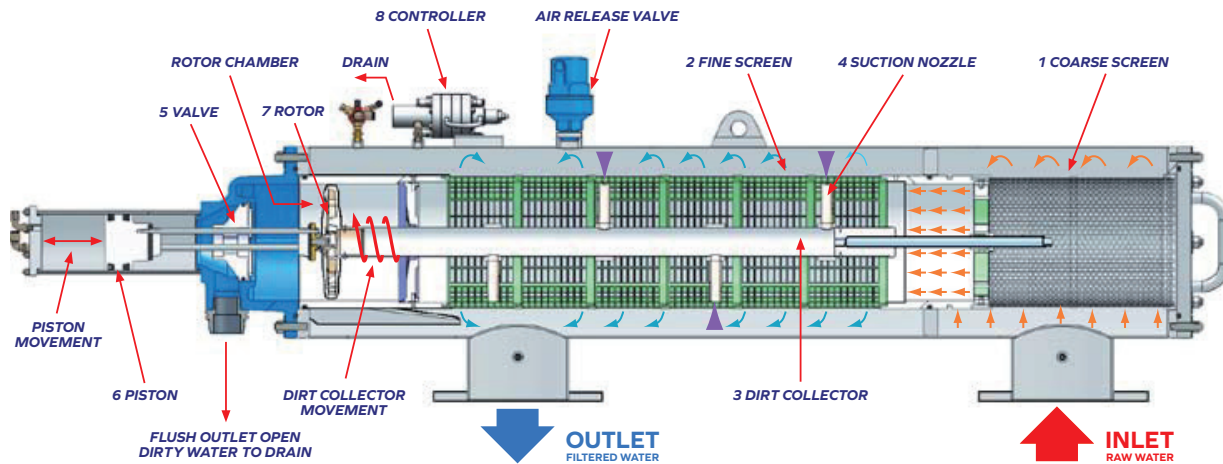
Compact and Simple Installation

can be mounted in any position or orientation, with minimal space requirements.

High Reliability

due to minimal moving parts, simple design and robust construction make FILTAWORX filters virtually maintenance free.

How FILTAWORX® Works



During normal filtering mode the raw water enters the Inlet of the filter, passes through the Coarse Screen (1), (the 7 mm perforations remove large debris that may obstruct the lower mechanism). Water then travels to the inside and through the Fine Screen (2) to the Outlet.

The solids in the water are trapped on the Fine Screen (2), eventually causing a pressure drop (DP) across the filter. At a pressure drop of 40 – 50 kPa the Controller (8) activates the cleaning cycle by opening the Flush Valve (5) to drain (atmosphere).

The interconnection of the Suction Nozzles (4) via the Dirt Collector (3) to the Drain causes a back flushing or 'vacuum clean' effect on the Fine Screen (2) with a high velocity suction jet of water from the clean side of the screen, removing the dirt on the screen as it passes through.

The water escaping via the Rotor (7) causes the Dirt Collector and Suction Nozzle assembly (3 & 4) to rotate. The Piston (6) moves this assembly down the length of the Fine Screen (2) in a spiralling motion, cleaning the entire screen surface area in approximately 15 seconds. The Flushing Valve (5) closes, and the Piston (6) is returned to its original position, ready for the next cycle. Cleaning also occurs on the return stroke.

Typical Application Areas

Irrigation

For the protection of all types of irrigation systems including: drip, micro jet, sprinkler and golf course irrigation systems, from all types of sources including treated effluent.

Cooling Towers and Process Water

Removal of algae, sludge, pipe scale, process impurities and atmospheric contamination, thereby maximising heat transfer efficiency, reducing maintenance, energy and chemical treatment costs of up to 30-50%. Significant reductions in sludge build-up in basins that sustains and shields legionella bacteria, ensuring a healthier & safer environment.

Surface and Ground Water

For protection of plant and equipment from contamination found in sea, rivers, dams, bores, and other water sources.

Equipment Protection

For pump gland seals, bearings, compressors, valves, etc.

Nozzle Protection

Eliminates blocked nozzles, keeping them clean and open thereby reducing maintenance.

Membrane & UV Protection

Removing problem sized solids that reduce the effectiveness of membranes and UV.

Effluent and Water Re-Use

Allows the re-use/recycling of effluent and other poor quality water within water treatment plants, industrial process systems, pulp and paper mills, mines, irrigation etc.

Town Water Supply

Removes algae, organisms, sand and silt from surface water streams, dams, reservoirs and bores, reducing chemical treatment and maintenance costs.

