

# IWC becomes official southern Africa distributor for SATI Filters

An effective water-filtration system is crucial to the smooth running of industrial cooling tower operations and ensures optimum efficiency. Filtration systems prevent corrosion and reduce the risk of growth of the deadly Legionella bacteria and other microbes. An effective filtration system minimises downtime due to scheduled or unscheduled maintenance and reduces unnecessary loss of water.



SATI is an Italy-based manufacturer of a line of water-filtration systems that are able to meet all industry-specific needs.

SATI's filtration systems cover the entire field of normal filtration from 5000 up to 1 micron. Its products include manual filters, semi-automatic filters, self-cleaning screen filters, pleated cartridges and membrane filters.

All SATI Filters are constructed with a stainless steel body, which is ideal in an industrial water cooling environment due to steel's higher resistance to wear and tear, its ability to work under harsh operating environments and a longer lifespan. The main models, such as the SATI Rotor, have been designed to work in very aggressive conditions and are available in Duplex stainless steel or stainless steel coated with a special paint.

IWC supply a number of SATI Filter models to fit industry-specific cooling water filtration requirements. These include:

## **Self-cleaning filters:**

- Aquaspeed is a self-cleaning water filter system with a patented pressurised water jet that cleans the cartridge, ensuring low water consumption and short stops of the outlet flux during the cleaning cycle. It is suitable for use in pressurised systems with a small flow rate ( $< 40\text{m}^3/\text{h}$ ) and is supplied with valves, pressure gauges and an electronic controller. This is the only filter that is able to function and regenerate the filter element at very low flow rates ( $5\text{m}^3/\text{h}$ ) (patent SATI);
- Autojet is similar to the Aquaspeed in that it incorporates a pressurised water jet system. This filter offers filtration from 2000 to  $25\text{ }\mu\text{m}$  and is suitable for the treatment of water that has a high concentration of suspended solids caused due to the installation of an internal cartridge containing polyester filtering tissue inserted into a holding net in stainless

steel AISI 316, or entirely in stainless steel AISI 316 in the double-layer REPS version of the filter. Autojet filters are supplied with automation group, valves, and pressure gauges;

- Rotor water filters are equipped with suction pads that ensure the complete cleaning of the filter screen with minimum water use and without stopping the water cooling filtration process. They are designed for filtration of liquids with solid particles and colloidal materials. The filtration degree ranges from 25 µm to 810 µm. Rotor filters are supplied ready to work with valves, pressure gauges and an electronic controller included;
- Another model of this series, the Rotor Jumbo, has been specifically designed to filter large volumes of water (from 800 to 3000 m<sup>3</sup>/h). The Rotor Jumbo has a filtration degree ranging from 1500 to 200 µm while still maintaining all the key features of the smaller Rotor system; and
- Big Matic filters contain cartridges that rotate during the cleaning cycle and are regenerated by pressurised nozzles. This type of system is widely used for microfiltration of liquids with impurities that measure between 1 and 25 microns, which ensures very low consumption of water whilst cleaning. This filter's unique pleated cartridge design means that it has a greater filtering area compared to normal filtration cartridges. This filter system has been designed with a modular structure, which allows the assembly of multiple modules to cater for any water flow.

## **Manual and semi-automatic**

IWC also supplies SATI water filters that require manual cleaning as well as models that have semi-automatic cleaning capabilities. The Basket filter is one such manual cleaning system that is easy to access due to a lid that incorporates folding closures, allowing quick-and-easy maintenance with reduced cooling tower downtime. This product can be used as a protective filter for pumps used in water wells, rivers or canals full of large suspended solids.

The Brush filter system is semi-automatic, providing a large filtration range from 2000 to 25 µm and is suitable for the treatment of water wells, rivers, canals and process water containing suspended solids. Cleaning the filter is quick and easy due to its semi-automatic cleaning group.

One of the biggest advantages of the SATI filters are their versatility. SATI filters are unique in that the model configurations are entirely interchangeable, meaning it is possible to transform a manual water-cleaning filter into an automatic one or vice versa, without having to change the characteristics of the water filter system.

For more, visit: <https://www.bizcommunity.com>