



# Taron™ Activated Sludge Filter

SMALL FOOTPRINT TECHNOLOGY EXPANDS BIOLOGICAL TREATMENT CAPACITY



**SANITAIRE**  
a xylem brand

# Accommodate higher flow rates.

Relieve the hydraulic and suspended solids load on your secondary clarifiers within a small footprint.

The innovative Taron activated sludge filter is the only technology of its kind on the market today, adapting the structure of a rotating disc filter to handle high solids content fed directly from a secondary activated sludge basin.

The Taron filter develops a dynamic sludge cake layer on micro mesh panels to separate out the biological floc. Vertical discs are mounted on a hollow shaft and submerged in the activated sludge. As the discs rotate and liquid flows through the panels, activated sludge is deposited on the mesh. Hydraulic pressure then compacts the biomass and forms the sludge cake layer. Filtrate flow is controlled by the rotational speed of the discs and a continuous filtrate backwash system that removes the sludge cake layer after each rotation.

This leading-edge, outside-in filter design reduces the physical space required to produce high-quality effluent that meets or exceeds the standards of traditional secondary clarification. So, it expands your plant's capacity while fitting within its existing footprint.



Taron filter rental units offer a plug-and-play solution for temporary hydraulic relief.



The Taron filter can produce high-quality effluent with TSS less than 10 mg/L.

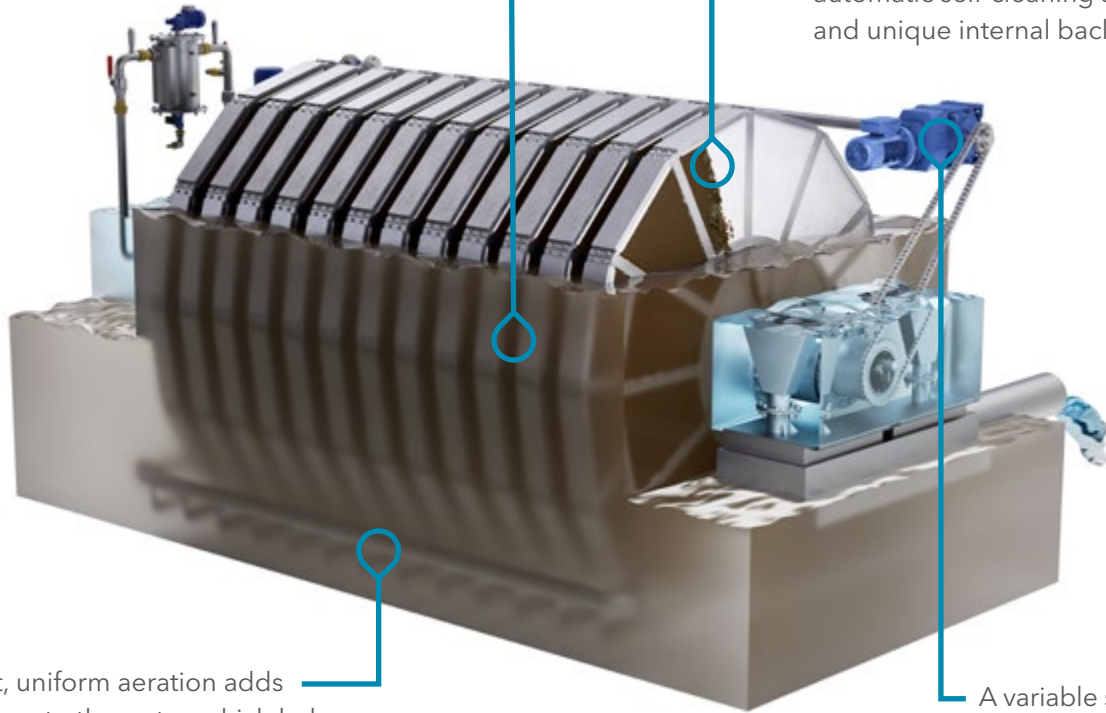
## The Taron activated sludge filter offers:

- The capacity to meet effluent requirements under higher flow rates, either seasonally or permanently
- A compact footprint: up to 60% smaller than traditional secondary clarifiers
- Plant retrofits with no excavation and limited civil works
- Reliable solids reduction: filtrate TSS less than 10 mg/L
- Low power consumption: less than 0.1 kWh/m<sup>3</sup>
- Operational simplicity, to reduce training and maintenance requirements

# How it works

A sludge cake layer builds up on rotating, partially submerged discs with micro mesh panels, creating a one-of-a-kind filter for the activated sludge.

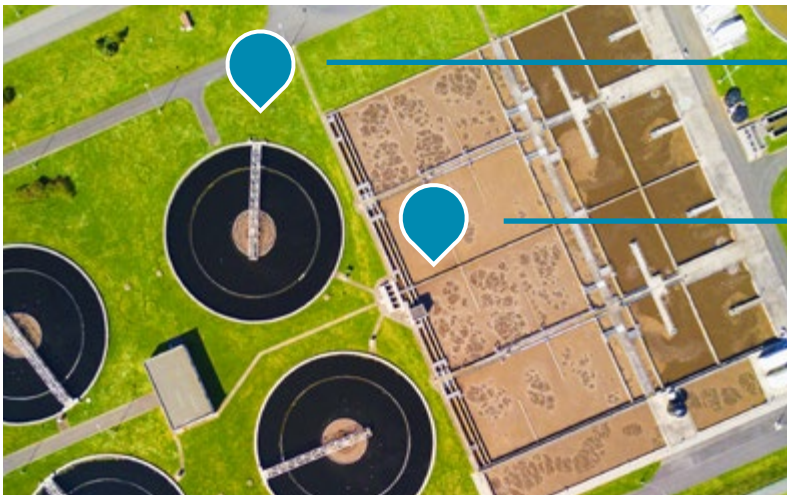
Continuous filtrate backwash from inside the discs removes the sludge cake layer after each rotation to maintain flow. The backwash system includes a backwash pump, an automatic self-cleaning strainer, and unique internal backwash arms.



Efficient, uniform aeration adds turbulence to the water, which helps maintain the optimum thickness of the sludge cake layer.

A variable speed motor with a chain drive controls the rotational speed of the discs and allows easy stand-by operation.

# Choose from two installation options



The bolt-on design houses the filter in an external tank in parallel with existing clarifiers.

With the integrated design, the filter is installed inside the biological treatment tank.

# Discover the convenience of the Taron filter

- Plug-and-play engineered systems are available. That means your plant will experience no operational downtime during construction and integration. In addition, you have the option to rent a Taron filter for temporary hydraulic load requirements.
- The easy stand-by operation of the Taron filter provides resilience to varying hydraulic loads.
- Taron filter operation is readily integrated into your wastewater treatment process control system.



Xylem Avensor, our cloud-based smart monitoring platform, provides remote connectivity to allow integration of Taron filter alarms, real-time operating data, and analytical insights with your plant's SCADA system.



The Taron filter's micro mesh panels provide long life, due to robust polyester material and an integrated backwash system.

## Application range overview

**Disc diameter:** 2.2 m

**Model sizes:** 2 to 12 discs (models 2202 to 2212)

**Filtrate capacity:** Up to 80 m<sup>3</sup>/h per filter, depending on model size

**MLSS concentration:** 4 000 to 12 000 mg/L

