



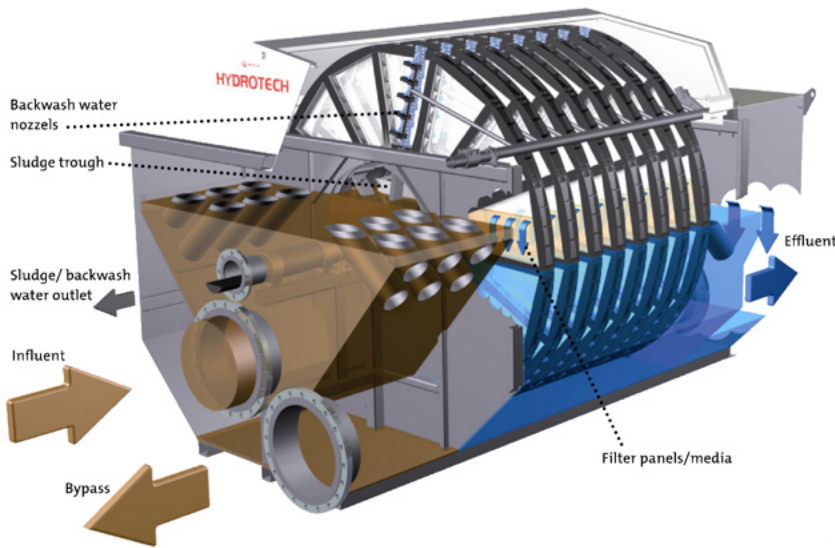
# Hydrotech Discfilter Pure Performance

**WATER TECHNOLOGIES**

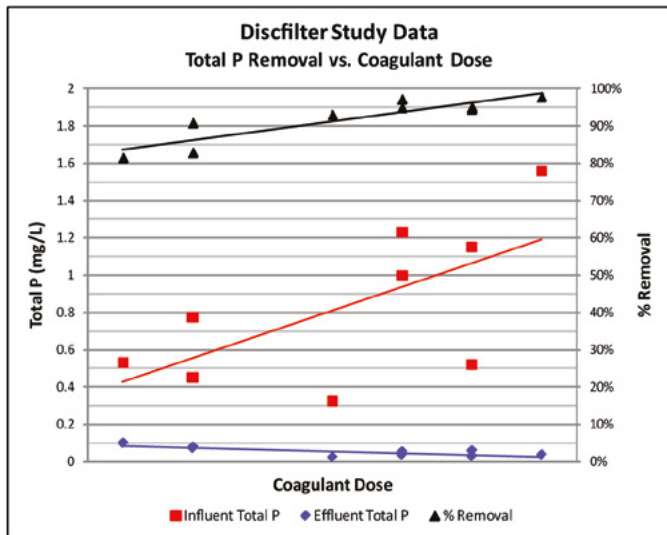
# The Discfilter Process

The Hydrotech Discfilter provides proven experience for today's demanding wastewater treatment applications through an efficient, yet easy-to-operate design. Influent flows by gravity into the center drum and then passes through the filter media mounted on both sides of the discs. The solids are retained on the media within the discs. Only purified water flows to the collection tank. The inside-out flow path prevents solids accumulation in the tank.

As solids collect on the inside of the media the influent water level rises. Maximum head loss through the media is <12 inches. The inlet water level is measured and the control system automatically initiates backwashing. The filtered effluent is pumped to the backwash spray nozzles, washing solids into the sludge trough as the discs rotate. The backwash water is typically 1% to 2% of the total flow to the filter, while the sludge return is typically <1%. Filtration is continuously maintained, even during backwash.



# Advanced Treatment



## Hydrotech Advantages

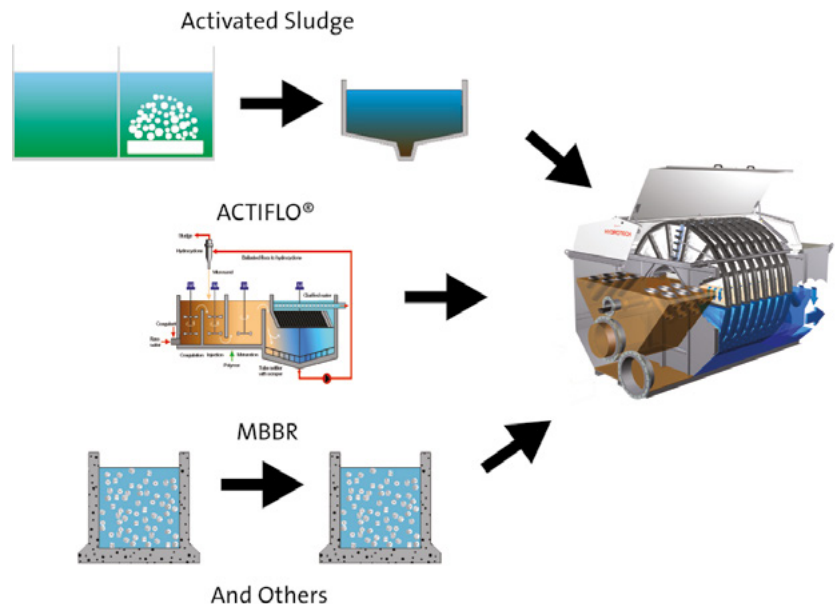
- Unmatched experience and performance
- Innovation: patented designs offer real savings
- Robust construction with 304 or 316 S316L
- Proven media: durable and chemically resistant
- Meets or exceeds Title 22 requirements at hydraulic loading rates up to and above 6 gpm/ft<sup>2</sup>
- Consistently produces high quality effluent despite high-solids loadings and upset conditions
- Ideal for “retro-fit” projects in existing basins
- Compact design requires far less space
- Simplified control system and lower installation costs than other filtration technologies
- Improved backwash efficiency reduces operating costs and carbon footprint
- Veolia has pioneered use of the discfilter in combination with coagulation/ flocculation as a cost effective means to reduce effluent phosphorus to < 0.1 mg/L

## Proven Performance

The compact Hydrotech Discfilter is used in a wide range of applications:

- Effluent polishing of wastewater
- Phosphorus removal
- Water reuse (Title 22 approved)
- Retrofit/replacement of existing systems
- CSO, SSO, and primary treatment
- Process water filtration
- Membrane pre-treatment

The Hydrotech Discfilter is ideal for treating effluent from a variety of processes (e.g., activated sludge, fixed film, etc.). Veolia offers full-scale pilots to demonstrate performance.



## Designed To Save

Hydrotech systems enable customers to achieve performance with lower cost and straight-forward maintenance. Hydrotech Discfilters provide a large filter area in a small footprint; up to 75% smaller than sand filters and up to 20% smaller than other cloth filters.

The discfilter is delivered as an assembled unit. Other cloth filters require substantial labor for site assembly and a larger footprint for backwash pumps and valves. The discfilter

eliminates these concerns and costs. Installation is as simple as off-loading from a trailer, anchoring the unit, and completing mechanical and electrical connections.

O&M is simple and reduces operating costs. Fabrication is in 304 or 316 SSSL for trouble-free operation in the toughest conditions. Durable filter media provides long life without frequent and costly replacement. The efficient backwash process reduces energy costs.

## Progressive Innovation

The Hydrotech Discfilter is available in a variety of models:

### 1700 series

- Up to 8 discs
- Up to 1 MGD per unit in effluent polishing
- Ideal for small scale projects

### 2200 series

- Up to 24 discs
- Up to 9 MGD per unit in effluent polishing
- Excellent for a wide range of project sizes

### 2600 series

- Up to 30 discs for 15 MGD per unit in effluent polishing
- Provides highest filtration area and most compact footprint
- High flow rates maximize treatment in a given footprint
- Energy reduced 15% and footprint by 25%
- User-friendly design for minimal maintenance

