

# SCHREIBER FuzzyFilter

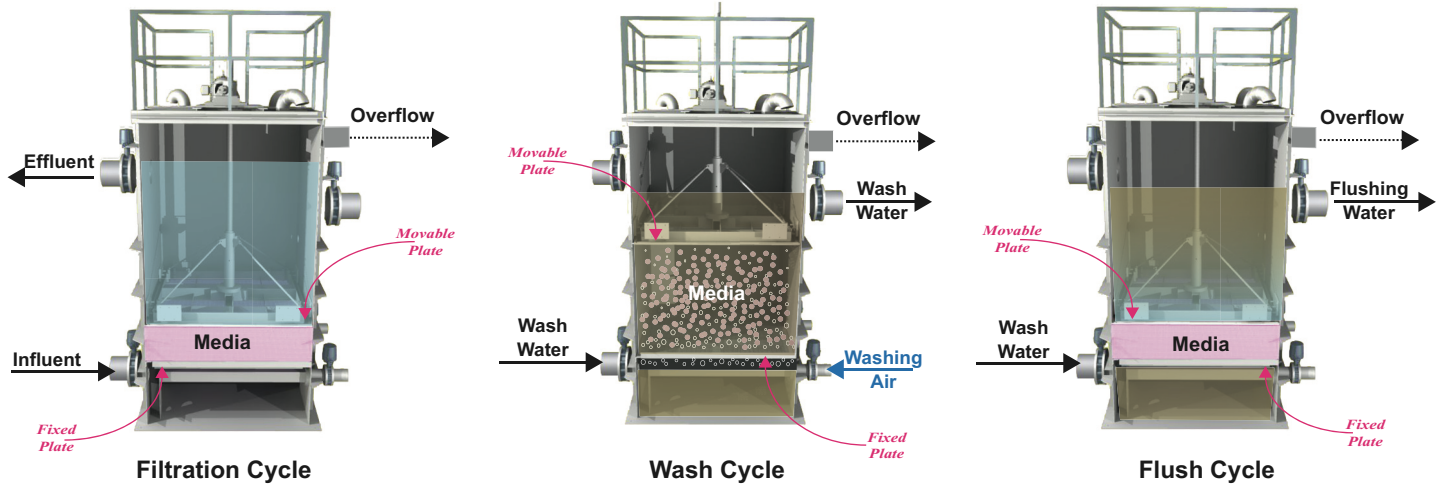
TITLE 22  
ACCEPTED  
REUSE



A unique innovative system for filtration rates of 40 gpm/ft<sup>2</sup>. Acceptable for water reuse under Title 22.

The Schreiber *Fuzzy Filter* is an innovative and cost effective compressible media filter for water and wastewater treatment systems. The *Fuzzy Filter* system is compact, modular, and easily adaptable for numerous applications. Operating in an upflow design, the Fuzzy Filter achieves an exceptionally high rate of solids removal through the use of compressible synthetic fiber spheres. The low density and high porosity of the media result in more solids captured per volume of media. Because the filter media is compressible, the porosity of the filter bed can be altered to suit influent characteristics. The filter media also represents a departure from conventional filter media in that the fluids to be filtered flow through the media as opposed to flowing around the media as in sand and anthracite filters. These innovative features permit dramatically higher hydraulic loadings of 40 GPM/ft<sup>2</sup>. Other filtration systems are typically limited to loadings of only 2 to 6 GPM/ft<sup>2</sup>.

The *Fuzzy Filter* utilizes air scouring during the wash cycle to clean the media. Influent can be used for wash water, which enters the filter while an external blower supplies air to diffusers located in the bottom of the filter to violently agitate the media. The media, which is retained between two perforated plates, is subjected to vigorous air scouring to free captured solids. Liberated solids continuously exit the filter with the wash water passing through the vessel. After the washing cycle, the media is returned to its compressed state and filtration is resumed.



## PILOT TESTING

Schreiber maintains *Fuzzy Filter* pilot units for testing and demonstration purposes. All units are trailer mounted with complete automatic controls and data logging capability.

## VALIDATION

Accepted for California Water Recycling Criteria (Title 22). Several installations are in place and operational (references upon request)

## SIZES

The Fuzzy Filter is available in 18", 2', 3', 4', 5', 6', 7', & 8' square units. Correspondingly, the Fuzzy Filter handles flows ranging from 0.13 MGD (18" filter) to 3.69 MGD (8' filter) at a loading rate of 40 GPM/ft<sup>2</sup>. In addition to upflow filters, the Fuzzy Filter is also available in downflow configurations, in both gravity and pressure operation.

### FEATURES

- Low operating costs
- Ease of installation
- 80% space savings
- Completely enclosed structure
- Low wash water usage (1-2%)
- Influent can be used for wash water
- High solids storage capacity
- Adjustable porosity via media bed compression
- No media loss
- 10+ year media life
- Effective down to 4 microns

### TITLE 22 ATTRIBUTES

- High flow rate of 40 GPM/ft<sup>2</sup>
- Effluent 2 NTU or less

### APPLICATIONS

- Tertiary treatment
- Pre-filtration for reverse osmosis
- Cooling tower water
- Water reclamation/reuse
- Reclaimed water from food processing
- Pulp and paper process water
- Wet weather flows (CSO/SSO)
- Membrane Backwash Water

