A unique innovative system for filtration rates of 40 gpm/ft² and up.
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. The Fuzzy Filter, operating in an upflow design, 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$^2$ and greater. Other filtration systems are typically limited to loadings of only 2 to 6 GPM/ft$^2$.

The Fuzzy Filter utilizes air scouring during the wash cycle to clean the media. Influent continues to enter the filter (filtered water is not necessary for washing) while an external blower supplies air to the 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).

**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$^2$. In addition to upflow filters, the Fuzzy Filter is also available in downflow configurations, in both gravity and pressure operation.

**FEATURES**

- High flow rate (40 GPM/ft$^2$ and greater)
- Low operating costs
- Ease of installation
- Dramatic space savings
- Completely enclosed structure
- Low wash water usage (1-2%)
- High solids storage capacity
- Flexibility through media bed compression
- No media loss
- Media life in excess of 10 years

**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