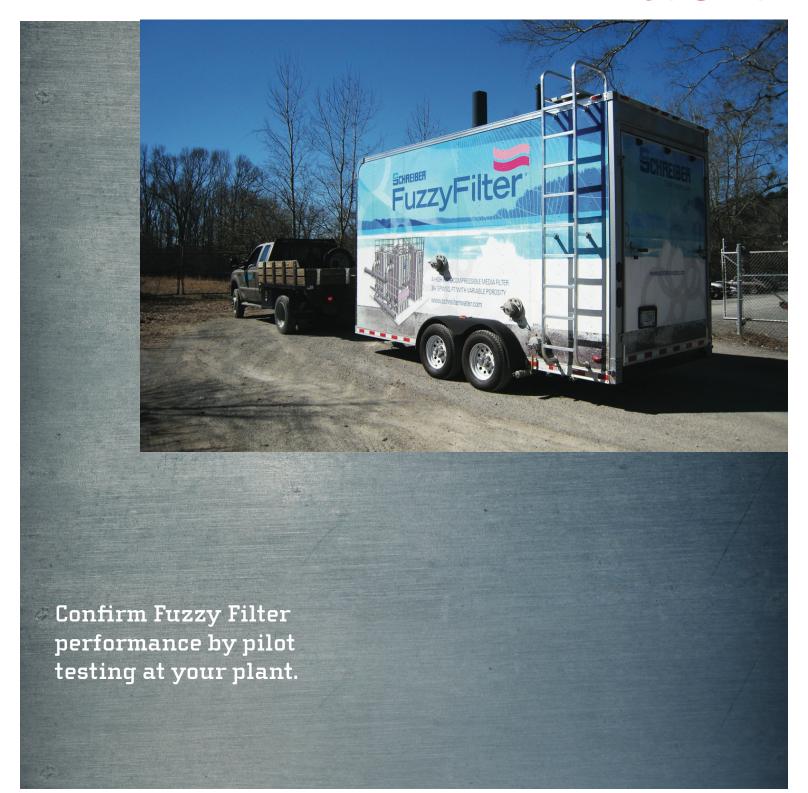


## **Pilot Unit**





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* operates in an upflow or downflow design and achieves an

exceptionally high rate of solids removal through the use of synthetic fiber spheres. The low density and high porosity of the media results 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 by mechanically compressing the media. 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 / ft² of flow and greater. Granular filtration systems are typically limited to loadings of only 2 to 6 gpm / ft²

## PILOT TESTING

The purpose of doing a pilot study is to validate filter performance and to optimize the media compression and flow rate values for peak efficiency. The results can then be used as the design parameters for a full-scale installation.

## PILOT TRAILERS

Schreiber has 3 fully automated pilot Fuzzy Filter trailers available for rental.

- Pilot trailer PF1 offers onboard turbidity, TSS and particle distribution analysis of influent and effluent streams during testing.
- Trailers FX02 and FX13 provide turbidity analysis of influent and effluent streams.

Most often, turbidity data is adequate. All data is automatically logged for downloading into a formal pilot test report which contains test procedure description, data graphs and charts, raw data table and filter recommendations.

## RENTAL

Pilot unit rentals are typically for a two week test. A minimum two week advance notice is required. Availability is subject to previous rental commitments and the field technician's schedule for set-up, training and 3 day operation. The second week of operation provides an opportunity for plant personnel to operate the system and become comfortable with compressible media technology while validating performance capabilities of the Fuzzy Filter at various plant influent conditions and media compression settings.



The pilot filter cell is 18" square and has a media depth of 30" without compression. The vessel and internals are constructed of 304 stainless steel. The area of the filter media face is 2.25 ft² and the flow at 30 gpm / ft² is 68 gpm. In some situations the flow may be as high as 40 gpm / ft² or influent flow of 90 gpm.

