

Sessil Trickling Filter

US Gypsum, Oakfield, NY



Left: Sessil trickling filter at USG with custom colored paneling to match the existing facility. **Above:** Motorized galvanized rotary distributor for even distribution of the wastewater onto the Sessil media.

Sessil Trickling Filter Information

Media: Sessil 150 with 45 ft²/ft³ surface area

Dimensions: 52 ft diameter x 21 ft bed depth, 42,900ft³

Design Conditions: *Recycle Paper Mill*

Forward Flow: 350,000 gpd

Recycle Flow: 850 gpm

Influent BOD: 1,400 mg/l

Influent TSS: 400 mg/l

% BOD Removal: 80% (minimum 50% total BOD removal)

Upstream equipment:

DAF, Clarifier

Downstream equipment:

Aeration Tank and Clarifiers

Year Built: 2004

Notes: Sessil trickling filter was constructed to replace existing shallow random media trickling filter to reduce heat loss. Early testing indicated the Sessil trickling filter was performing as designed.

Engineer: Veolia Water North America



Four 2-speed tubeaxial fans were provided to ensure proper airflow was maintained through the Sessil media bed.