

# SESSIL® Trickleing Filter Media

## Vertical Plastic Strip Media



Sessil® Trickleing Filter Media was specifically designed for trickleing filter applications over 20 years ago and is in service today in more than 100 trickleing filters worldwide. Sessil consists of polyethylene strips attached to "ironwood" boards. Sessil's proven vertical design makes it ideal for treating high strength industrial wastewaters as well as domestic wastewater. Industrial installations include food processing, beverage, pulp and paper, chemical and pharmaceutical plants.

### Economic and Operating Advantages

- Low operating costs with minimal energy requirements and maintenance
- Reduces size and energy requirements of down stream biological systems
- Improved process control and stability
- Lower sludge production than other aerobic processes
- Lowers installation and construction costs for expansions and new WWTP's



### Benefits of Sessil® Trickleing Filter Media

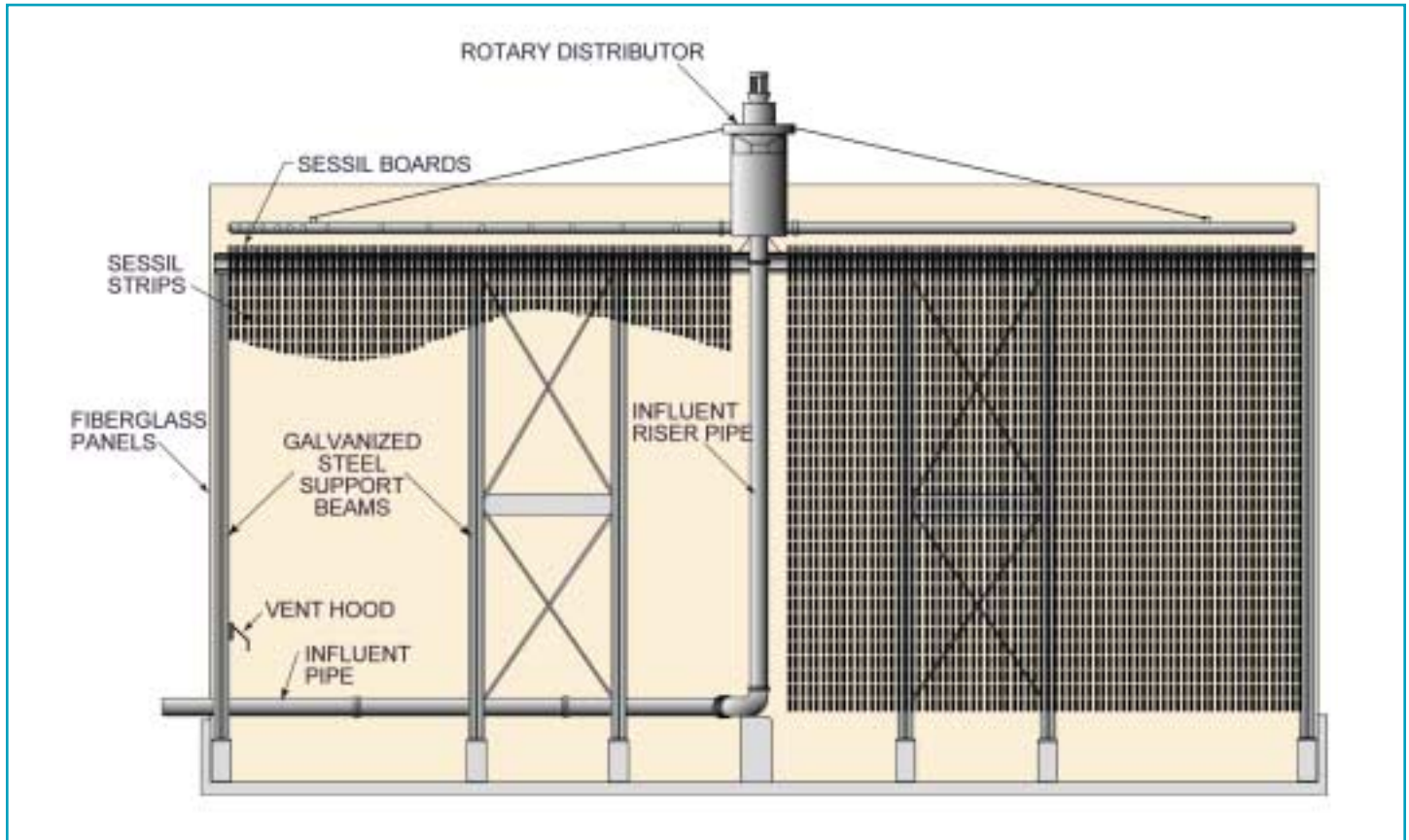
- No interfaces to collect solids which can cause odors and clogging
- UV Stabilized Polyethylene for long life
- No gluing or adhesives required
- Media hangers provide a secure deck for accessing top of the media, grating not required
- Lower installation costs, only one cut required to fit corner areas (compare to PVC modular media which requires cutting for each layer)
- Compresses to ship more economically and reduce onsite storage area requirements
- Sessil weighing systems are available to monitor the operating weight for optimizing performance
- Ideal for bed depths from 10 to 30 ft
- Available in various surface areas from 30 to 60 ft<sup>2</sup> / ft<sup>3</sup>

In addition to Sessil®, NSW provides a complete line of trickleing filter media including Dura-Pac PVC sheet media and Bio-Pac SF#30 random media. NSW can help in determining the best media and system for your application. NSW offers process design and engineering, product support and specifications, construction supervision, operator training, and post-installation service. Please contact NSW for prompt assistance.



## Typical SESSIL® Trickling Filter

NSW's SESSIL vertical plastic strip-type media is attached to wooden support boards that are installed atop the bio-tower. Wooden boards supplied by NSW are 1-5/8" x 3-1/8" x 7'-4" long. Once installed, the boards form a continuous platform across the top of the tower creating a stable footpath for operator access to the rotary distributor. Each 1-1/8" wide media strip hangs from the wooden boards at the top of the tower to a depth of up to 30 feet. Typical installations incorporate a SESSIL trickling filter system to remove 50-80% of the soluble BOD, followed by an activated sludge process.



## SESSIL® Weighing System

A unique feature of the SESSIL design is the ability to weigh a specific volume of media. This feature allows operators to control the thickness of the bio film and adjust the speed of the rotary distributor accordingly. The weighing system can alert operators to sudden weight changes and thereby avoid upsets and operational problems. Shown here is a single board weighing system. Systems designed to weigh 14 boards at a time are also available.

