# **Biofilter** Odor Control Units

The bioscrubber tower is a vertically oriented biofilter filled with an inorganic media. The filter' s unique design treats odors in areas where space is at a premium or where VOCs are present.

Contaminated air enters the bioscrubber tower and flows either upward or downward (depending on the design) through the media along with a recirculating water flow. The recirculation water maintained in the bioscrubber tower allows for optimal control of pH, nutrient levels and biofilm thickness. In some applications, an intermittent, single-pass irrigation system can be supplied, eliminating the need for a recirculation pump.

## Standard Features

Cost- effective odor control solutions with these products:

- Built-in-Place (BIP) Biofilter Systems for larger air flow rate applications
- Modular Package Biofilters for small air flow rate applications
- Bioscrubber Towers for space-limited applications

### What is a Biofilter?

BIOFILTER ODOR OVAL BIOFILTER ODOR PENNOVAL CONTROL AND RENOVAL Biofilters use naturally occurring microorganisms to treat air containing such odorous substances as reduced sulfur compounds and volatile organic compounds (VOCs). Microorganisms reside on the surface of the biofilter media and only require irrigation water and small quantities of nutrient (for some applications). Microorganisms consume these odorous contaminants for energy and, in the process, cleanse the air.



## United International HYDRO ENGINEERING TECHNOLOGIES





DIAMETER IN INCHES [MM]	HEIGHT IN INCHES [MM]	FLOW RANGE IN CFM [M3/HR]
60 [1524]	180 [4572]	220-370 [370-630]
72 [1829]	180 [4572]	320-530 [540-900]
84 [2133]	180 [4572]	430-720 [730-1,220]
96 [2438]	180 [4572]	560-940 [950-1,600]
108 [2743]	180 [4572]	715-1,190 [1,200-2,000]
120 [3048]	180 [4572]	880-1,470 [1,500-2,500]
132 [3352]	180 [4572]	1,070-1,780 [1,800-3,000]
144 [3657]	180 [4572]	1,270-2,120 [2,160-3,600]

• Vessels are made of HD Polyethylene, FRP, or Carbon Steel according to client requirements • All vessels can be provided in carbon steel lined with Plasite 7159 or 316L stainless steel. Piping is available in PVC, CPVC FRP, and 316L stainless steel.