



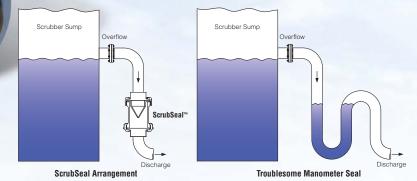
# ...Feature Innovative Engineering to Save Money and Increase Scrubber Overflow Reliability

New Bionomic ScrubSeal Vacuum Overflow Valves are the perfect overflow and vacuum seal solution to replace troublesome manometer water seal legs on scrubber sumps.

Designed to eliminate unreliable, cumbersome manometer piping, and the headache of maintaining a liquid filled line, ScrubSeal acts as a check valve to allow drainage of scrubber sump liquid through the overflow valve while maintaining required vessel vacuum during normal non-flow conditions.

As an added safety feature, ScrubSeal prevents unrestricted rise of the liquid level within the vessel, a situation that can cause structural damage from excessive hydrostatic pressure – resulting in potential costly damage

to downstream equipment, or product contamination due to scrubbing liquid passing through the horizontal gas inlet.



# ...Offer a Number of Other Important Features and Benefits

#### Ease of Installation

ScrubSeal Valves are designed for use in either vertical or horizontal pipes and inline or end of pipe mounting.

## **Wide Range of Sizes**

ScrubSeal is available in five sizes from 3/4'' - 4''' to accommodate a wide range of overflow rates from fractional to over 500 gallons per minute.

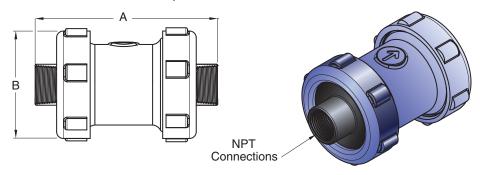
#### **Choice of Construction Materials**

ScrubSeal Valve bodies are manufactured in corrosion-resistant polypropylene (PP), polyvinyl chloride (PVC), or chlorinated polyvinyl chloride (CPVC) depending upon size with durable, flexible EPDM internal elements to withstand many cycles of use.

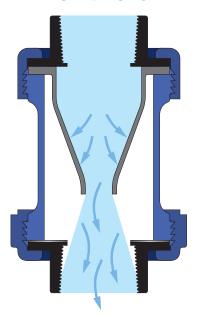
# **ScrubSeal™ Principal of Operation:**

ScrubSeal Valves combine a hard bodied exterior with a simple, flexible one-piece internal element with no mechanical moving parts that can seize, break down or require maintenance. The combination of the straight through valve configuration and flexible internal element enables unrestricted high liquid flow rates at extremely low head pressures. The rugged valves are rated to positively seal and maintain a vacuum condition of up to minus 80" of water column within the scrubber vessel, but during normal non-flow conditions, positive vacuum line sealing is accomplished at less than 1-1/2" of water vacuum.

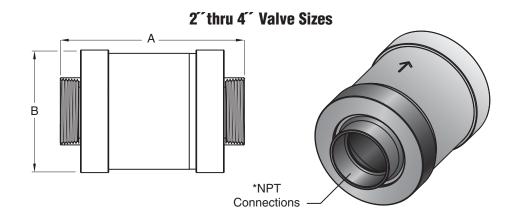
## 3/4" and 1" Valve Sizes



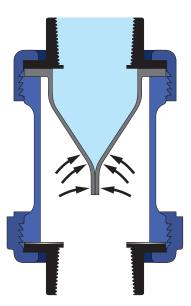
### **How It Works**



ScrubSeal™ Opens When Liquid Enters Overflow Line for Drainage



Nominal Size	Dimension Referen	nce (inches ± 1/16") B	Approx. Wt. (lbs)
3/4″	6 3/4″	4 5/16″	1
1″	6 3/4"	4 5/16″	1
2″	8 1/8″	5″	3
3″	8 3/16″	5″	3
4″	13 3/4″	9 1/8″	13 1/2



Under Vacuum ScrubSeal™ Closes to Prevent Air Entrance and Internal Vacuum Loss

#### Note

- 1. Valves designed for gravity flow line pressures
- For horizontal valve installations, flow arrow must be located on valve top for proper installation
- Maximum temperature rating for ScrubSeal Valves with PVC body is 140°F, PP body is 190°, and CPVC body is 212°
- \*4" valve also available with socket connections

