# 2050-450-IP Odor control systems



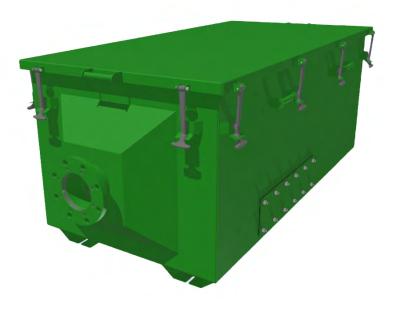
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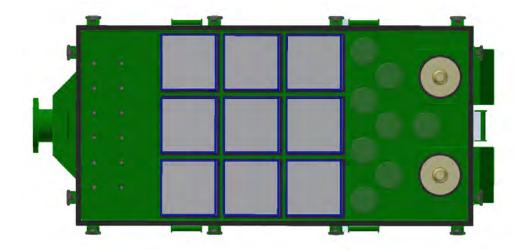
## **2050-450-IP** ODOR CONTROL SYSTEMS

The 2050-450-IP is a combined odor control vent valve, with the additional feature of Wager's highly effective vertical vent check valve. This system is designed specifically in areas where lift stations or gravity lines are subject to flooding.

The 2050-450-IP is constructed from aluminum, and is epoxy coated grass green so that it fits nicely into the surrounding environment. It has 4 louvered vents to allow for maximum air flow of deodorized air. H2S gas is directed thru eight canisters containing 50 lbs (23kg, 1.5 cu.ft) of odor controlling media. The media is an engineered product, designed to chemically absorb the H2S gas and change it to a non-toxic compound. Our custom Power-4 permanganate is also included as a polisher. A mist eliminator pad is incorporated into the unit to prevent exiting moisture from damaging the media bed.

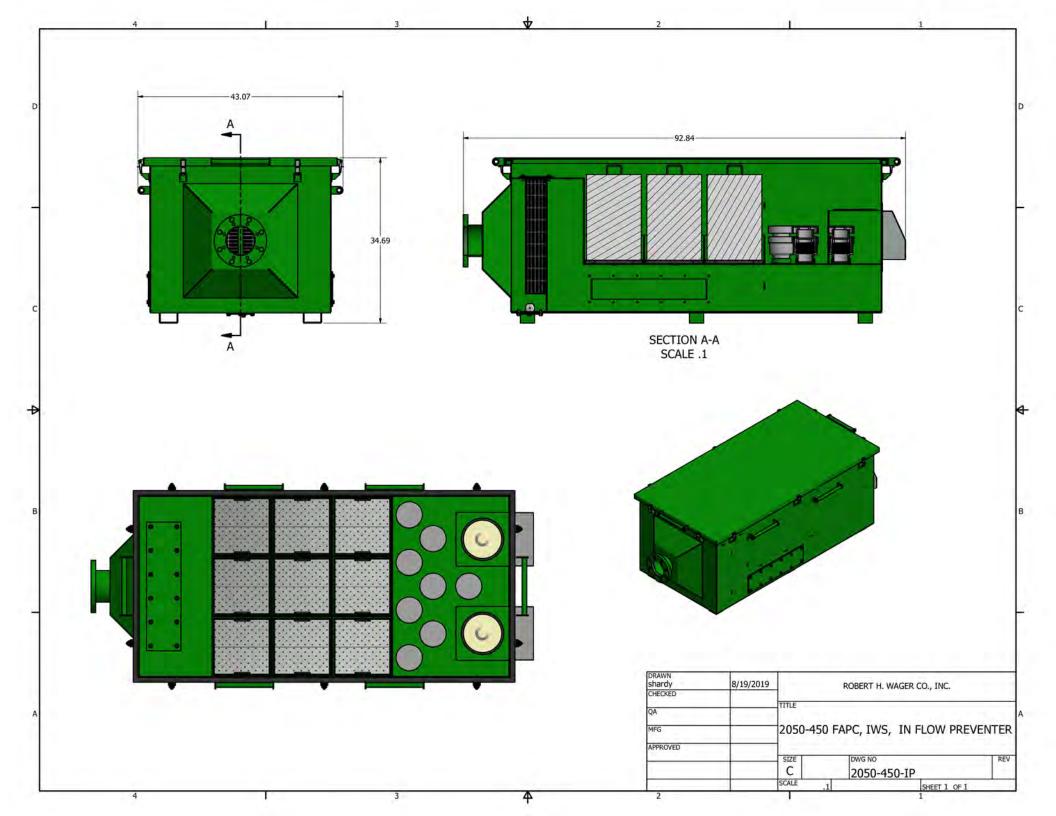
During a flood event, our disc style float located just outside of the media chamber will rise to a buna seat, preventing water and debris from entering the inside of the system and destroying the media.





SPE	CIFICATIONS					
2050-450-IP	MEDIA CAPACITY Est. 450 LBS. (204kg)	9 CANISTER	8 INTAKE VALVES	1 MIST PADS	2 VENT CHECK VALVES	EST CFM. 650-700





### **2050-450-IP** SPECIFICATIONS

**A.** This specification defines the requirements for a Wager 2050-450-IP Vent Scrubber 2050FAPC-IWS-450-IP manufactured by Wager Company in Rural Hall, NC.

**B**. The 2050FAPC-IWS-450-IP consists of dry-scrubbing media contained in a fabricated aluminum plate housing, powder coated, grass green with a 4", 6" or 8" inlet.

**C.** The 2050FAPC-IWS-450-IP shall contain 450 lbs of dry-scrubbing media that is engineered for the removal of H2S gas. The media is contained in a corrugated plastic container that is 11" x 11" in size.

**D.** The airflow shall be designed for passive applications. The configuration shall be arranged so that the contaminated air shall flow from the bottom flange and be forced upward through the media bed and discharged through ventilated openings.

E. The vent check intake contains 316ss, 1/4 x 1/4 mesh screen, a disc style float, buna seat, 316 guide rod.

**F.** The 2050FAPC-IWS-450-IP contains EIGHT air admittance valves. They intake directly into the lines without any restrictions from the unit's media bed. This assures continued airflow during pumping sequences needed with air release valves, and with a vacuum sewer system where outside fresh air is required for system operation.

#### G. All components of the 2050FAPC-IWS-450-IP shall include:

- 1. A fabricated aluminum plate body, powder coated grass green
- 2. 450 lbs of odor controlling media engineered in pellet form
- 3. 4", 6" or 8" flanged connection Optional metric flange
- 4. Disposable media corrugated plastic insert
- 5. (2) Polyethylene disc style float
- H. Vent Scrubber Material
  - 1. Fabricated Aluminum plate
  - 2. Corrugated plastic canister measuring 11 1/2" x 11 1/2 "
  - 3. EPDM T handle Rubber latches
  - 4. 450 lbs of odor controlling media for removal of H2S gas and topped with a layer of POWER-4 Permanganate.
  - 5. 4", 6", or 8" Flanged Connection with 7.5" (191mm) bolt circle Optional metric flange
  - 6. Plastic vent scrubbers that contain activated alumina media or carbon will not be accepted.
  - 7. Media must be Non-Hazardous before and after it is spent.
- I. Media Specification
  - 1. Moisture Content: 35% Max
  - 2. Crush Strength: 35%-70% Max
  - 3. Abrasion: 4.5% Max
  - 4. Pellet Diameter: 1/16" 1/4" (1.5mm-6.5mm)

J. Wager media only will be accepted due to the high level of capacity. No equals will be accepted. Carbon will not be accepted.

- K. Only UL certified media will be accepted in Wager's vent scrubber.
- L. If other media's are used in this unit, it must be designed to be 25% larger with a minimum of 25% additional media.
- **M.** The general contractor is responsible for all design cost changes, engineer review time, and testing verification.
- N. Analytical Services:

1. Samples of the media may be analyzed in order to predict the life of the system media at Wager's expense.

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#### **O.** Built in Water Separator / mist eliminator

- 1. The body of the water separator is constructed from 50-52 H32 aluminum plate and is epoxy coated for protection from harsh environments.
- 2. The overall measurements of the unit are 26.25" x 31.25" x 35"
- 3. 10" flanged threaded aluminum connection provided for attaching to the 2050-1350
- 4. A Kerick Valve Assembly with float allows for excess accumulated water to be expelled.
- 5. An inlet stem provides an exit for accumulated moisture from the air release valve.
- 6. A Nitrile gasket allows for a tight fit of the aluminum plate cover.

#### P. Mist Eliminators

- 1. Highest collection efficiency of ANY mesh-type media: 99+% @ 1 μm.
- 2. Composite pads of various mesh styles allow for optimization of efficiency, pressure drop, and pluggage resistance.
- 3. Able to handle the widest range of gas velocities and contaminant levels.
- 4. High void spaces (94-97%) and the largest fiber diameters contribute to the highest resistance to fouling.
- 5. Lower pressure drops than traditional knitted mesh.
- 6. Custom fabrication to conform to any Wager 2050 series.
- 7. The media is cleanable & reusable for extended service life in the harshest environments.
- 8. Wide range of materials of construction available, including polypropylene, PVDF, ETFE and PFA, to meet any level of temperature and corrosion requirements.



## **2050-450-IP** INSTALLATION GUIDE



1. Remove media canisters. Ensure all of the original plastic wrap is removed from canisters. Media is in pellet form and should move freely to allow air to vent through. Check media pellets to ensure they are NOT wet.



2. Reinstall media canisters ensuring they are flush with the valve's inner chamber.



**3.** Place unit in desire location. Bolt flange to vent stack.



4. Secure the lid with the four3. EPDM T handle Rubber latches



\* 2050-450 PICTURED. MODEL 2050-450-IP FOLLOWS THE SAME STEPS.

- Pour a concrete pad with bolts in place for slated feet on the unit.
- If preferred, a level crush stone pad may be used in lieu of concrete.
- Set the 450-IP on pad or stone, and bolt it down.
- Remove media from the unit.
- If the 450-IP is being used in conjunction with an ARV, get a complete blowout of the ARV so that there is no big slug of air through the media bed.
- Unwrap the media canisters and place in the unit.
- Reinstall the 450-IP cover, and lock down.



AAU-450-SET-IP	2050-450-IP BODY			
AAU450-LID-IP	2050-450-IP COVER			
VRV-2050	2050 VACUUM RELIEF VALVE			
O C U - 2 0 5 0 - 5 0	50 LB. CARTRIDGE ODOR CONTROL MEDIA			
233-GASKET-3	GASKET, 3.0 "I.D.x 3.5" O.D.			
SV- LATCH	UNDER CENTER DRAW LATCH			
2500 ACFM	MIST ELIMINATOR PAD			
A A U - 50 - 7 - G	2050 DOOR GASKET			
WS-DRAIN-ASSY	WATER SEPARATOR VALVE			
FLT-7.5P-D	7.5" FLOAT POLY DISC			
1500-6-G	GASKET 6" 1500 SERIES			
1500-6-GR	GUIDE ROD, 6" 1500 SERIES			

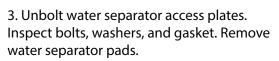


# 2050-450-IP



1. Unlatch and remove lid from unit. Visually inspect the media canisters and air intake valves.







5. With the water separator pad out, inspect float drain assembly. Remove any debris and ensure drain is clean.



2. Inspect the media. Make sure it is dry. Shake or stir media pellets inside canisters every 3-6 months for maximum media life.



4. Wash water separator pad with hose.



6. Reinstall water separator pads, gaskets, and water separator pad plates back onto the unit. Secure the lid with the EPDM T handle Rubber latches.



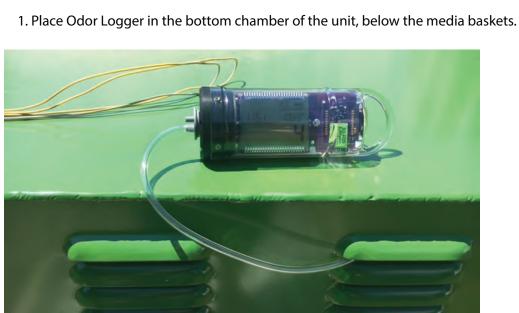
## 2050-450-IP TEST PROCEDURES





(Example of Side flange procedure.)

(Example of bottom flange procedure.)



2. Place Odor Logger on top of media baskets, or place tube through the vent louvers.



## WARRANTY

Wager warranties our full line of Odor Control Valves for a period of twelve (12) months from the date of purchase of our products. This warranty covers the repair or replacement of any faulty manufacture of equipment produced by Wager. No allowance will be granted for repairs or alterations made by the Buyer.

The (1) year warranty does not cover Wager's engineered media. The media is meant to be replaced over time after scrubbing odorous gases from various sewer applications. Replacement of Wager's media with unauthorized material will affect the Limited Warranty of our products.

