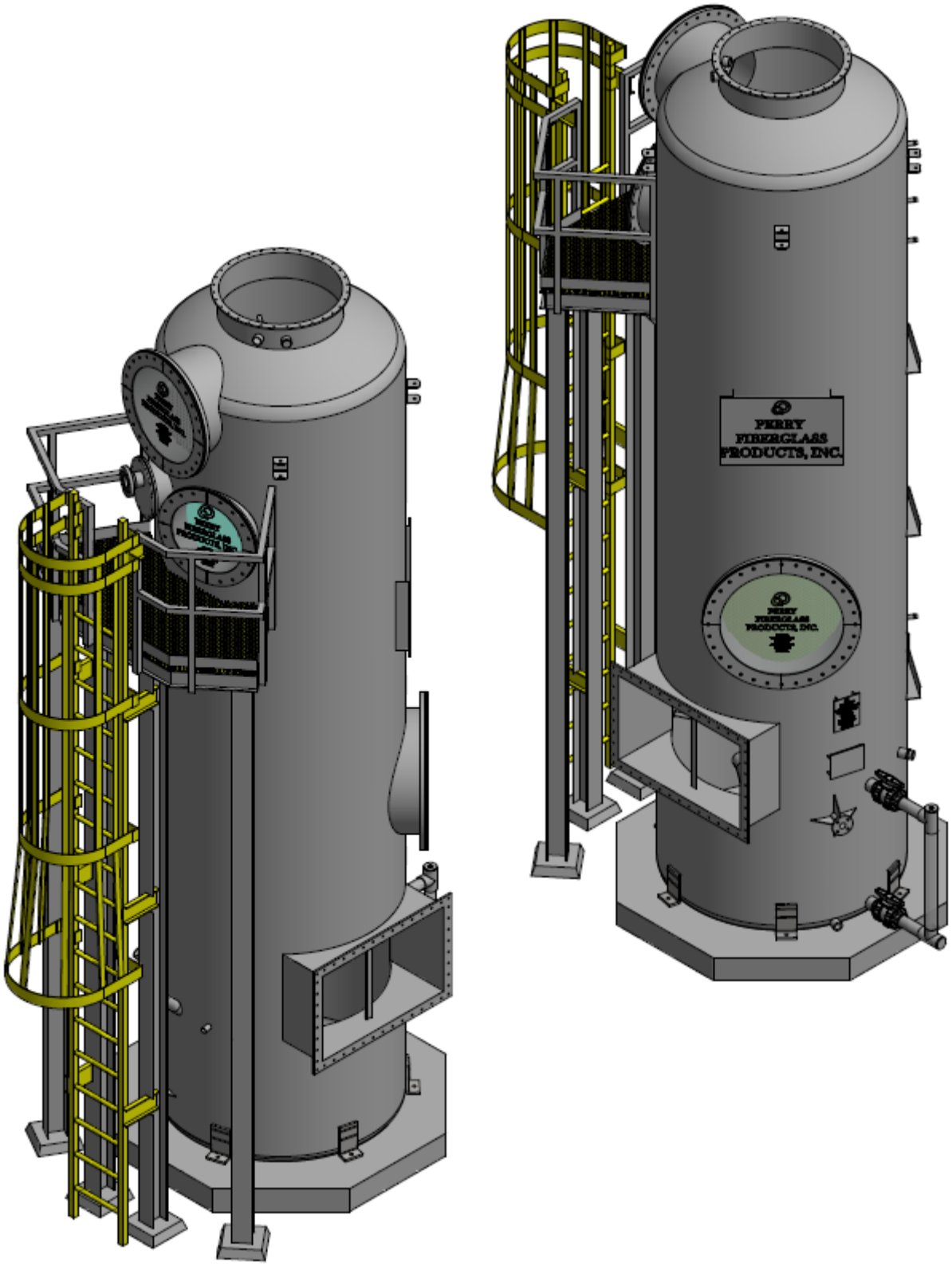
CHEMICAL SCRUBBERS

APOLLO, OMEGA AND ODYSSEY SERIES



Perry Fiberglass Products, Inc.

Experts in designing and manufacturing of odor control and air pollution control equipment

5415 Village Drive Rockledge, Florida 32955 / Phone: 321-609-9036 / www.PerryFiberglass.com

Principle of Odor Scrubbers

The principle of a scrubber is to remove impurities out of the gas stream typically by absorption. For example, gas generated at a wastewater treatment plant will require the removal of Ammonia or sulfide compounds. Scrubbers are designed based on the particular contaminants required to be removed. The contaminated gas flows up while recirculating liquid sprays downward into the packed bed. The gases are absorbed by the solubility levels or by chemical reaction. The airborne vapor is then released into the atmosphere or to a further post treatment process.





Perry's scrubbers are one of the most economical and effective means of removing gases, odors and vapor fumes from a wide variety of applications. Each system is individually designed and engineered to meet site specific requirements. A typical scrubber includes the vessel with internals, fan, chemical metering pumps, controls, instrumentation and recirculation pumps.
Perry Fiberglass can integrate a complete package to include all duct, piping, instruments, fan filter enclosure, access ladder and platform, instruments and controls. Units typically range from 12" to 168" diameter.

Odorous Compounds Controlled

H_2S	Aldehydes	NH_3
Amines	Acetic Acids	Ketones

Perry Fiberglass Products, Inc.

Experts in designing and manufacturing of odor control and air pollution control equipment

5415 Village Drive Rockledge, Florida 32955 / Phone: 321-609-9036 / www.PerryFiberglass.com

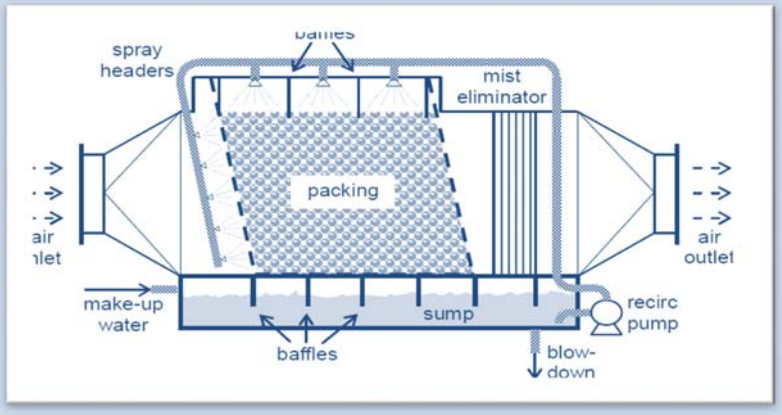
Vessel:

Perry Fiberglass scrubber vessels are designed and fabricated of all type of materials; most common are fiberglass, aluminum and stainless steel. All fiberglass vessels are manufactured per ASTM D-3982, ASTM D-3299 and RTP-1 standards. Most units are one piece construction with no body flanges for ease of installation. Fiberglass units have light blocking UV inhibitors that are applied to prevent UV penetration that can aid in potential biological fouling. Each vessel is designed with site specific seismic and wind consideration.

Packing Media:

Perry Fiberglass provides packing media to match the specific application of the service intended. Most media is random dump type polypropylene that has high mass transfer efficiency, excellent chemical resistance, and low potential for biological or chemical scale fouling.





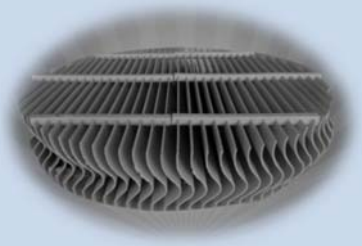
Scrubber Configurations:

- Counter-Current Vertical Flow (APOLLO Series)
- Cross-Current Horizontal Flow (OMEGA Series)
- Bidirectional Flow (ODYSSEY Series)



Liquid Distribution:

Perry Fiberglass provides a high quality engineered complete designed liquid distribution system that assures proper liquid flow and the best available wetting of the packing media. The quantity, size, and configuration along with materials of construction are important for proper design and durability. Materials included; PVC, FRP, CPVC, stainless steel and aluminum.



Demisters/Liquid Entertainment Separators:

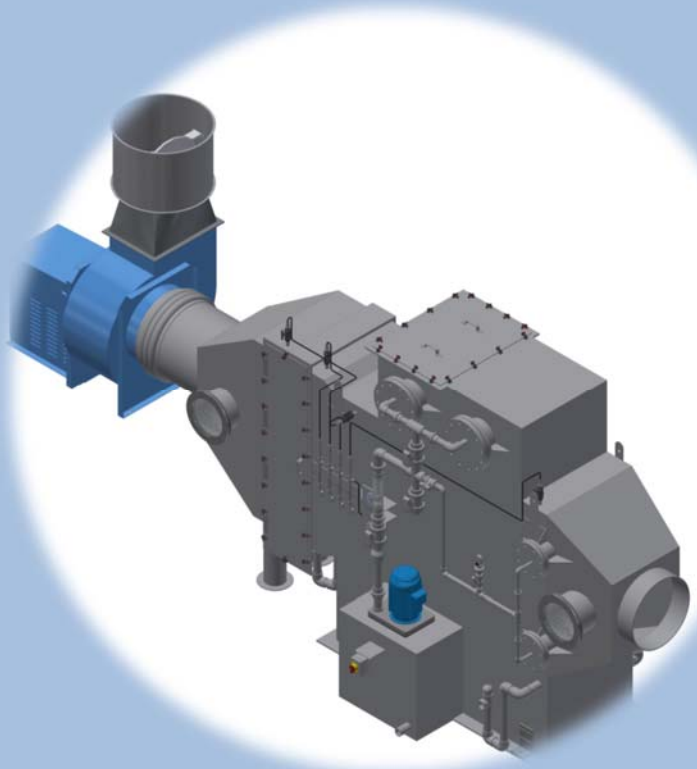
Perry Fiberglas demisters are supplied as required per the application and requirement of the service intended. Units are supplied as mesh pad assemblies or ridged chevron blade type. Both types are very effective in removal of entrained water droplets.

Tower Cleaning/Wash Down:

Perry Fiberglass offers options for effective ways of cleaning the scrubber vessel, header, packing and demister. These normally include use of piped wash down header connections and spray nozzles. These are designed to use recycled cleaning solutions (usually, HCL or sodium hypochlorite) to flush down the vessel and allow cleaning of all internals.







Scrubbers

Degasifiers / Air Strippers

Carbon Adsorbers

Fans

Storage Tanks

Pumps

Metering Pumps

Stacks

Ductwork

Dampers

Enclosures

Control Panels

Instrumentation and Controls

Design

Fabrication

System Integration

Complete Turn-Key Systems

Municipal and Industrial

Perry Fiberglass Products, Inc.

Experts in designing and manufacturing of odor control and air pollution control equipment

5415 Village Drive Rockledge, Florida 32955 / Phone: 321-609-9036 / www.PerryFiberglass.com