

DEGASIFIERS — AIR STRIPPERS



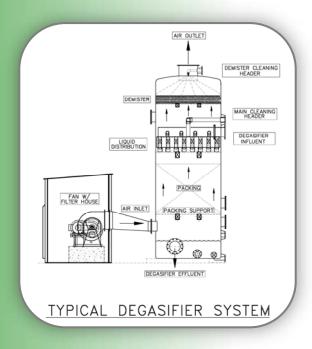
Air Pollution Control — Chemical Process

Water & Wastewater Treatment

Since 1982

Principle of Degasifier

Degasification or desorption is the functional opposite of absorption (scrubbing). However, the same type of equipment is used. Contaminated solution (water) is introduced at the top of a vertical packed column and normally fresh air is introduced at the bottom of the column. As the air is moving up and water moves down (counter-current) there is disassociation of contaminates (VOC's) that release from the water to the air. The liquid leaving the column is cleansed of most contaminants and the airborne contaminate vapor is released to the atmosphere or a further post treatment process.



The Indusco Environmental Services Vertical Packed Bed Degasifier Column is an economical and effective means of Liquid/Air Stripping that can be used for a wide variety of applications. Each system is individually designed and engineered to meet the site specific requirements. A typical degasifier includes the vessel with internals and a fan. Indusco can integrate a complete package to include all duct, piping, instruments, fan filter enclosure, cleaning pump, access ladder with platforms, instruments and controls. Units typically range from 12" diameter to 14' diameter. Liquid flow capacities in a single vessel design range from 5 GPM to 7500 GPM.

TYPICAL TREATMENT APPLICATIONS

- Desalinization
- Groundwater
- **Brackish Water**
- Landfill Leachate
- Reverse Osmosis Industrial Process Water

COMMON COMPOUNDS REMOVED

- PCE
- TCE
- H₂S

- DCA
- BTEX
- CO₂

- C₂H₃CI
- MTBE
- NH₃





Vessel:

Indusco Environmental Degasifier Vessels are designed and fabricated of all type materials; most common are fiberglass, aluminum and stainless steel. All fiberglass vessels are supplied per PS15-69, ASTM 3299 and RPT-1 industry 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:

Indusco Environmental 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.

Packing Support Plates:

Indusco Environmental utilizes Packing Supports of Grating and Gas Injection Plates for even air distribution and maximum water flow drainage. The design provides optimal gas to liquid transfer with the lowest drop in pressure, increasing time between packing replacement or cleaning up to 35%. Materials include stainless steel and fiberglass.

Liquid Distribution:

Indusco Environmental 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 Entrainment Separators:

Indusco Environmental 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:

Indusco Environmental offers options for effective ways of cleaning the degasifier 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
CARBON ABSORBERS
FANS
TANKS
PUMPS
METER PUMPS
STACKS

STACKS
DUCTWORK
DAMPERS
ENCLOSURES

CONTROL PANELS
INSTRUMENTATION AND CONTROLS

DESIGN
FABRICATION
SYSTEM INTERGRATION
COMPLETE TURN KEY SYSTEMS

MUNICIPAL
INDUSTRIAL
PULP AND PAPER
CHEMICAL PROCESS
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METAL FINISHING
FOOD AND BEVERAGE
GOVERNMENT
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