




VERTICAL SCRUBBER FOR PICKEL



A.M.C. Tannery Machines

designs and manufactures air treatment systems and for the abatement and control of hazardous gases.

ADVANTAGES:

- Long-term structural integrity guarantee
- Polypropylene construction for maximum corrosion resistance
- Hydrostatic test performed at factory
- Random or structural packing bed type selected on the specific application
- Distribution system for the washing solution in order to optimize the gas-liquid contact
- High efficiency mist removal system
- Automatic system for chemical addition control package and solution renewal (optional)
- Seal less vertical pumps
- Heat exchanger (cooling or heating) integrated in the scrubber structure (Patented)

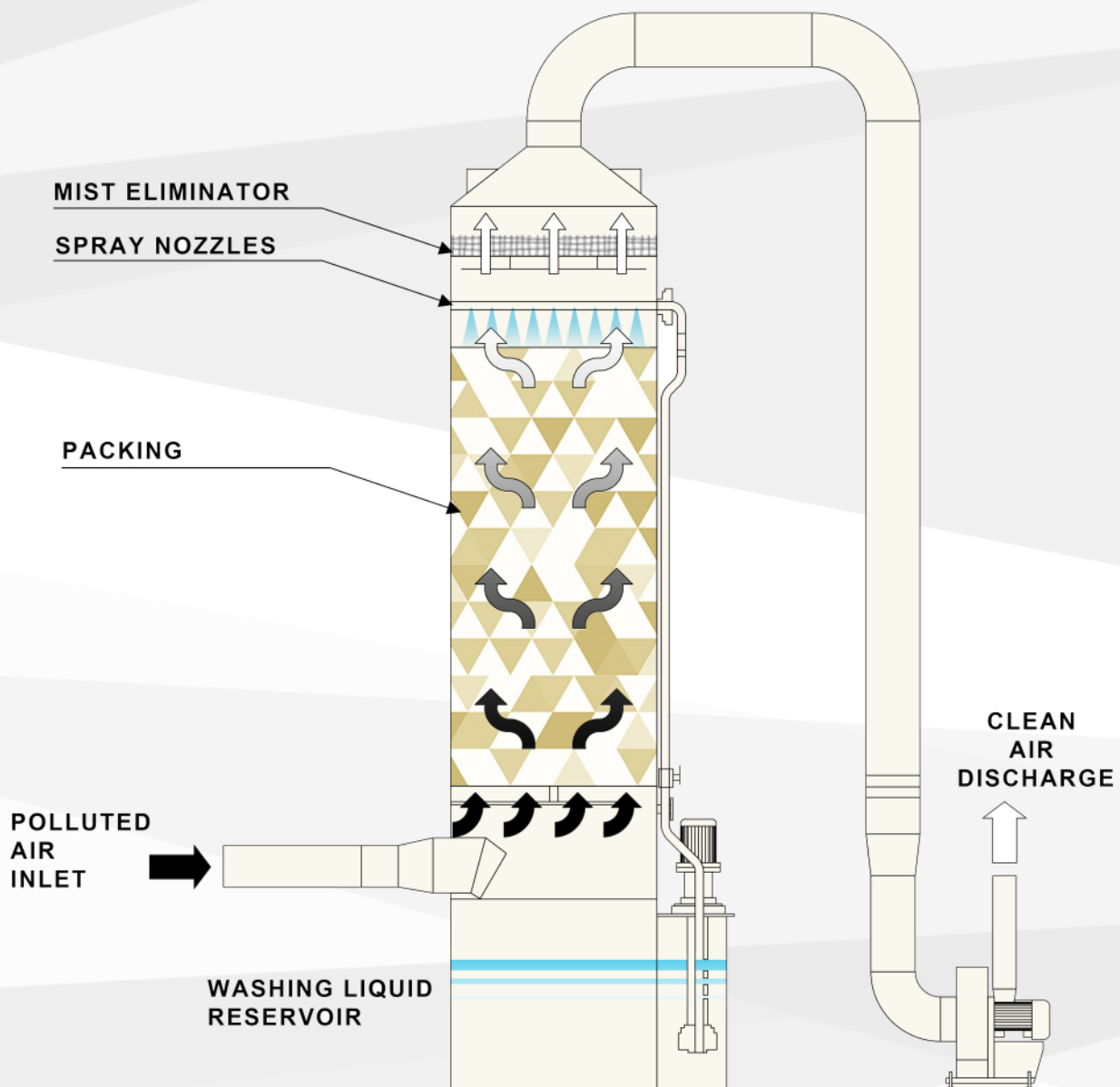
Packed bed scrubber

A packed bed scrubber is a wet type scrubber for the removal of soluble chemicals, fumes and odours from gas streams. It can provide higher scrubbing efficiency as contact surface between gas and liquid phase is increased by the use of a specially designed packing media. Contaminated air is blown through the scrubber by a fan and, after treatment, is released in the atmosphere.

Inside the tower the air flows through the packing bed, that is wetted with recirculated liquid. The liquid solvent absorbs the pollutant contained in the gas by physical or chemical means.

This vertical assembly is a counter-flow design with contaminated gas flowing upwards and recirculating liquid spraying downward into the packing media.

Washing liquid is stored in a reservoir located at the bottom of the tower and is pumped in a closed loop to the distribution system above the packing bed. For each stage of washing is installed an high efficiency mist eliminator, which keeps water droplets, entrained by gas flow, inside the tower avoiding mists formations at the stack.



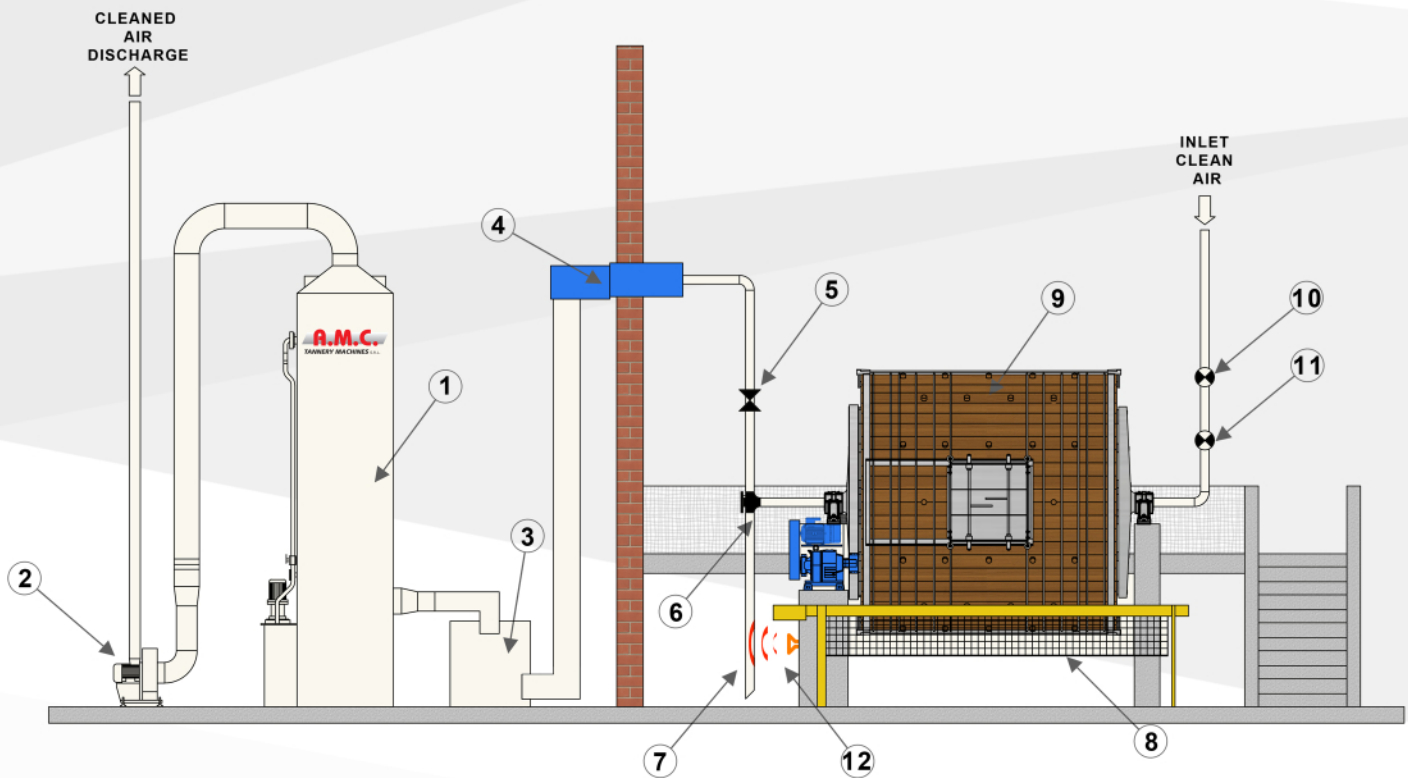
Description

The scrubber - Suction plants for the abatement a wet one - I managed with a vertical configuration ideal for installation.

The scrubber of the series can be made of polypropylene, in other thermoplastic and stainless steel materials are also available different technological solutions based on the type of pollutant from purified.

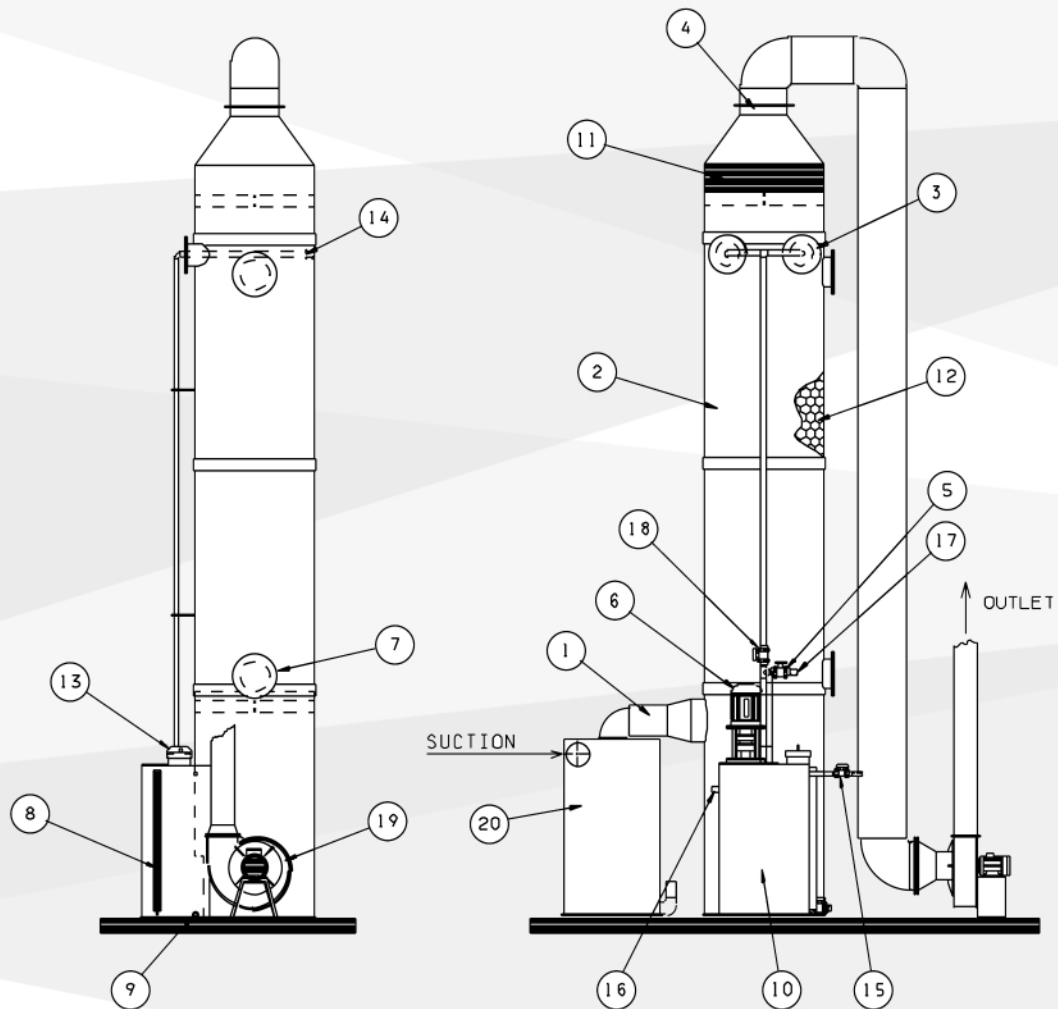
Working principle

The principle of operation provides for the entry of the air into the tower from below where it contacts, in countercurrent, with the solution of abatement. The contact between the liquid and the aeriform phase takes place on a surface that consists of the filling body of the tower, supported by special grids. The filling is made up of special materials with geometry designed to offer large contact surfaces.



1. VERTICAL SCRUBBER
2. FAN
3. DROPS SEPARATOR
4. COLLECTOR
5. SHUT-OFF VALVE
6. INSPECTION
7. VALVE
8. PROTECTION BAR
9. DRUM
10. FLOW DETENTION AND CONTROL DEVICE
11. CHECK VALVE
12. ACOUSTIC ALARM

Parts Scheme



1	Polluted air inlet	11	Demister
2	Tower	12	Filler Pall Ring
3	Supports for spray ramps	13	Tank inspection hole
4	Cleaned air discharge	14	Spray ramps
5	Sampling valve solution	15	Water Inlet
6	Recycling pump	16	Overfull
7	Exhaust flange Pall Ring	17	Hose connection
8	Visual level	18	Regolation valve
9	Exhaust Valve	19	Centrifugal fan
10	Washing solution tank	20	Drops separator



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