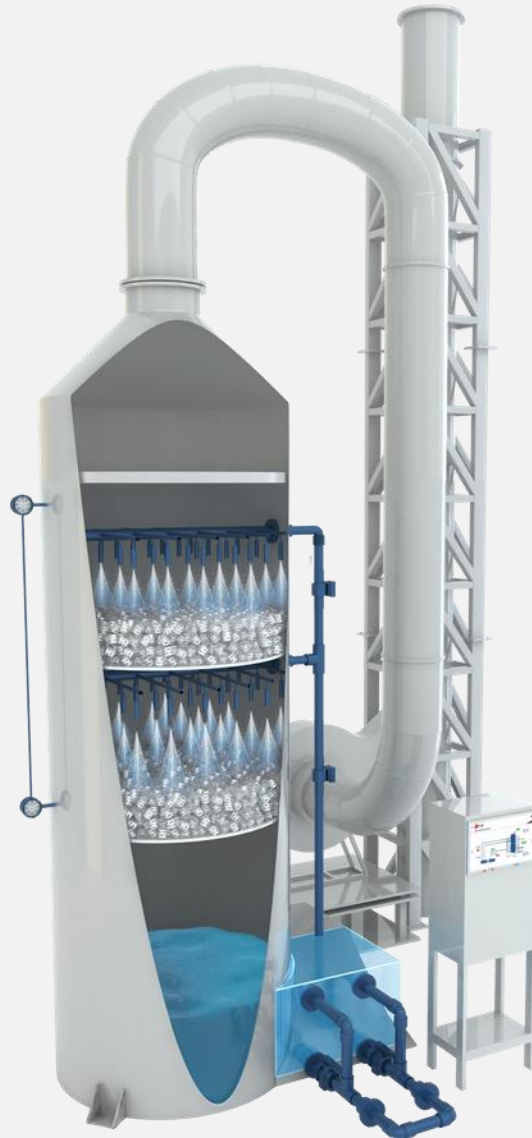




COPIFE
INDUSTRY SOLUTIONS

ergil[®]

SCRUBBER SYSTEMS



YouTube



Certificates & Standards



Scrubbers

Chemical Gas Washing Systems

The harmful gases and odors caused by the activities of industrial facilities and enterprises pose a great threat to human and environmental health. It is necessary to develop some systems to protect our environment from these harmful substances.

Gas purification systems installed in this direction contribute significantly to ensuring environmental safety. Ergil Scrubber prevents Systems prevents the formation of acid rain by purifying the acidic gases from the exhaust before being released into the sky.

Clean Air is a Basis Of a Healthy Life



In the gas treatment system, the working principle of which is to wash the waste gases under raschig rings, the principle of absorption of gases by liquids is applied.

The gases coming out of the “scrubber” chimney are free of harmful contents.

The pH value of the liquid phase, which is acidic, is increased to be basic or neutral with the dosing system during the cycle.

Ergil Scrubbers help to provide safer systems and environment. Ergil Scrubber Systems protects the environment, workers and surrounding communities by removing harmful hail gases even in harsh tank conditions and extreme temperatures.



Why Choose A Scrubber?

The scrubber can handle high-temperature streams and very moist streams. It also provides smaller space requirements.

In some cases, scrubbers can be retrofitted into current equipment. Also, they can provide cooling of heated gases. The scrubber, which has a higher desulfurization capacity compared to other equipment, has a low purchase cost. It can cool the heated gases and neutralize highly corrosive gases and dust.

On the other hand, it can remove gases and particles in a single unit. When properly designed and operated, it can handle highly flammable dust with a very low risk of explosion. Depending on the specific output and applications, it has several customizable features that usually allow a cost reduction. Depends on customer demand IoT can be addable.

With the use of the Ergil scrubbers' heat reduction options, the temperature limit is eliminated. Ergil scrubbers eliminate as much or more than 99% of dangerous gases, which meets all EPA requirements for RACT, BACT, and LAER.



Scrubber Systems

Ergil wet scrubbers are used to treat or clean the following lists of chemicals from a process exhaust air stream, with ammonia being the most popular:

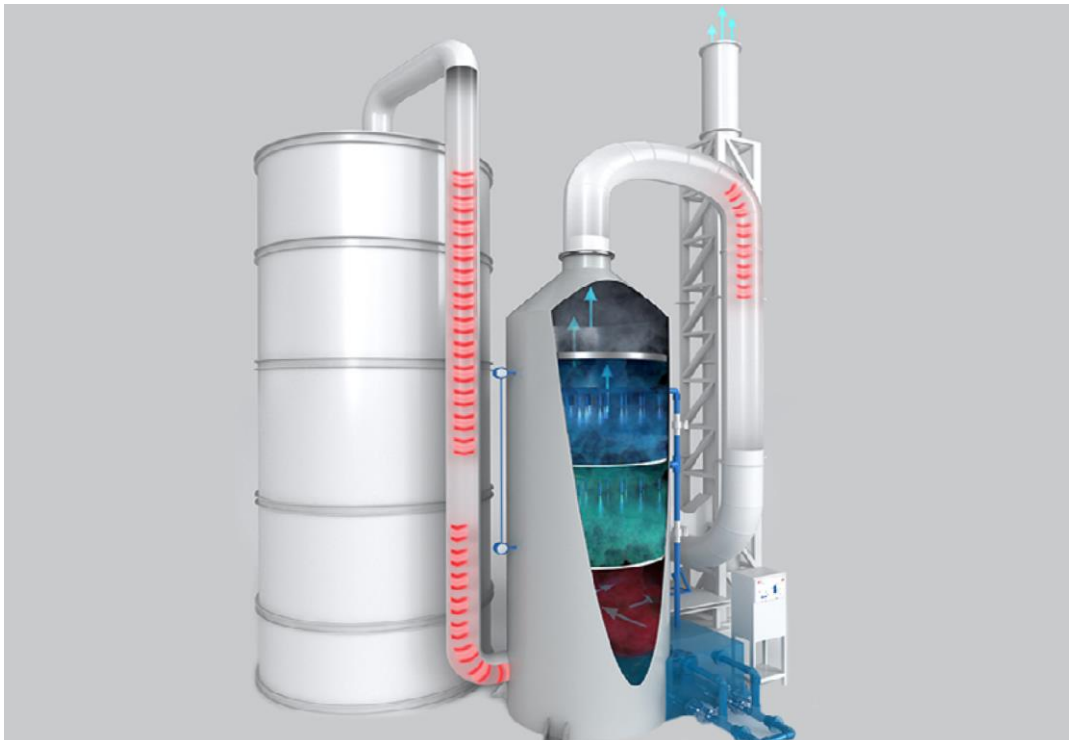
- Ammonia
- Chlorine
- Hydrochloric Acid
- Chlorinated Silanes
- Sulfur Oxides
- Nitrogen Oxides
- Hydrogen Sulfide
- Boron Trifluoride
- Amines

They Provide Treatment
With Efficiency Rates Of

Up To
%
99

With its 40 years of experience, Ergil has developed solutions for these industries:

- Asphalt Processing
- Pharmaceuticals
- Oil & Gas
- Landfills and Biogas
- Textile Processing
- Tar Removal
- Curing Ovens
- Vinyl Manufacturing
- Acid Mist Control
- Fertilizer Manufacturing
- Wastewater Treatment
- Steel Processing
- Electronics
- Food Processing
- Cocoa Processing
- Nuclear Waste Filtration
- Printing
- Precious Metal Recovery
- Wood Products



The Air We Breathe Sustains Us

Where Scrubber Systems Are Not Present:

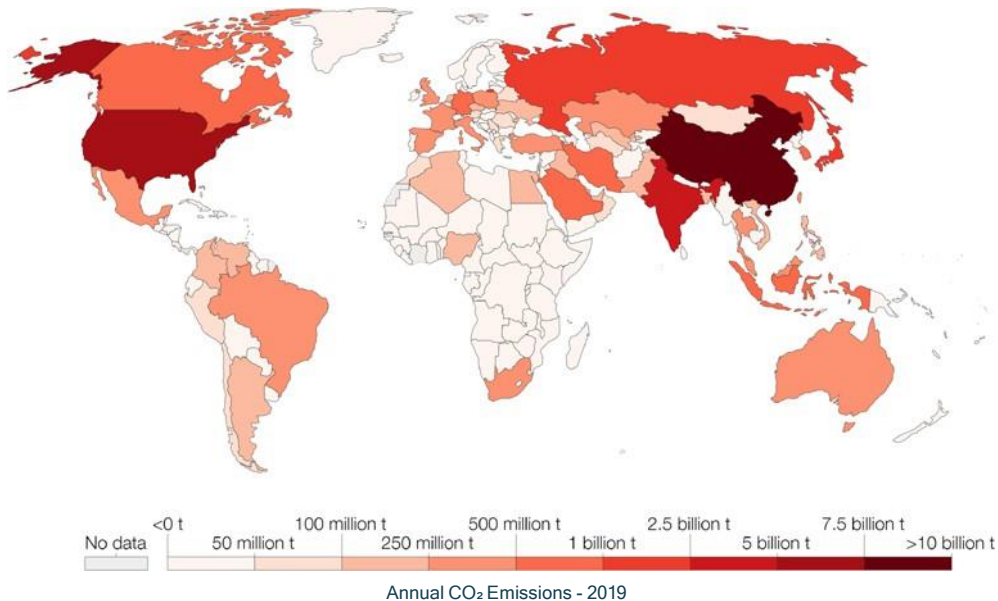


- Inhaling the acidic gasses present in the environment is a great danger to human life and may lead to respiratory problems.
- The toxic gasses that rise from the facility can turn into acid rains which is a serious threat to the people living in the area.
- The formation of acid rains damage buildings and pieces of equipment in the area and increases the maintenance costs.
- Absence of Scrubber Systems leads to the destruction of wildlife and agricultural activities in the area.

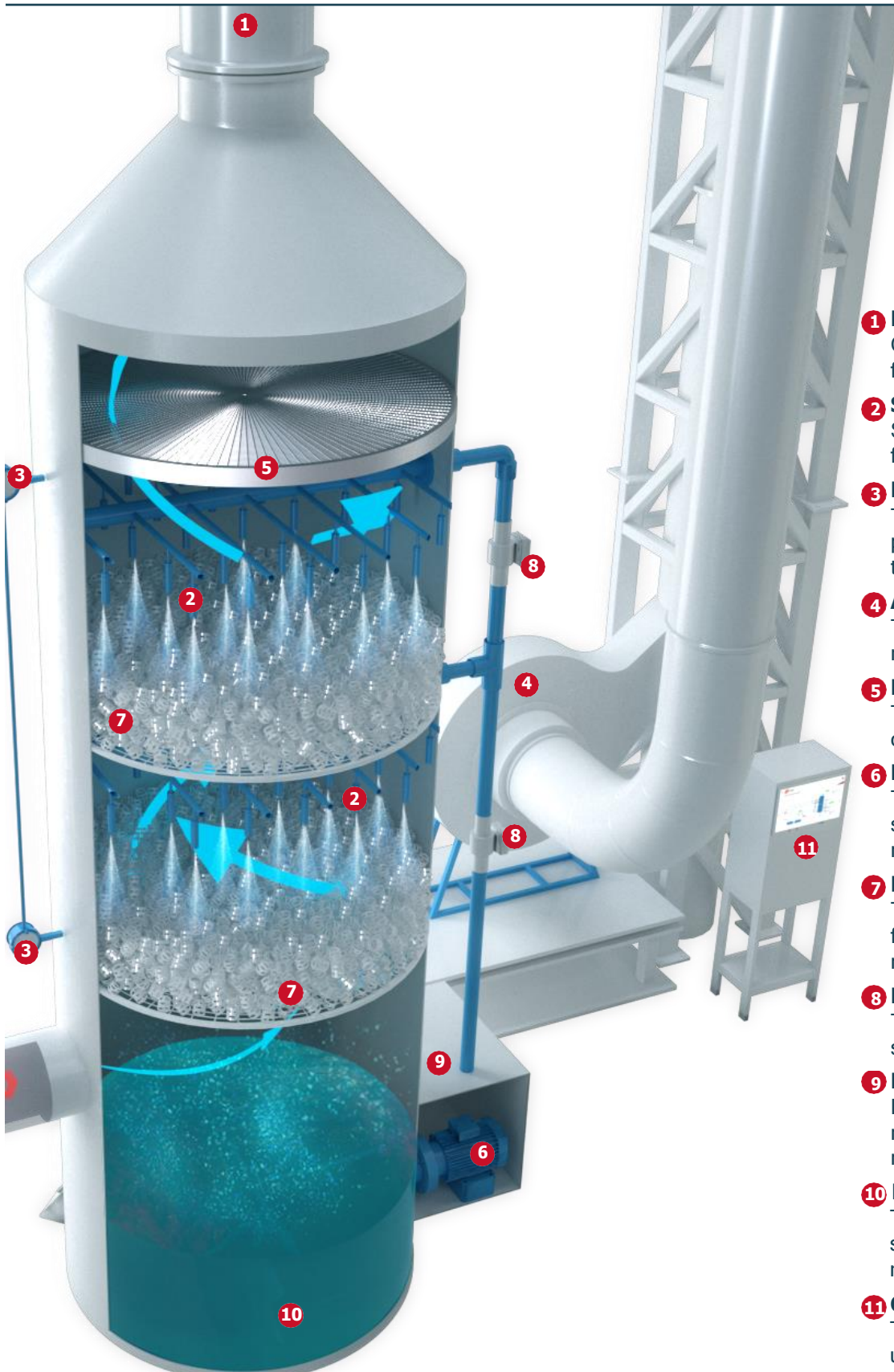
Where Scrubber Systems Are Present:



- Ergil Scrubber Systems encapsulates acidic gasses and prevents people in the area from getting affected by its dangers.
- In places where Scrubber Systems are present, the formation of acid rains is prevented.
- Installing Scrubber Systems decreases corrosion-related damage and maintenance costs.
- Scrubber Systems prevents the soil, water, air pollution which stems from industrial wastes.
- They provide treatment with efficiency rates of up to 99%.



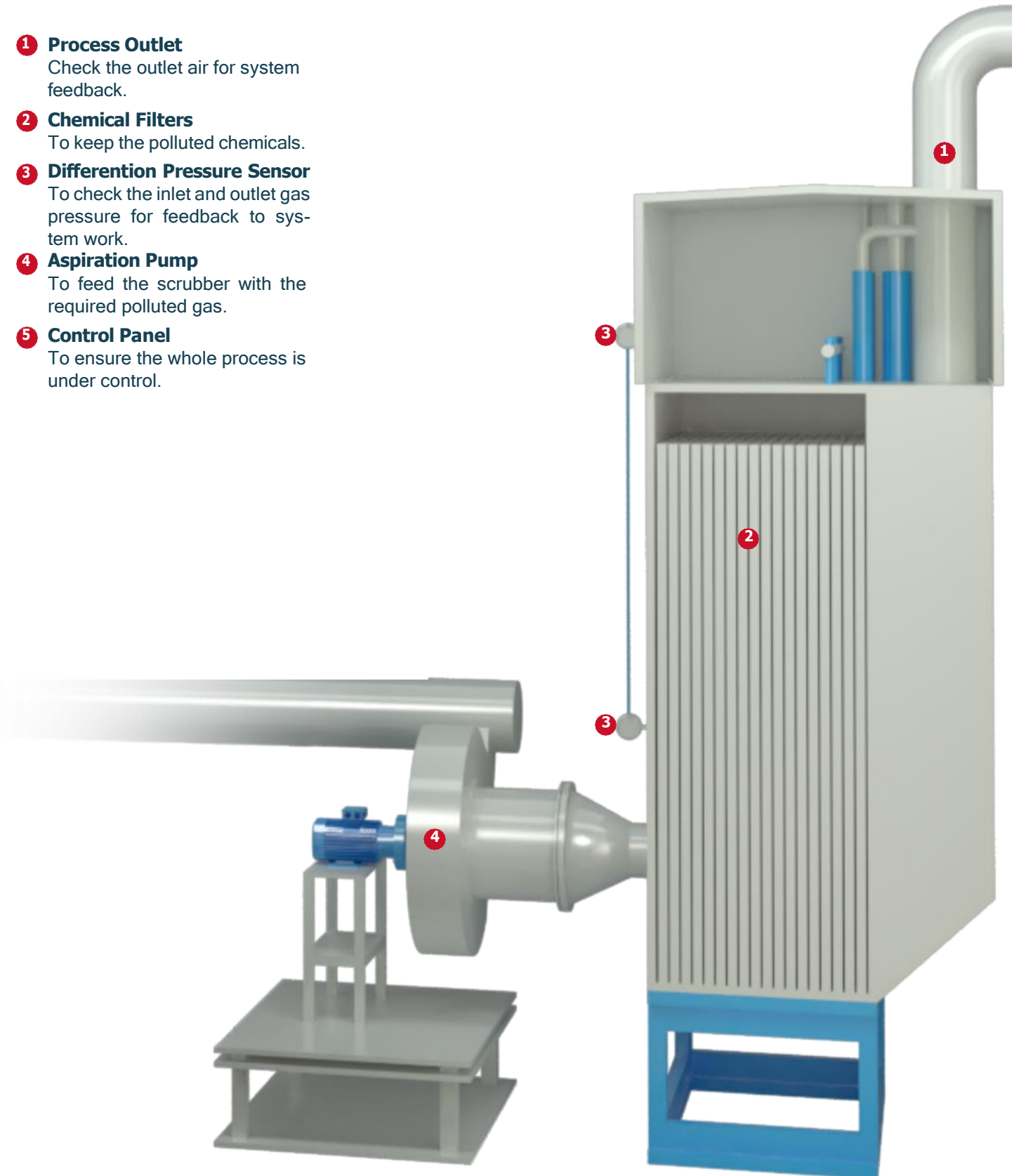
What is Wet Scrubber ?



- 1 Process Outlet**
Check the outlet air for system feedback.
- 2 Spray Nozzles**
Spraying the chemical solution for better distribution.
- 3 Differention Pressure Sensor**
To check the inlet and outlet gas pressure for feedback to system work.
- 4 Aspiration Pump**
To feed the scrubber with the required polluted gas.
- 5 Mist Eliminator**
To keep the pulverised chemical solution inside the scrubber.
- 6 Recirculation Pump**
To recirculate the chemical solution at the scrubber until reach the setted pH value.
- 7 Pall Ring (Rashing)**
To distirubite the polluted gas for better contact to chemical neutralisation solution(CNS).
- 8 Flow Control Valves**
To supply required CNS to scrubber with correct flow rate.
- 9 Dosing System**
Dosing the scrubber with the required chemical when the pH reached the setted value.
- 10 Recirculation Tank**
To collect the CNS inside the scrubber for reused until pH reached the setted value.
- 11 Control Panel**
To ensure the whole process is under control.

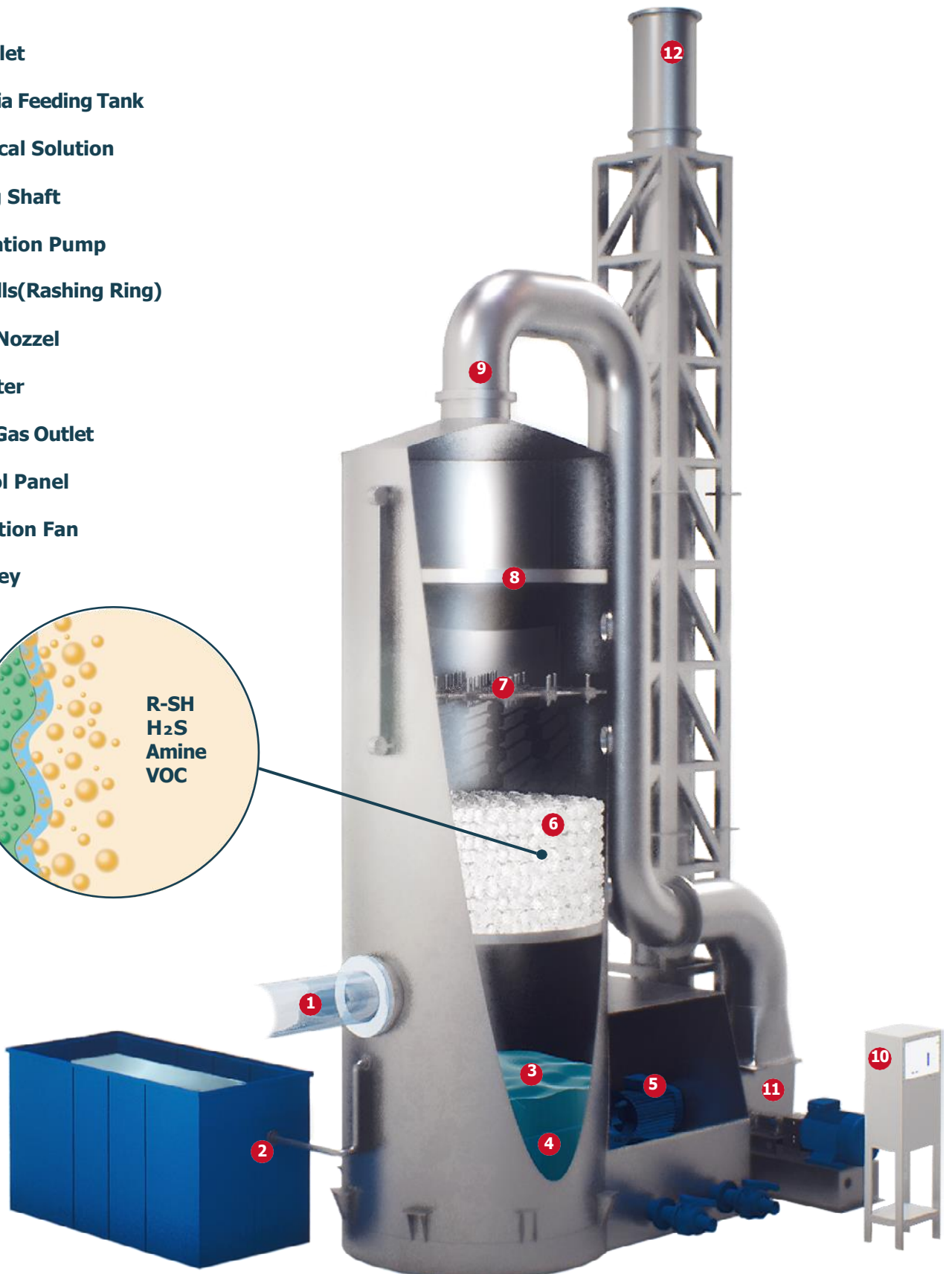
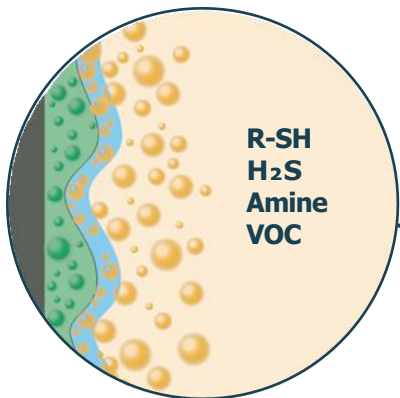
What Is Dry Scrubber ?

- 1 Process Outlet**
Check the outlet air for system feedback.
- 2 Chemical Filters**
To keep the polluted chemicals.
- 3 Differention Pressure Sensor**
To check the inlet and outlet gas pressure for feedback to system work.
- 4 Aspiration Pump**
To feed the scrubber with the required polluted gas.
- 5 Control Panel**
To ensure the whole process is under control.

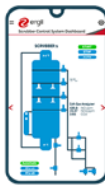
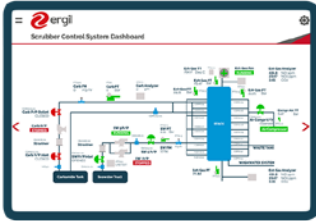


What Is Bio Scrubber ?

- 1 Gas Inlet
- 2 Bacteria Feeding Tank
- 3 Chemical Solution
- 4 Mixing Shaft
- 5 Circulation Pump
- 6 Bio Balls(Rashing Ring)
- 7 Spray Nozzel
- 8 Demister
- 9 Clean Gas Outlet
- 10 Control Panel
- 11 Aspiration Fan
- 12 Chimney

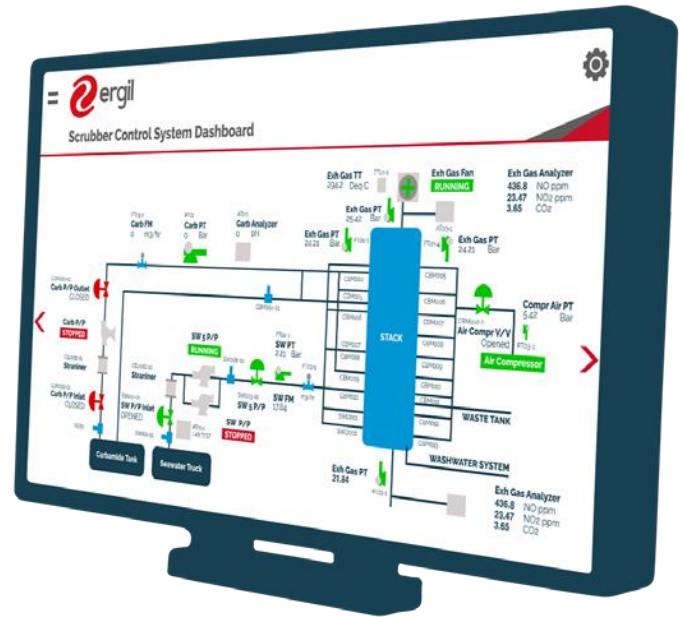


Fully Automated Systems



Are you interested to control your scrubber systems operations automatically and monitor operations from your control room? System can also be monitored and controlled from our smart App and send SMS or e-mail notifications.

Ergil provides full automated scrubber systems that can be integrated into your existing control system. Having an automated system helps you to reduce man power manual help, accident risks and equipment hazards. Behind the all products we produce, there is 40 years engineering expertise and insights we get from hundreds of happy customers around the globe.




RSD Studies Supported by Academic Research

Ager engineers carry out intensive R&D studies on Scrubber Systems. During these studies, support is supplied from institutions such as Çukurova University and joint laboratory studies are carried out. Pollutant gas scrubber tests were carried out at Çukurova University, Faculty of Science and Literature, Department of Chemistry, and patents still continue. In the ongoing experiments, studies are carried out on the chemical solutions that will clean the pollutant gas, the concentration (density) of the dilutions, the amount of chemical solution required depending on the pollutant gas flow rate. According to the experimental results; reaction stoichiometry was deduced, critical pH values of the system were determined. As a result of these studies, Ager Scrubbers are continuously developed to be durable and resistant to more intensive use.



35.000
SQUARE METER
MANUFACTURING
SPACE



300+
EMPLOYEES



40
YEARS
OF EXPERIENCE



4 MAIN
OFFICE



200+
DIVERSE RANGE
PRODUCTS



30+
INTERNATIONAL
REPRESENTATIVES



QUALITY
CERTIFICATES



AT 4
REGIONS

