



HIGH-EFFICIENCY
WET SCRUBBERS

FOR CLEANER AIR

Why choose our Wet Scrubbers?



High-efficiency gas absorption for air pollution control



Particle collection for cleaner air quality



Removes harmful pollutants and contaminants



Odour control for a more pleasant working environment



Customisable design to fit any industrial application

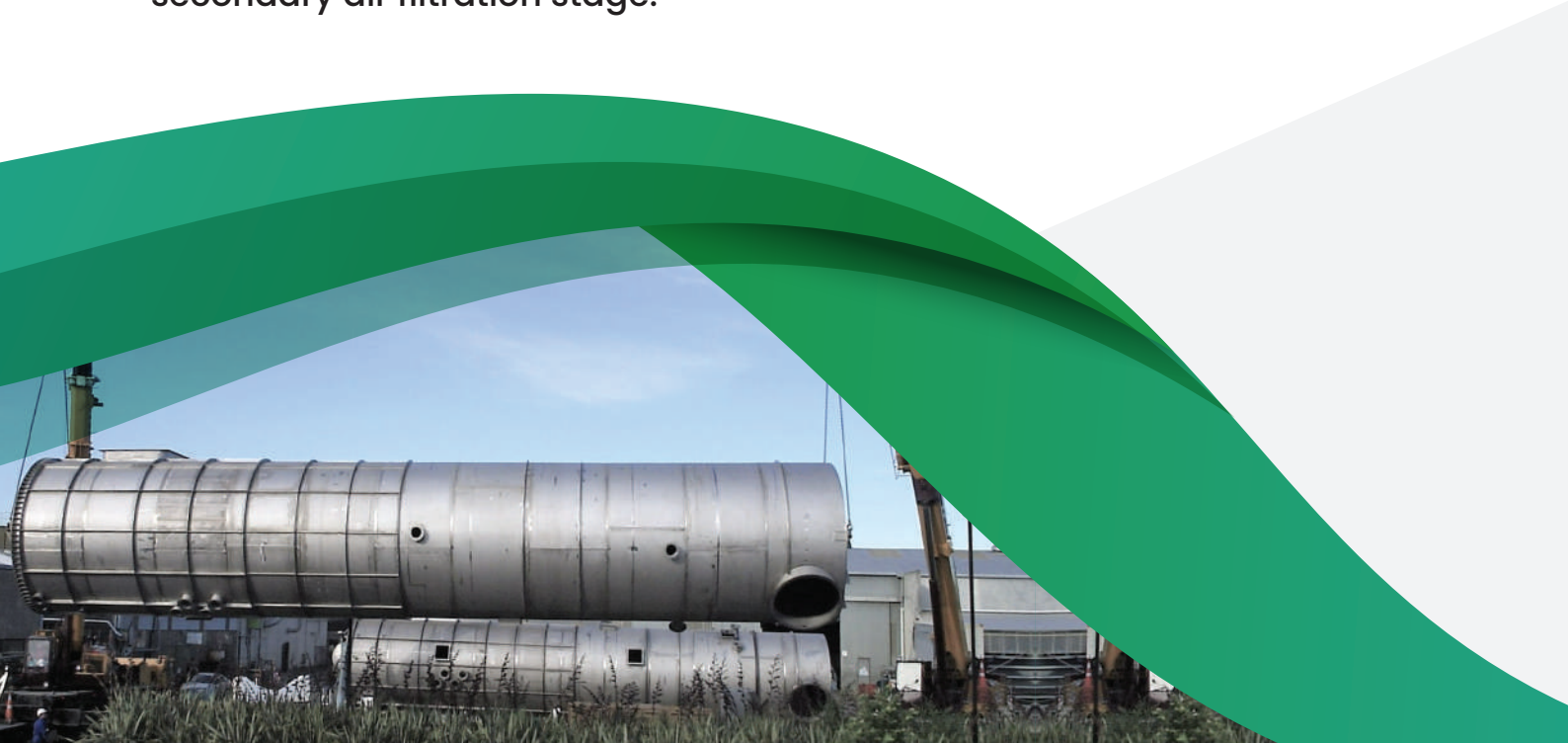


Easy maintenance and low operating costs

Spray Tower Scrubbers

Spray tower scrubbers are a low cost / medium efficiency scrubbing method. The spray tower scrubbers work by passing the air up through the scrubber chamber while spray nozzles with a set droplet diameter and water volume continuously spray the chamber. To be effective the spray nozzles design needs to be specified to the dust particle size and type.

Spray towers are also used for pre-conditioning of airflow. Reducing the temperature or adding humidity into an airflow before it goes to a secondary air filtration stage.



Packed Bed Scrubbers

Our Vortex packed bed scrubbers effectively remove liquid/gas pollutants from airstreams. Sizing is based on required airflow, concentration, and pollutant type. Air passes through a high surface area material wetted by continuous flow spray nozzles. This maintains a high contact area for the pollutant to react with.

Most commonly our packed bed scrubbers utilise water as the wetting material for the scrubber bed, however this is also often dosed with additional chemicals to create a reaction inside the scrubber.

If possible, the liquid used in the scrubber is re-circulated to reduce water / chemical wastage.

- Constructed from FRP, mild steel, 304 or 316 stainless steel.
- Automated liquid re-circulation
- Automated chemical dosing
- Automated liquid level control
- PH monitoring
- Demister with automated clean down





Venturi Wet Scrubbers

Our Vortex venturi wet scrubbers effectively control dust and fume particulate. We size scrubbers based on required airflow, mass, and pollutant type.

Venturi scrubbers introduce dust/fume laden air and water into the venturi throat. Air and water are accelerated to specified speeds, shearing the water into droplets, and combining it with dust/fume particles before being separated in a cyclonic separator.

Careful consideration of the particles size and properties needs to be made during the design process. The higher the velocity through the throat the smaller the water droplet size. But this also results in a higher pressure requirement through the venturi throat and increased power requirement.

If possible, the water used in the scrubber is re-circulated to reduce water usage.

- Constructed from FRP, mild steel, 304 or 316 stainless steel.
- Automated liquid re-circulation
- Automated liquid level control
- Fixed or variable throat diameter

Wet Scrubber Applications



Mineral Processing



Fertilizer Processing



Pharmaceutical Industry



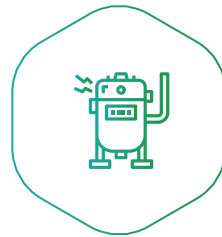
Odour Control



Waste Management



Cement Processing



Boiler Emissions



Mining Industry



Your one-stop solution for air pollution control, tailored to your unique needs.

Vortex Engineering group are the leading specialists in design, manufacture, installation and servicing of air pollution control systems, fume and dust extraction systems and material handling solutions. We create bespoke systems to meet specific client requirements, this is powered by our extensive history and ever-growing product range.

OUR SERVICES



Engineering & Consultancy



Installation & Erection



Inspection & Testing



Commissioning & Training



Maintenance & Retrofit




Spare Parts Supply

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