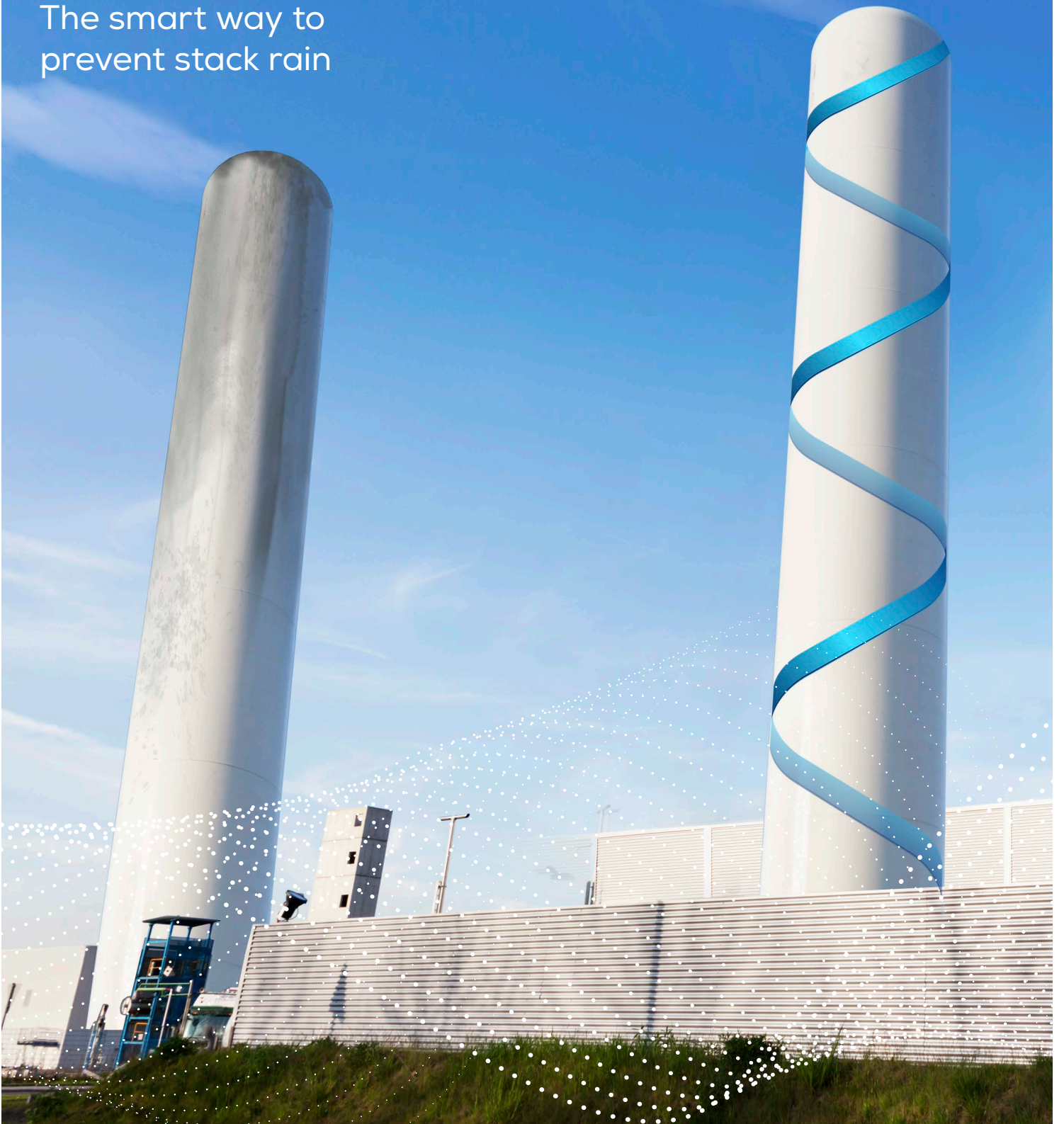


Munters Helix

The smart way to
prevent stack rain





Clean emissions with a twist

Stack rain is a common problem for power plants and chemical industries and occurs when droplets of water are pushed out of the chimney. These droplets are dirty and can contain harmful chemicals, and if the stack rain is not handled in the right way it can cause real harm to the human beings and surrounding environment.

Munters Helix is the efficient, mechanical solution engineered to prevent stack rain and effectively clean exhaust gases in a reliable way. Also, as there are no moving parts it is easier to maintain and uses less power than chimneys with heat displacement system, which reduces your energy costs and limits your environmental impact, both locally and globally.

Clean, cost efficient and reliable

Many solutions designed to prevent harmful stack rain consume significant amounts of power or create additional service needs. Munters Helix works efficiently and reliably as it's a mechanical system installed within the chimney itself.

The Helix runs around the inside of the chimney, and the gas flow is rotated by the design of the system. The droplets are forced/pushed to the chimney walls before they leave the stack. This forms a liquid film on the stack walls, which can then run back down the chimney via the troughs to be gathered and effectively disposed of or treated, while the exhaust vapour that leaves the top of the stack is free of large droplets.



There is also a film trap at the top of the chimney which removes the film generated at the very end of the stack, further reducing contaminants. This patented system works in conjunction with our ring-shaped vane type mist eliminator, and these solutions efficiently clean the exhaust vapour once more just before it leaves the chimney.

As there are no moving parts which need to be serviced, Munters Helix is an extremely reliable solution that's engineered to meet your specific needs.

A more sustainable stack

Munters Helix helps protect the environment around the stack, and by using less power than alternative options, it can result in a reduced carbon footprint, helping the plant operate in a more sustainable way.

In addition to this, the water gathered by the Helix can be collected, gathered, treated and reused, with any chemicals being disposed of in a safe and responsible way, further helping improve overall sustainability.

Munters Helix – the facts

Munters Helix is a unique solution which can be adapted and designed to your specific needs. The concept remains the same, but the actual system is customised to fit your process in the best way possible. This also dictates what we use to manufacture the Helix, as well as how we install it, ensuring that you get the most efficient mist elimination possible.

Helix Mist Eliminator System facts:

- For wet stacks with diameter ≥ 2 m
- Stack velocity up to 25 m/s
- Separation efficiency: 97% for droplets ≥ 0.3 mm
- Energy friendly operation by low pressure drop
- Material FRP or steel
- New installation or retrofit





How Munters Helix helped PCC Rokita

PCC Rokita, a chemical company based in Poland, needed a system to prevent stack rain as part of a modernization of the flue gas outlet at its heating plant in Brzeg Dolny, and Munters was able to offer the most effective and unique solution.

As it was a new chimney stack, Munters Helix was considered as part of the design. This had a major benefit, as PCC Rokita could build a chimney with a smaller diameter thanks to the Helix being able to handle greater air velocities. A smaller chimney means lower construction costs and less of a physical footprint

With the Helix installed no problems with stack rain occur. Since Helix creates a pressure drop, more power is required to push the gas up and out of the chimney, but overall energy consumption is still likely to be lower when compared with a heat displacement system which operates with the same goal in mind.

Overall, Munters Helix reduces costs, improves sustainability, and has helped PCC Rokita operate as a more considerate and responsible chemical company.

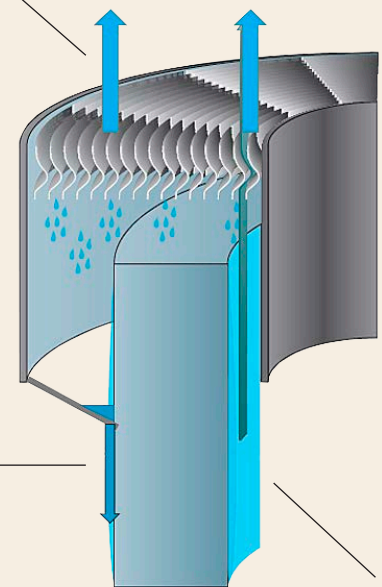
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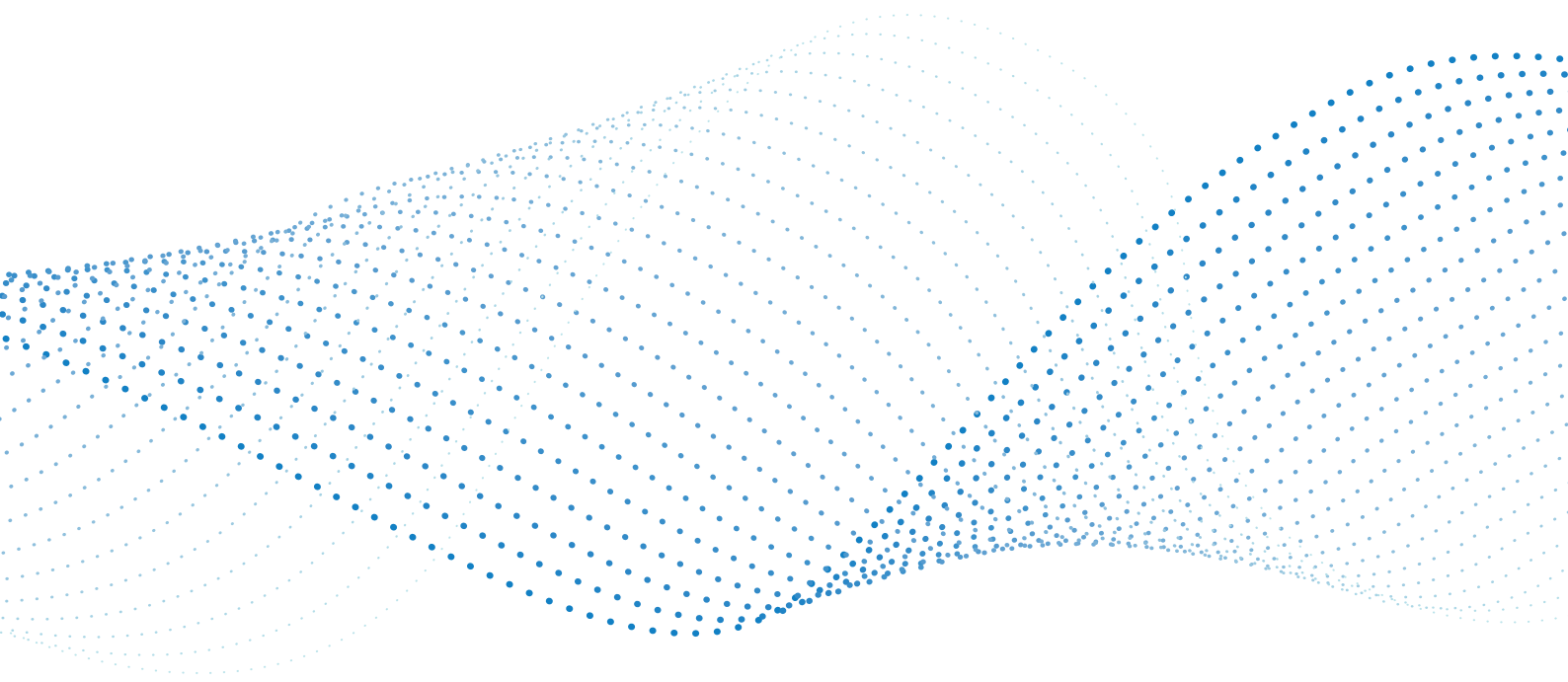


Clean gas

Drained liquid from film trap

Liquid film inside the stack





Munters is a global leader in energy-efficient air treatment and climate solutions. Using innovative technologies, Munters creates the perfect climate for customers in a wide range of industries.

Munters has been defining the future of air treatment since 1955. Today, around 4,000 employees carry out manufacturing and sales in more than 30 countries.

For more information, please visit www.munters.com