



echeuch
TECHNOLOGY FOR CLEAN AIR

VENTURI HIGH 5

A NEW DIMENSION IN SCRUBBER TECHNOLOGY

FOR THE GLASS INDUSTRY

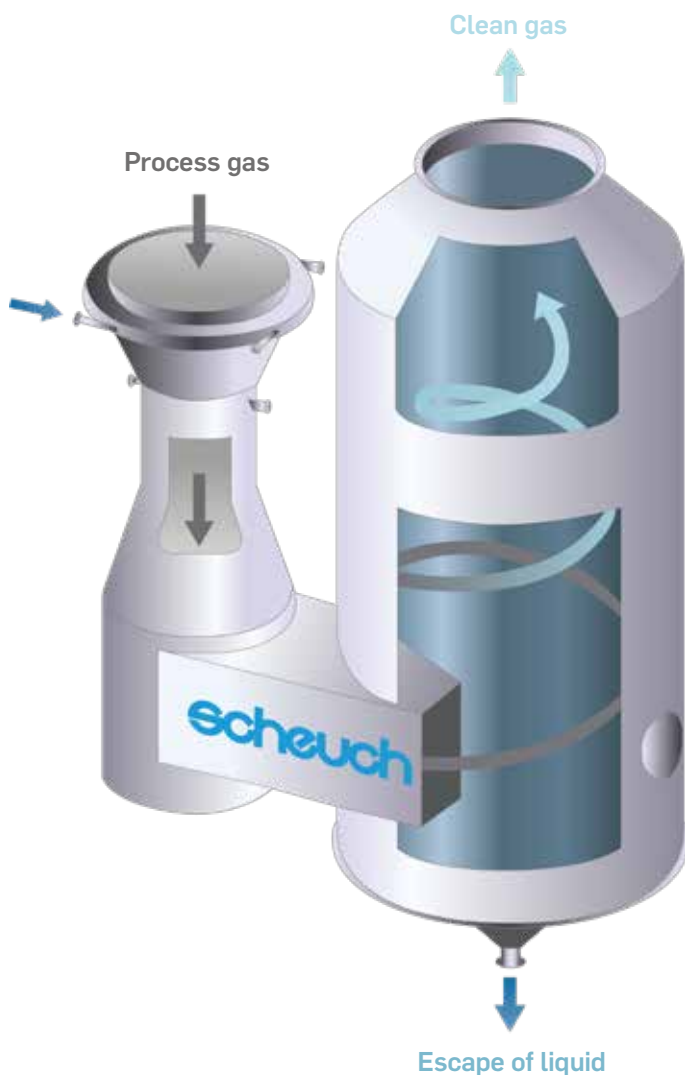
THE venturi^{high 5} HIGH-SPEED EFFECT

HIGHLY EFFICIENT AND EFFECTIVE SEPARATION

Scheuch offers a whole range of processes related to dust separation. Now, it is opening up an entirely new dimension in mineral wool production with its venturi^{high 5} wet scrubber. The company, whose headquarters are in Austria, draws its innovative capacity from the experience gained through thousands of filter systems and wet scrubbers. Used for separating fine dust, the highly efficient system is primarily used in applications where fine dust needs to be separated in aggressive, damp and corrosive exhaust air flows. It also allows gaseous pollutants to be separated at the same time. The system is capable of separating fine dusts and aerosols in the range of 1 µm in size.

BENEFITS:

- ▶ High degree of separation (guaranteed clean gas dust load of less than 5 mg/m³)
- ▶ High degree of cleaning (reliable dust separation; separation of water-soluble materials)
- ▶ Small footprint thanks to compact design
- ▶ No clogging (efficient treatment of complete process water as a whole without bypassing – no risk of nozzle clogging)
- ▶ Low operating costs (low maintenance and cleaning expenditure, low pressure loss)



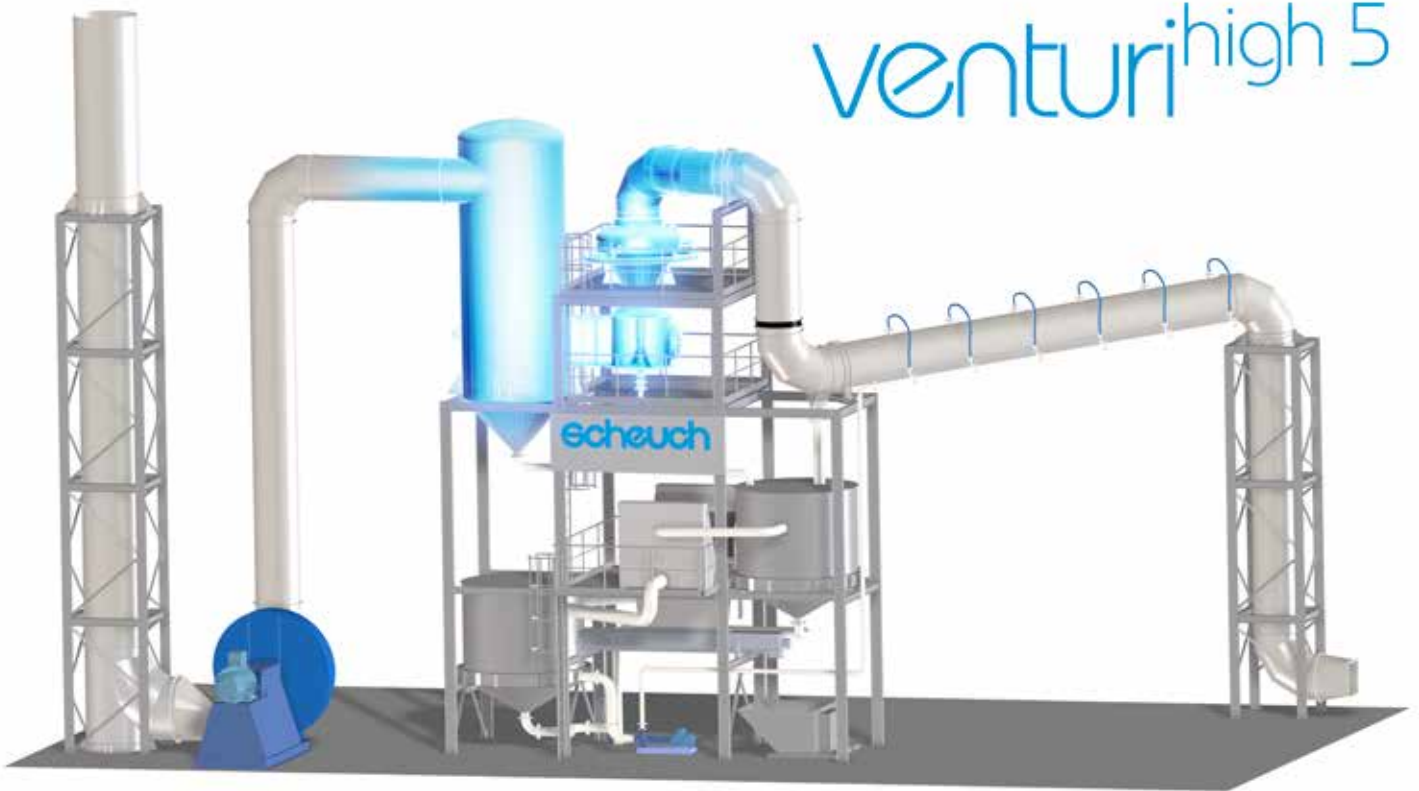
1. QUENCHING

To ensure highly efficient separation with maximum safety, process water injection is used to saturate the crude gas with moisture before it enters the Venturi system. This keeps the crude-gas duct free from caking and minimizes cleaning expenditure. Pumps in a redundant design supply the clog-resistant quench nozzles with process water.

2. DUST SEPARATION

There are two elements involved in the dust separation process: an adjustable Venturi system that finely atomizes the process water and wets the dust particles, and a downstream cyclone droplet separator that enables the particles bound to the process water to be separated from the gas flow. The adjustable Venturi throat maintains a constant degree of separation even when operating conditions are fluctuating.

venturi^{high 5}

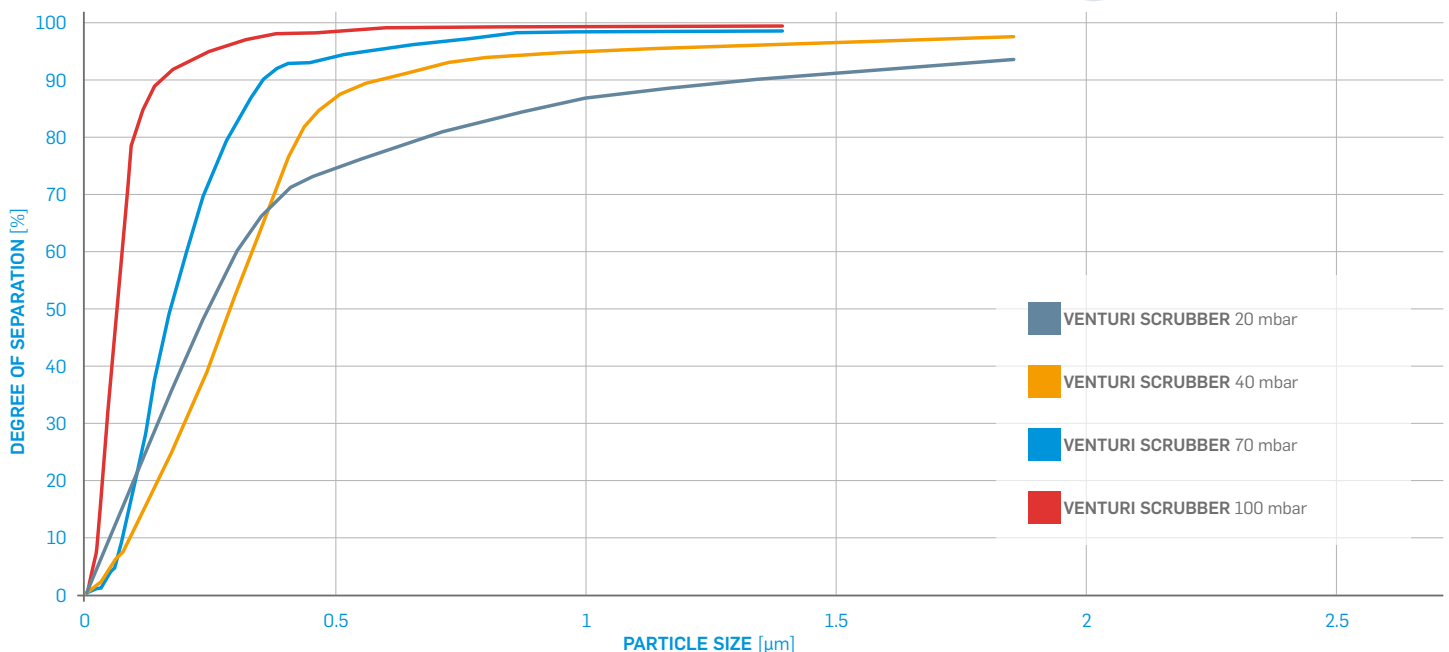


3. SEPARATION OF SOLIDS

In addition to efficient exhaust air cleaning, another vital step is conditioning process water that contains solids and, in some cases, pollutants. The water from the quench and cyclone stages enters a collecting tank and is conveyed in the direction of the stage involving treatment of the complete process water as a whole without bypassing. Once it has been purified, the scrubbing liquid is fed back into the process water. There is also the option of separating any pollutants that may be present using additive metering.

4. SEPARATION CURVE/PERFORMANCE FEATURES

The diagram shows four degrees of fractional separation at different degrees of pressure loss. It is possible to achieve different degrees of separation based on the fine atomization and venturi pressure loss. Clean gas dust loads of $< 5 \text{ mg/m}^3$ can be guaranteed at a relatively low level of pressure loss.



YOUR RELIABLE PARTNER

Thanks to our qualified employees, we can provide customers with everything from a single source – from consultation, project planning, production, assembly and commissioning all the way through to system servicing and emission measurements. In this way, we can ensure on-time completion of services, reliable compliance with

guaranteed values, efficient project management without interface problems, plus expert customer support even after commissioning is complete. With our worldwide network of partners, we are also able to organize and coordinate individual on-site service packages such as manufacturing, assembly or service.



Scheuch GmbH
Weierfing 68
4971 Aurolzmünster
Austria

Phone +43 / 7752 / 905 – 0
E-Mail office@scheuch.com
Web www.scheuch.com