

SAVING ENERGY USING VENTURI SCRUBBERS

MikroPul Venturi Scrubbers type SVS and MVS-V utilise the proven venturi technology for dust collection and gas cleaning. By means of raw gas acceleration, the scrubbing liquid is atomized. The scrubbers do not need any spray nozzles.

This leads to 3 advantages for a trouble-free operation:

- No clogging
- Scrubbing liquid can be recirculated with high contents of solids
- Low water consumption.

MikroPul Venturi Scrubbers are suitable for robust and safe „Heavy-Duty“ applications and almost maintenance free. High scrubbing efficiencies can be achieved through higher gas acceleration, but also increasing pressure losses. According to particle size and required collection efficiency, MikroPul SVS and MVS-V operate in a range between 2.500 Pa and >15.000 Pa pressure loss.

MikroPul offers to different venturi throat versions:

- Single Full Pass
- Multi Rod Deck

Both venturi throats are manually or automatically adjustable, resulting in:

- Easy adjustments for pressure loss and collection efficiency during scrubber operation.
- Convenient calibration of ideal operation mode. No further valve or fan control is necessary.
- Variable amounts of gas can be processed by automatic venturi through adjustment settings, maintaining constant separation efficiency levels.

Scrubber pressure losses above 8.000 Pa (80 mbar) sometimes generate energy demands which would make the scrubbing process inefficient. To lower power consumption for these applications, MikroPul offers a combination of both venturi throat types in a consecutive arrangement.

With this design, the following results could be achieved in different applications:

- For simple dust collection, the MikroPul Venturi Scrubbers can be operated with a pressure loss level of only 1.500 Pa.
- The overall pressure losses could be lowered down by 45% at the same separation efficiency.
- Residual clean gas contents of $\leq 2 \text{ mg/m}^3_N$ ($\ll 3\mu\text{m}$) are achieved at approx. 20% pressure loss savings.
- Simultaneous absorption and condensation can be run at higher efficiencies.

Benefit from MikroPul's energy saving Venturi Scrubbers and ask our engineering department for a proposal to optimize your system configuration!

Pictured: Venturi Scrubber, made of GRP, operating at 20 mbar pressure loss for separation of finest zinc oxide dusts and chlorine aerosols.

