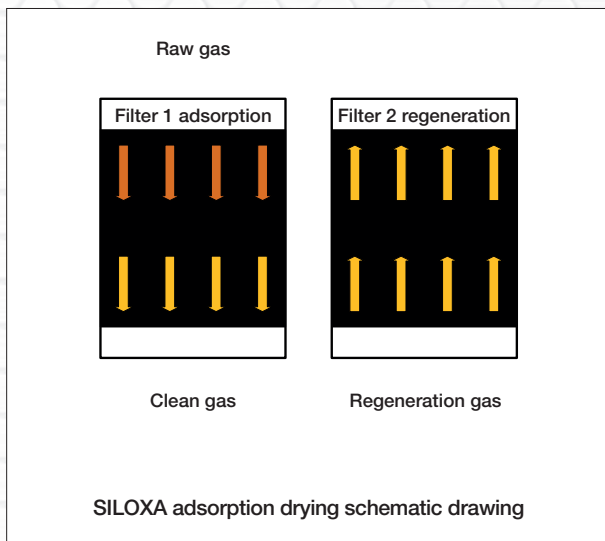


SILOXA adsorption dryer, models 400 and 700 (further models on request)



Product description

In the SILOXA adsorption drying systems, gas drying is performed by two separate adsorber vessels. The two vessels are mounted on a metal frame and are used alternately. The vessels each contain a packed bed of a high-quality desiccant which allows dew points of up to -80°C to be attained.

In the adsorption process, damp gas is passed through a filter which retains the moisture. The water molecules (adsorbates) are deposited in the centres and on the specific surfaces of the desiccant. When the desiccant is saturated with water, the system switches over to the second, regenerated filter. Meanwhile, the water-saturated filter is processed.

The water-saturated filter is regenerated using a process known as heat regeneration. Dry gas (regeneration gas) is heated and passed through the filter bed of the filter being processed. Increasing the temperature enables moisture to be removed from the desiccant. The gas then passes through a tube bundle heat exchanger where the water condenses out. After this, the regeneration gas is reheated and goes through the cycle again. Before beginning the regeneration cycle again, the heated filter is cooled to return it to its initial operating status.

Sizes/system components

- 2 performance classes, with gas flow rates of $400\text{ Nm}^3/\text{h}$ and $700\text{ Nm}^3/\text{h}$
- The components are mounted on a frame.

Design features (basic version)

- Frame
- 2 adsorption vessels
- Desiccant
- Regeneration gas processing
- Condensate trap
- Insulation against heat and cold
- Measurement and control unit
- Control cabinet
- E, I&C system
- Factory assembly
- Technical documentation

Options

- Gas pre-cooling
- Water cooler
- Components in contact with fluids comply with ATEX (Zone 1G) requirements
- Installation in an EX Zone possible on request

Consumption costs

- No additional external or inert gases are required for the regeneration
- High energy efficiency is achieved through optimal adjustment of the energy input
- Dew-point-controlled regulation ensures efficient utilisation of the adsorption vessel

Service

- As well as installation, SILOXA also offers full regular maintenance and supply of spare parts for the adsorption dryers.

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SILOXA
Take out what doesn't belong.

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