

# Adsorption Dryer HRE

Type size 0375 up to 13600

The externally heat regenerated adsorption dryers of type HRE work according to the dynamic adsorption principle. Wet compressed air streams through a desiccant bed. While streaming through, moisture is drawn out of the compressed air. Since the adsorption capacity of the desiccant is limited, the flow direction has to be changed before the desiccant is completely saturated. Using two parallel adsorption vessels (adsorbers) with alternating function, the permanent supply of consumers with dried compressed air is guaranteed.

One adsorber is always available for drying the compressed air. The second adsorber is regenerated at the same time. The activation time respectively the regeneration time is always shorter than the loading time of the working adsorber.

The regeneration of the saturated desiccant is realized in two steps:



Figure: HRE 1950

1. **Desorption in counter current flow** to the adsorption direction with externally heated blower air.
2. **Cooling of the heated desiccant with a partial stream of dried compressed air**

A complete type series - with extraordinary design and equipment - guarantees high reliability and very economic operation at the same time.

Innovative variations allow customized solutions.



Figure: Detail „Ventilation Unit“

Technical changes reserved. Release: R00/09062004