

Adsorption Dryer HRS

Type size 0375 up to 13600

The externally heat regenerated adsorption dryers of type HRS operate according to the dynamic adsorption principle – wet compressed air flows through a desiccant bed. While passing 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 operating adsorber.

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



Figure: Detail „Blower Unit“



Figure: HRS 1950

1. **Desorption in counter-current flow** to the adsorption direction with externally heated blower air.
2. **Cooling of the heated desiccant with ambient air**

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

Innovative variations allow customised solutions.