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MiniAds-IOM

Mini Adsorber

Compact Desiccant Dryer Instructions

Operation

The Mini-Adsorber is the only compact desiccant dryer whose design provides full-bed drying. The compressed air flow is directed downward to the bottom of the canister, then upward through the core, utilizing the entire desiccant bed for drying. As water vapor is adsorbed, the dew point of the compressed air is lowered.

Drying time can be determined by Theoretical Life Charts (see Brochure No. 601-SBG), or by using an easy, “fail safe” method – a disposable moisture indicator. Available as an accessory, the indicator can be quickly installed and easily read. (Silica gel in the indicator changes color from **blue to pink** when the cartridge becomes saturated.)

Regeneration of Desiccant

Both Mini-Adsorber models are furnished with Activated Alumina as standard. This desiccant provides high adsorption capacity, long life, and is more reliable than the silica gels used in other dryers.

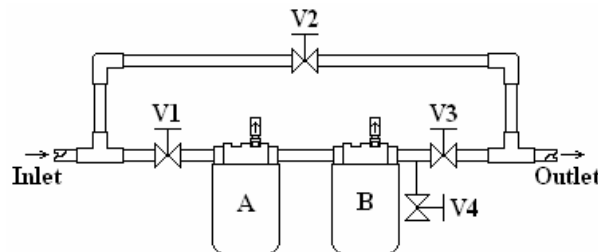
The Activated Alumina is regenerated by baking the entire canister in an oven at 275°F for 3-4 hours. (Adding a purge with dry gas is recommended.) Regeneration may also be accomplished by installing a purge valve and a thermostatically-controlled heater wrap.

A standby or spare desiccant cartridge can be installed while regenerating. Replacement involves a simple “spin-off, spin-on” design (similar to an automobile oil filter) guaranteeing ease of maintenance.

Installation of Mini-Adsorber

The Mini-Adsorber should be installed utilizing a 3-valve block and bypass, so the cartridge can be replaced while maintaining downstream air flow. (Prefilters and Afterfilters are recommended.) The optional Moisture Indicator (Part No. 70583-4), used on all Mini-Adsorber models, is installed as follows: Screw the Moisture Indicator Mounting Fitting (Part No. 71038-194) into the Vent Port on the Mini-Adsorber. Slide the Moisture Indicator into the fitting, with the flow arrow directed upwards. Remove the orange protective cap. The indicator turns from **blue to pink** when the cartridge requires changing. To remove the Indicator from the Mini-Adsorber Fitting, press down on the fitting pressure ring and lift the Indicator out.

NOTE: If short periods of wet air cannot be tolerated, a second Mini-Adsorber and the proper bypass valving must be installed in series (see drawing). A coalescing prefilter with an automatic drain should be installed upstream. A particulate afterfilter is recommended downstream. Canisters on stream: V1 and V3 open; V2 and V4 closed. When Canister B requires regeneration (moisture indicator turns pink), close V3 and open V4 just enough to allow small purge. Heat Canister B with a thermostatically-controlled heater wrap to 275°F for 3-4 hours. Close V1 and V4. Replace the moisture indicator on Canister B and switch Canister locations A-B to B-A. Place Canisters back on stream. (The system can be bypassed by opening V2 while Canister B is regenerating; the air, however, will be wet.) Regeneration Alternative: 1) Replace canisters and respective moisture indicators when the latter turn pink. 2) Heat in oven, with open canister end in an upright position to 275°F for 3-4 hours.



NOTE: Units with optional molecular sieve or activated carbon cannot be regenerated. Dispose of spent desiccant according to local regulations.