



ML + MM HEATLESS DESICCANT DRYERS

Silicair Dryers have a number of Heatless dryer designs operating on the Pressure Swing Adsorption (PSA) principle which involves the use of a fixed timer control system providing alternating drying process and reactivation through the two desiccant filled adsorber vessels. The general changeover sequence is based on a 10 minute full cycle with 5 minutes drying per vessel. The units are all plc controlled to ensure the dryer and valve operational sequences meet with the required timings.

A bleed of very dry expanded air is used to reactivate the off stream vessel ready for the next drying duty to commence. For processes that require a very low outlet dewpoint, the timer sequence and desiccant bed composition can be changed to achieve these levels of performance.

ML Heatless Dryers

For medium sized flows, Silicair Dryers would select a dryer design from the ML range of models to meet your requirements. These are simple, compact floor mounted units with standard control system arrangements.

Also note that models of this dryer design are available to provide flows with the required filtration being installed to meet with Breathing Air standard **BS EN 12021:2014**

MM Heatless Dryers

For larger flows, Silicair Dryers would select a dryer design from the MM range of units to meet your requirements. These are physically larger designs to handle the increased flow parameters as required by any specific application.

Nominal design flow rates can be accommodated up to 2500 L/s (5300 cfm or 9000 M³/hr at 7 bar (g)) with all models being available for a maximum working pressure up to 13 bar (g).



All Silicair Dryers models are CE marked as standard and are custom selected to meet your specific requirements based on the exact operating parameters for your process. To obtain the correct model to meet your requirements please contact us with your inlet flow, pressure, temperature and required outlet dewpoint. All models are available for an outlet dewpoint of -40 °C with an option for -70 °C if required. Specific pressure vessel design codes are available for these models including ASME VIII Div.1, ASME VIII Div.1 U stamp or PD5500.

These models will benefit from the use of the optional DESS dryer energy saver system to assist with the overall operational energy efficiency.

In addition, complete dryer/filtration packages can be provided to ensure that the correct level of outlet air quality is provided to meet your process specification. Dewpoint analysers and changeover failure alarm can be provided as part of the scope of supply.

The activation purge flow will be calculated accordingly and product design data sheets are available on request.