Silicair

DESICCANT DRYERS - DRYER ENERGY SAVER SYSTEM (DESS)

All of our medium and larger Heatless and Heat Reactivated dryer designs are available with our DESS facility installed to reduce operating energy cost in time of low load operation. With any desiccant dryer, the standard operating sequence cycle is normally fixed and set up for the maximum duty and inlet moisture load. Even if the loading on the dryer reduces, the sequence and energy running cost will remain constant. However, the installation of the DESS will reduce the energy consumption in periods of low load operation based on the outlet dewpoint performance of the dryer.

With our Heatless designs, the activation purge period will be reduced for the period of operation when the outlet dewpoint is below the specified set point. The reactivation energy is saved by the reduction in time that the dryer is actually using its reactivation air.

With our Heat Reactivated designs, the drying cycle of the dryer is extended until a specific outlet dewpoint set point is reached and only at that point will the dryer change over therefore saving reactivation energy during this extended drying period.

Given a certain set of operating parameters and expected loading conditions, a calculation can be provided for the anticipated energy savings that can be made with the operation of the dryers based on the average moisture loading that the dryer is expected to experience.



The DESS facility also provides you with an upgraded plc control system and digital dewpoint analyser with alarm, built into a common control panel with dryer operating status lights to provide constant information on dryer status and operating performance.

Please contact us for further details on how this DESS facility can assist your dryer operating energy efficiency.