

FRI-9.3-1-THPE-12

PERFORMANCE ASSESSMENT OF SORPTION REGENERATOR FOR DEHUMIDIFICATION IN AIR HANDLING UNIT

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Abstract: Nowadays the studying various solutions to reduce energy consumption has a great importance. Air to air heat exchangers have the potential to increase the energy savings. In particular, interest in desiccant wheels is increasing due to their high effectiveness and possibility to dehumidify. This paper reviews the potential to transfer of heat and moisture in regenerative heat exchangers as a part of air conditioning system in pharmaceutical industry. A comparison of performance between the different types of regenerators is made under different operating parameters.

Keywords: Air conditioning, Dehumidification, Desiccant wheel, Efficiency, Energy consumption, Heat and mass transfer, Regenerative heat exchangers.

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