

Abstract

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Experimental Investigation Of Packed Column Absorber In Absorption System

Absorption refrigeration technology presents a promising alternative for vapor compression cooling system due to the increase of the environmental problems and electricity cost which made this heat-operated cycle more attractive for both residential and industrial applications. An experimental study was especially designed and developed in this work in order to study the increase in the absorption rate by using a new technology of absorber component (Packed column absorber). The study is also used to investigate the effect of many parameters on the average absorption rate which presents the performance of the apparatus. These parameters are the type, height and the porosity of the packing. As a result of this work, it was found that the use of packed column absorber can increase the average absorption rate in the absorption system significantly.