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عنوان مقاله:

CFD and Experimental Studies on Cone Cap Tray Hydrodynamics

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خلاصه مقاله:

This paper describes an experimental and CFD investigation into the hydrodynamic behavior of a new type of column tray introduced as cone cap tray which may be used in contactor columns especially in stripping columns. The hydrodynamics of this plate is investigated in an Air-water commercial scale simulator column with an internal diameter of 1.2 m. The experiments and CFD simulation were performed on different operating conditions. The clear liquid height and total pressure drop were measured. The results were compared with valve tray in the same column simulator rig. The totalpressure drop and clear liquid height of cone cap tray are similar to a valve tray having equal open holes area

کلمات کلیدی:

CFD, Cone Cap Tray, Valve Tray, Hydrodynamics, Pressure drop, Clear Liquid Height

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