عنوان مقاله:

Developed method based on Underwood s equation to calculate minimum reflux ratio for column with two feed

محل انتشار:

پنجمین کنفرانس بین المللی پژوهش کاربردی در شیمی و مهندسی شیمی با تاکید بر فناوری های بومی ایران (سال: 1397)

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خلاصه مقاله:

The separation of more than two components by continuous distillation has traditionally been accomplished in petroleum refinery plant, chemical, petrochemical and many other process industries. Minimum reflux ratio is a key parameter to optimize operating cost and fixed cost of distillation column. The Underwood's equations are very famous as they provide a shortcut method for evaluating the minimum reflux ratio of a multicomponent distillation column. This method is used to distillation column with one feed. In this research, a new method based on underwood method is developed to calculate minimum reflux ratio for column with two feeds. The result of this model compared with McCabe-Thiele method. The result shows that proposed method has a good agreement with McCabe-Thiele method

کلمات کلیدی:

Distillation, Minimum reflux ratio, Underwood s method, Two feed column

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