عنوان مقاله:

Optimization of Operating Parameters of Continuous Catalytic Naphtha Reforming Process using Response Surface Methodology

محل انتشار:

هفتمین کنگره ملی مهندسی شیمی (سال: 1390)

تعداد صفحات اصل مقاله: 10

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خلاصه مقاله:

Optimization of the operating parameters of continuous catalytic naphtha reforming process including temperature, pressure and hydrogen to hydrocarbon ratio was conducted using a response surface methodology for a unit with three or four beds to achieve to the highest reformate yield and research octane number (RON). The results were analysed by Analysis of Variance (ANOVA) to realize the significant effect of the operational parameters and their interactions on the reformate yield and RON. Taking 95% confidence level into account, each factor with a significant level of lower than 5% can be regarded as a significant factor. The ANOVA was performed with the help of statistical software, Design Expert 8. It was concluded that using three reactors instead of four, required around 17k increase in the inlet temperature of the reactors to approach to the same industrial target of RON and yield of reformate

کلمات کلیدی:

Optimization, Catalytic naphtha reforming, Moving bed, Radial flow reactor

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