

عنوان مقاله:

Distillation Column Energy Targeting and Exergy Analysis for Demethanizers

محل انتشار:

شانزدهمین کنگره ملی مهندسی شیمی ایران (سال: 1397)

تعداد صفحات اصل مقاله: 7

نویسندگان:

Sajad Sarikhani - Process Engineer at Bakhtar Management and Development Co., Tehran, Iran

Ali Gharibi - Engineering Manager at Bakhtar Management and Development Co., Tehran, Iran

خلاصه مقاله:

The aim of this work is the study and design of demethanizers columns as the main equipment in natural gas processing and condensates recovery plants from the scope of feed allocation, column energy targeting, and exergy analysis. In addition, these parameters and their effects on the performance and operation of this type of columns will be reviewed. Location of feed introduction to distillation columns has great effects on the performance of these major equipment of the separation process. Many demethanizer columns have several side reboilers, distributing required energy for separation in several points instead of one point. This hot utility distribution enhances the separation process and reduces exergy loss throughout the column. Choosing proper points for feed introduction is the main subject of distillation column targeting. The main issue is to find the stages in which overall exergy loss will be minimized. In this work, three demethanizer columns with different operating conditions from three plants have been selected as sample.

کلمات کلیدی:

Demethanizer, Distillation Column, Energy Targeting, Exergy Analysis, Natural Gas Processing, NGL

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/860130>

