

عنوان مقاله:

Energy optimization in unit 103 of 2 and 3 phases of south pars of iran

محل انتشار:

نخستین کنفرانس بین المللی نفت، گاز و پتروشیمی با رویکرد توسعه پایدار (ارتباط دانشگاه با صنعت) (سال: 1393)

تعداد صفحات اصل مقاله: 8

نویسندگان:

Mohsen darabi - *Department Of Chemical Engineering, Shahrood Branch, Islamic Azad University, Shahrood, Iran*

mostafa montazeri - *Department Of Chemical Engineering, Shahrood Branch, Islamic Azad University, Shahrood, Iran*

reza naeimi - *process enginer oil refinery Abadan*

hamed sohrabzadi - *Department Of Chemical Engineering, Shahrood Branch, Islamic Azad University, Shahrood, Iran*

خلاصه مقاله:

This process has a significant proportion of energy in the industry. Thus, according to the uncontrolled increase in consuming energy as well as global energy prices, the attempts to find ways to save energy in the distillation process is of very importance. This study investigates energy recovery for condenser of the stabilization tower (South Pars Phases 2 and 3) by using thermal integration. The tower condenser is originally air conditioner that consumes 5 megawatts electrical power for the overhead vapor condensation to the temperature of 55 ° C Per hour. The cost of the production of this amount of energy is considerable. Based on the thermal integration, the amount of feeding energy due to its low temperature is suitable for condensing and even one can improve the condensing temperature to 25°C. In this paper, by replacing heat exchanger with current air conditioner and by using food as condensation factor, excellent results were obtained. In case of using the integration, 5690 GJ electric power will be saved annually. The current air conditioner will be removed from the process and a good profit will be obtained for this operating unit through reducing the cost of electricity supply of condenser.

کلمات کلیدی:

Simulation, Energy optimization, thermal Integration, Air Conditioner

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/383596>

