

عنوان مقاله:

Energy Optimization of Ilam Gas Refinery Unit 200by using HYSYS REFINERY Software

محل انتشار:

کنفرانس ملی بهینه سازی مصرف انرژی در علوم و مهندسی (سال: 1393)

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خلاصه مقاله:

Optimization can be defined as the use of the specific methods to determine the most effective and economical solution to a problem in a process. Optimization is one of the most important decisionmaking tools in the industry. Optimization uses the effective quantity methods by choosing the best answer or solution among the possible solutions. Of course, computers and the related software have made the necessary calculations feasible with the least cost. In this paper, an energy optimization has been done for condensations stabilization unit of Ilam gas refinery (IGTP). At first, the stabilization unit has been simulated and examined in the environment of the commercial HYSYS Refinery software by taking into account all the details. Then, it has been defined by using integration techniques and scenario processing facilities with the purpose of losing Electricity consumption. Again, the presented scenario was defined in the software. The obtained results from the simulation reveal that in case of using feed stream as the energy integration factor (for cooling) and using heat exchanger Instead of the present air conditioner, 1/1 Mega Watt electric power will be saved in addition to the omission air conditioner 1060/1360 AC (this equipment is currently being used for cooling) and the reduction of operating costs amounted to be more than \$ 522,240 a year

کلمات کلیدی:

Energy Efficiency, Energy Integration, Heat Exchanger, Air Conditioner

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