

## عنوان مقاله:

Study on Application of Heat Pumps in Distillation: A Review

## محل انتشار:

چهارمین کنفرانس بین المللی رویکردهای نوین در نگهداشت انرژی (سال: 1393)

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## خلاصه مقاله:

Despite the many well-known benefits of distillation and its widespread use, one major drawback is the significant energy requirements, since distillation can generate more than 50% of plant operating cost. To solve this problem, several technologies were proposed to reduce the energy requirements of distillation, with potential energy savings typically in the range 20–50%. The employment of heat pumps is one of the best possibilities for drastic reduction of the energy demand. Industrial heat pumps are a class of active heatrecovery equipment that allows the temperature of a waste-heat stream to be increased to a higher, more useful temperature. Thus, the purpose of this review is to introduce heat-pump technology and its application in industrial processes.

## کلمات کلیدی:

heat pump, heat integration, distillation, energy savings

## لینک ثابت مقاله در پایگاه سیویلیکا:

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