

## عنوان مقاله:

Heat Pumps Technologies Ground Source

## محل انتشار:

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## خلاصه مقاله:

Heat Pumps specially Ground Source Heat Pumps (GSHP), Ground Water Sources Heat Pumps (GWHP), Surface ( surface , shallow, river, lake and ...) Water Source Heat Pumps(SWHP) have been attended very much in recent years. In areas where the technologies of heat pumps has been applied, since of their reliability, high level of comfort, low demand, and low operating costs, they are one of the best system for application. Initially these systems were most popular in rural, residential applications where heating requirements were the primary consideration. However, recent improvements in heat pumps units and installation procedures have expanded the market to urban and commercial and industrial applications. One of general forms of heat pumps is ground source heat pump (GSHP) that it has higher efficiency and coefficient of performance, therefore its energy costs is low. This system can be use in several methods and in different places, one of the easy and usual application is space heating and cooling. Building cooling may be provided by circulating water directly between the ground loop heat exchanger and chilled ceilings or .beams. In this system, the heat extracted from the ground for heating is replaced during the cooling season

## کلمات کلیدی:

Heat pumps, Ground heat pumps, Geothermal heat pumps

## لینک ثابت مقاله در پایگاه سیویلیکا:

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