

# 生活中的熱學

## 與本主題有關的技術

### 一、散熱器

採用均熱板 + 4熱導管 Cooler Master TPC 612 散熱器  
<https://www.youtube.com/embed/PMjXPQOYXCA>

此散熱器是利用了熱導管的原理，使管子內的空氣氣壓降低，液體就會容易沸騰，變成氣體，氣體再去冷端凝結，再回到熱端吸收熱量，持續來回，達到降溫的效果。

113級 吳信緯

### 二、蒸汽火車

蒸氣火車的由來與構造

<https://www.youtube.com/embed/XFiGr1tMhKc>

加熱水使蒸氣膨脹，推動火車。

112級 陳建錫

### 三、史特林引擎

Stirling Engines - How They Work

<https://www.youtube.com/embed/gQb2sN6UWkA>

這影片介紹史特林引擎的構造及運作原理。

112級 李孟翰

## 四、Bosch Thermal System Video

### Bosch Geo 101 - How Geothermal Heat Pump Systems Work

<https://www.youtube.com/embed/q9DP6v0IW1k>

The Bosch Geothermal heat pumps use the earth as a heat source in the winter and as a heat storage source in the summer. Ground and water temperatures, 6 feet below the earth's surface, stay relatively constant throughout the year. This allows the system to provide extremely efficient heating or cooling all year long in virtually any climate. Sometimes the term "environmental comfort system" is used to describe a geothermal heat pump. The thermal system video shows how the heat pump absorbs or rejects heat from the earth and has absolutely no impact on the environment.

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## 五、熱管heat pipe

Heat Pipe 中文

<https://www.youtube.com/embed/n8sT4d-szJk>

在大部分的工廠中，部分的能源會以熱能的形式散失。利用類似電腦內熱導管的原理，使用熱廢氣加熱真空管的下端，使管內的液體沸騰蒸發，水蒸氣到上端後凝結放熱，藉此加熱上端的物質。

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