Heat exchangers

Heat exchangers are a factory system with the aim of serving the industry in the fields of engineering, and it is considered one of the important scientific developments in the field of industry today. Heat exchangers are a system of heat exchange between liquids inside the heat exchanger based on the transfer of heat energy from the fluid with the highest heat. To the liquid with the lowest heat, usually these fluids are water.

There are many forms of heat exchangers that share the same goal but differ in design and installation, and the most famous types are:

Plate Heat Exchanger

This type of heat exchanger is considered one of the most popular types of heat exchangers, and its installation from the inside is in the form of plates that have the same shape and arrangement one after the other inside the heat exchanger, and there are four nozzles in each plate, two at the top and two at the bottom, in the upper nozzles are inserted into the first nozzle The owner of the higher temperature is intended to warm the less heated liquid, and in the other upper nozzle the liquid is released after absorbing heat. As for the lower nozzles, in the first nozzle the heat-giving liquid comes out, and in the second lower nozzle the question is asked to give the heat.

In the way the heat exchanger works, it is done on the basis of heat transfer, but here the transfer of heat from a liquid to a liquid is not through direct contact between them, but here the way the heat exchanger works is to transfer the heat energy from the plate with the highest heat to the plate with the lowest heat, so the arrangement of the plates is arranged on the basis of The first plate is the warm one, and the one after it is the lowest heat. When the liquid with the highest heat passes into the plate, it is heated and the heat energy is transferred from the warm plate to the cold plate by means of thermal steam energy that moves and raises the temperature of the cold plate so that the temperature of the liquid is raised. The lowest temperature is for the exit from the heat exchanger at a temperature higher than its entry temperature. For example, if the liquid with the lowest temperature entered 30 degrees Celsius and the heat-giving liquid entered at a temperature of 80