

History of pumps

Since ancient times, man has tried to manufacture tools capable of increasing the efficiency of his actions.

The primordial need to raise the water, even if only to bring it to the mouth, made the human being engineer in finding solutions to this problem.

The first tool developed was the use of one's own body, or the instinctive formation of a cup obtained by joining the palms of the hands.

Later, when the nomadic man became sedentary, he started using pumps to solve the problem of raising water.

The first pump in history dating back to 300 B.C. it is due to Archimedes. It was a screw conveyor known as Archimedes screw. This type of pump moved constant quantities of liquid with each rotation. The noria instead, used since ancient times, allowed the overcoming of very high differences in height by taking advantage of the current of a river. The fountains of the Palace of Versailles were once fed by an installation of norias on the Seine.

The idea of using the centrifugal force to pump liquids was instead suggested by Leonardo Da Vinci in 1500.

However, the official inventor of the centrifugal pump is the French physicist Denis Papin who in 1705 built the first truly functional centrifugal pump. It was equipped with a multi-blade impeller and a spiral housing. Developments came gradually, through small construction improvements, and tedious experiments.

Around the seventeenth century the construction of connecting crankshaft mechanisms and piston/cylinder systems allowed the creation of piston pumps which, having much higher limits of capacity and head difference, allowed the pumping of large quantities of liquid at large differences in height.

In the 19th century, rotodynamic pumps and then centrifugal pumps were developed for the improvement of steam engines and then for the spread of turbines and electric motors.