

Kartell

ARTICLE 1395: WATER JET PUMP

USE:

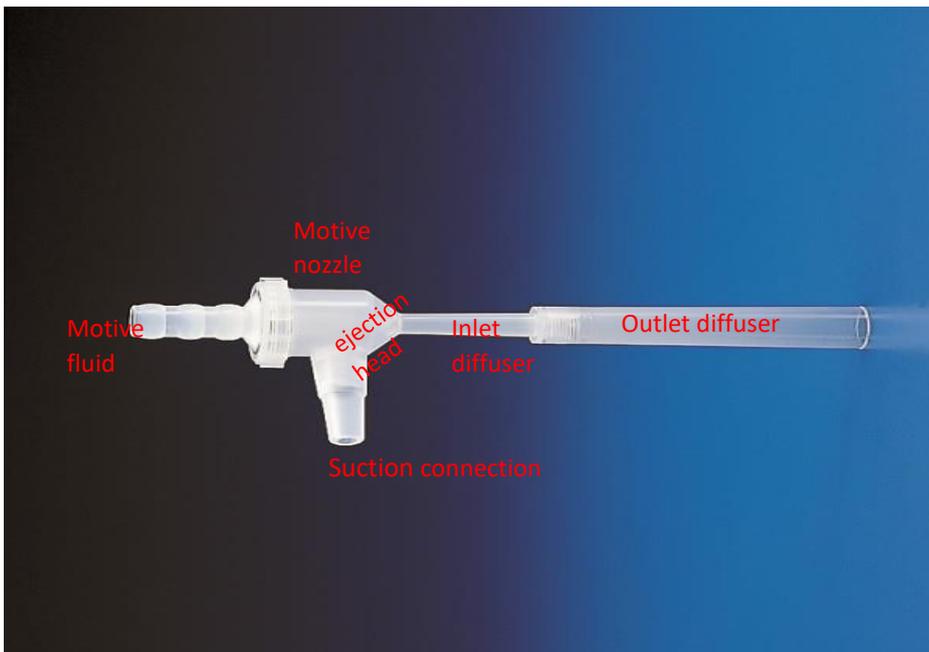
Water jet vacuum pumps are mainly used in chemical laboratories for the production of vacuum, for example in vacuum distillation or drying.

When water is used as the motor vehicle, water jet vacuum pumps can be coupled directly to the water pipeline. However, if it is necessary to save on the consumption of water, this can be put back into circulation.

By further cooling the water, a greater vacuum can be obtained.

ACTION

The action of water jet pumps is based on the fact that the "liquid jet" (motive fluid) that comes out of the motor nozzle (motive nozzle) at high speed drags air from the head of the jet pump and compresses it at atmospheric pressure.



The motive fluid (water) passes through the motive nozzle and the diffuser. The pressure in the motive nozzle decreases and the speed rises.

On the contrary, the flow is decelerated in the diffuser while its pressure increases to the discharge pressure at the outlet of the jet pump.

Through the suction connection the air enters into the ejector head and it is mixed with the motive fluid (water) flowing with high velocity.

Motive flow and sucked air pass together - as a mixture - through the diffuser, losing velocity and gaining pressure.

The ratio discharge pressure/suction pressure is the compression ratio of the water pump