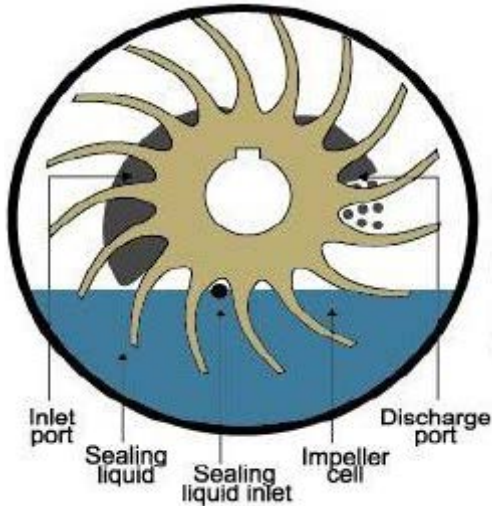
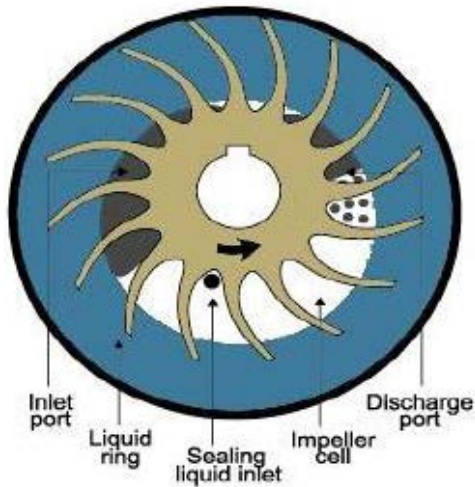


TWO-STAGE LIQUID RING VACUUM PUMP

To produce vacuum in a two-stage liquid ring vacuum pump, a multiblade impeller on a shaft is positioned eccentrically in a cylindrical housing that is partially filled with sealing liquid.



As the shaft turns, a liquid ring is created by the centrifugal force generated by the rotating impeller. This force holds the liquid ring against the inner wall of the pumping chamber. Since the impeller is located eccentric to the pumping chamber, the depth of entry of the blades into the liquid ring decreases and increases as the impeller rotates. This creates increasing cell volume on the inlet port side, creating vacuum.



On the discharge port side, the impeller cell volume decreases as the blades move further into the liquid ring. This increases the pressure until discharge takes place through the discharge port. A continuous flow of fresh sealing liquid is supplied to the pump via the sealing-liquid inlet.

In the case of the two-stage liquid ring pump, the discharge from the first stage does not discharge to atmosphere. Instead, the first stage discharges through the manifold leading to the second stage as well as through a discharge port located in the intermediate plate between the first- and second-stage impellers. The process repeats itself in the second stage, allowing deeper vacuum and finally discharging to atmosphere.

[Click here to find your local authorized distributor](#)

