

Rotary Vane Vacuum

Principle of Operation

The rotor is mounted on the drive shaft and positioned eccentrically in the cylindrical casing. The rotor has slots for radially sliding vanes, which divide the pump chamber into segments. The centrifugal force of rotation pushes the vanes out of these slots and toward the wall of the casing. As the rotor turns, the gas is drawn through the inlet, compressed and pushed out through the exhaust.

In lubricated vacuum pumps, the oil collects in the bottom of the exhaust oil separator chamber as the gas passes through a demister, then through an exhaust filter, before finally exhausting to the atmosphere.

Dry running rotary vane incorporate a simplex exhaust filter between the cylinder and discharge port

