

Rotary Vane Pumps Features and Benefits

A Reliable Line of Pumps to Cover the Most Demanding Industrial and Scientific Applications

Varian Vacuum Technologies' new DS line of Rotary Vane Pumps are designed and manufactured to meet the demanding requirements of various industrial and scientific applications.

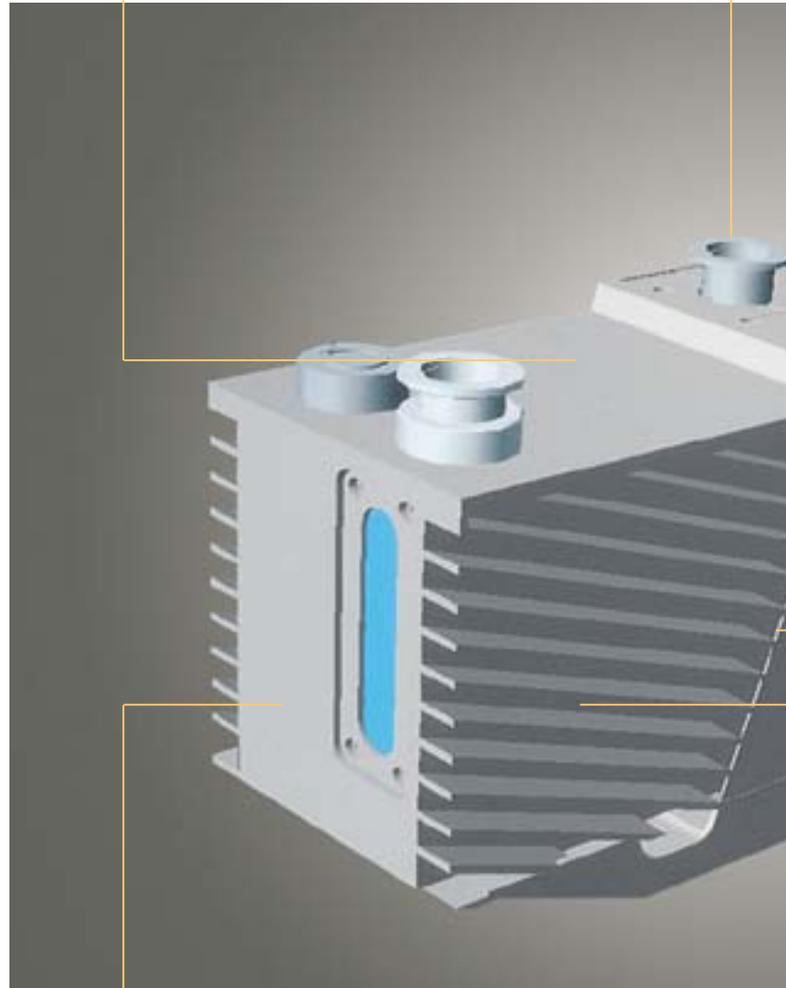
Thanks to a very simple and highly reliable design, these field proven rotary vane pumps provide excellent vacuum performance. Varian's quality and manufacturing standards ensure that the DS Rotary Vane Pumps provide high pumping stability for light gases, low noise, minimal oil backstreaming, and a long operating life.

Varian's DS Rotary Vane Pumps conform with CE requirements, and all pump motors are UL and CSA approved. Varian's world class technical support organization makes the DS Rotary Vane Pump cost-effective and well suited for a wide range of applications.



Dual Stage Pump

The two stage design allows low 10^{-3} mbar operation, low operating temperature, minimal backstreaming at low pressure, good pumping efficiency and gas ballast in the high 10^{-3} mbar region.



Forced Oil Circulation

The dedicated oil circulation gear pump ensures efficient and reliable lubrication of the pump from atmospheric pressure throughout the entire vacuum operating range.



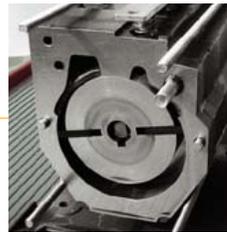
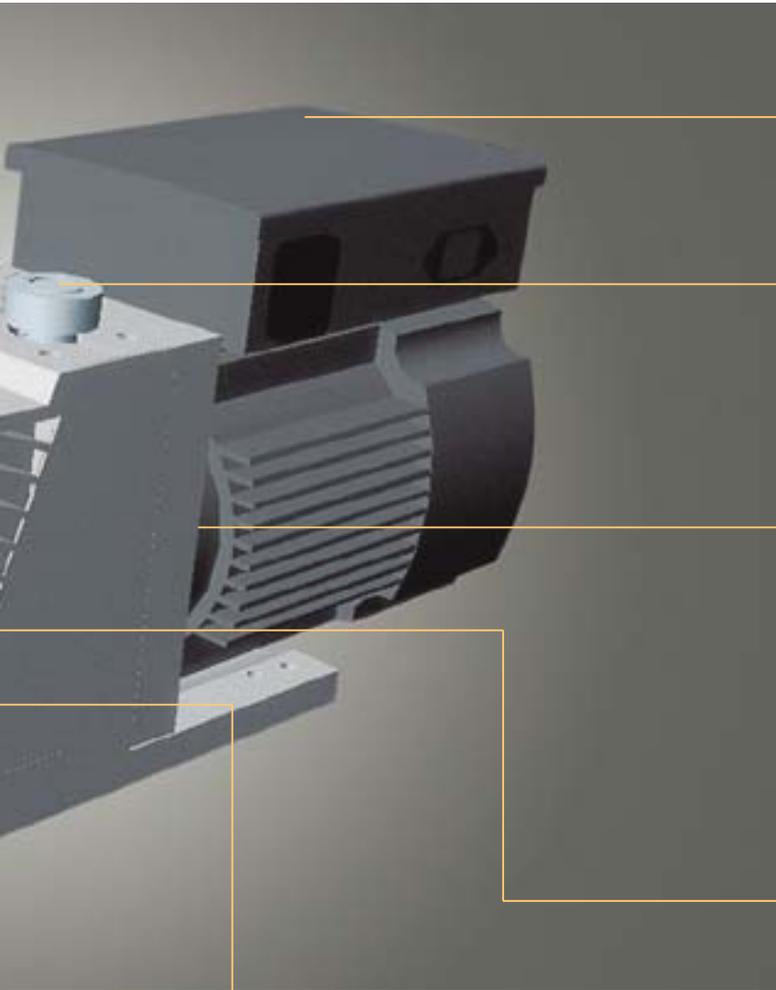
Anti-suckback Valve and Vent Device

This valve isolates the pump should it stop or be idle. It prevents inadequate venting and oil contamination of the vacuum system when the pump is switched off.



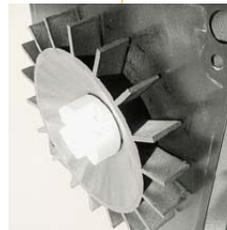
World-wide Motors

Pump motors, available as 1-phase or 3-phase, are suitable for all voltages and frequencies world-wide. Operational voltages are easily selectable, allowing greater flexibility, easy planning and inventory reduction.



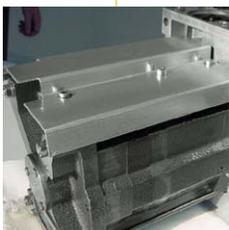
Gas Ballast Valve

The opening of this valve injects air into the second stage of the pump. This action increases the temperature of the module which facilitates the outgassing and clean up of water vapor or other condensibles from the pump fluid.



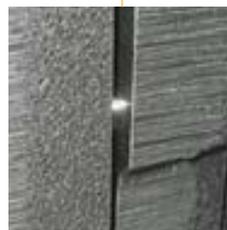
Forced Air Ventilation

The cooling fan between the motor and the pump reduces the pump operating temperature, lowers the oil vapor partial pressure, minimizes oil backstreaming and vacuum system contamination.



Built-in Oil Shield

This feature minimizes the oil mist at the pump exhaust. Apart from drastically reducing the oil consumption over long periods of operation, this results in a reduction of air pollution limiting the impact on the environment.



Alignment Pins on Pump Module

The pump module components are assembled and positioned by built-in alignment pins. These speed up and facilitate pump assembling and maintenance.