



MXQ 501 SERIES

Energy efficient single stage Vacuum Pumps capable of handling excess process water, finding wide applications in the Pulp and Paper Industry.

CAPACITY : 3300 to 23400 M³/hr (1950 CFM to 12800 CFM)

MAX VACUUM : 700 mm Hg (27.5” Hg) at sea level

- MXQ 501 series can handle excess liquid carryover without any difficulty, even if it arrives as massive slugs
- 20 vane rotors handle air more efficiently
- Ease in maintenance as bearing bracket is externally mounted
- Power efficient
- No pressure throb
- Enhanced capacity can be achieved when handling saturated gas by using inlet spray nozzles provided near the suction flanges of the pump.
- All components are 100% interchangeable with *NASH 904 series
- Standard material of construction is Cast Iron, also available in SS 304 and SS 316

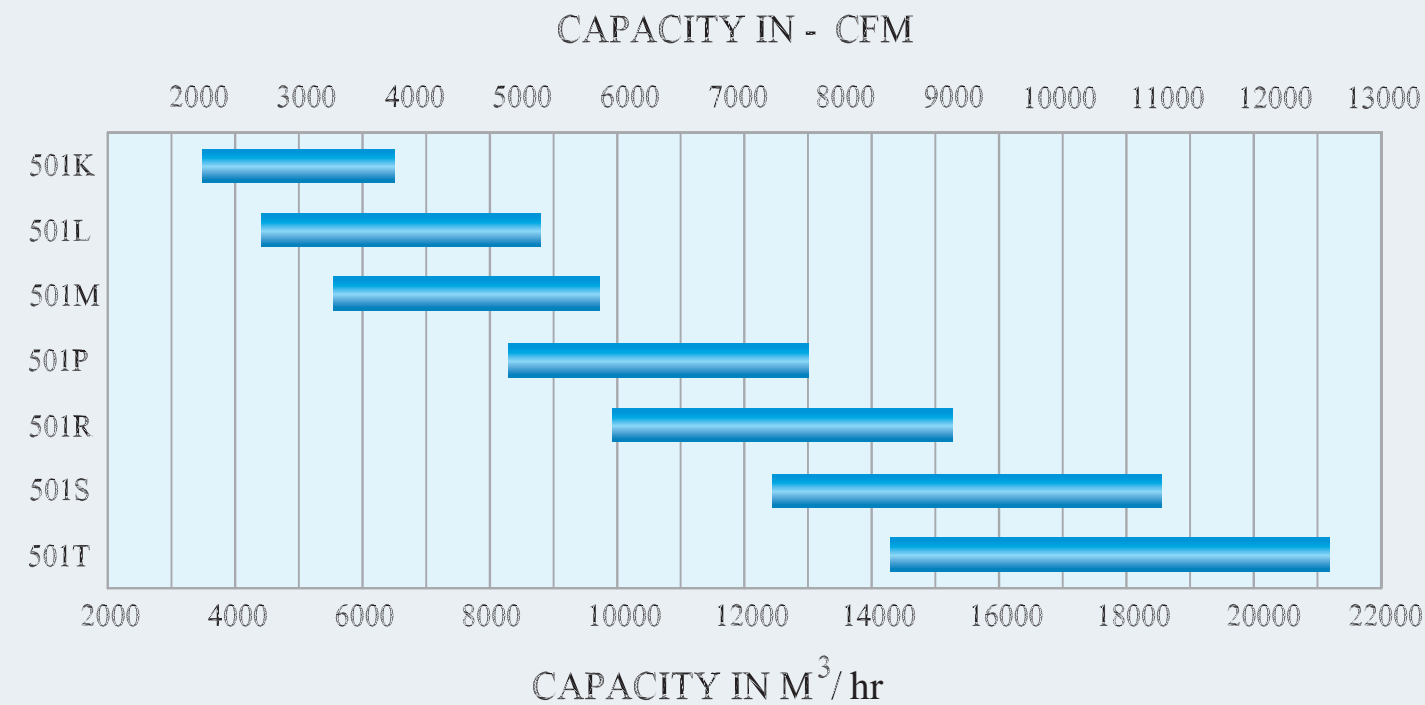
Constructional Features

Body, Heads & Cones are made of close grained heavy duty Cast Iron, Rotor is made of Spheroidal Graphite (SG) Iron free from cavities and blow holes. The Shaft is made of Carbon Steel and carries the one and only moving part, the Rotor which is dynamically balanced for a vibration free running. The Shaft is carried on both the ends by bearings which maintain the close running clearance between working parts throughout the working life of the Pump.

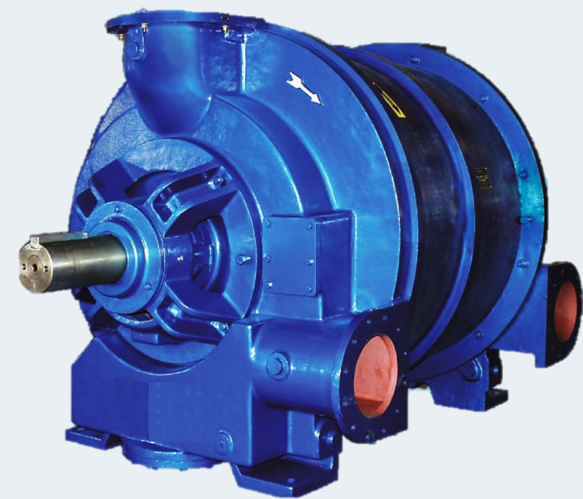
Bearings are grease lubricated before shipment and require no further lubrication for approximately six months.

The pumps can also be supplied with contact parts in solid or claddd SS 304 and SS 316.

Performance Data



The above graph is only indicative, refer to the individual performance curve for Pump selection



Equivalent Chart

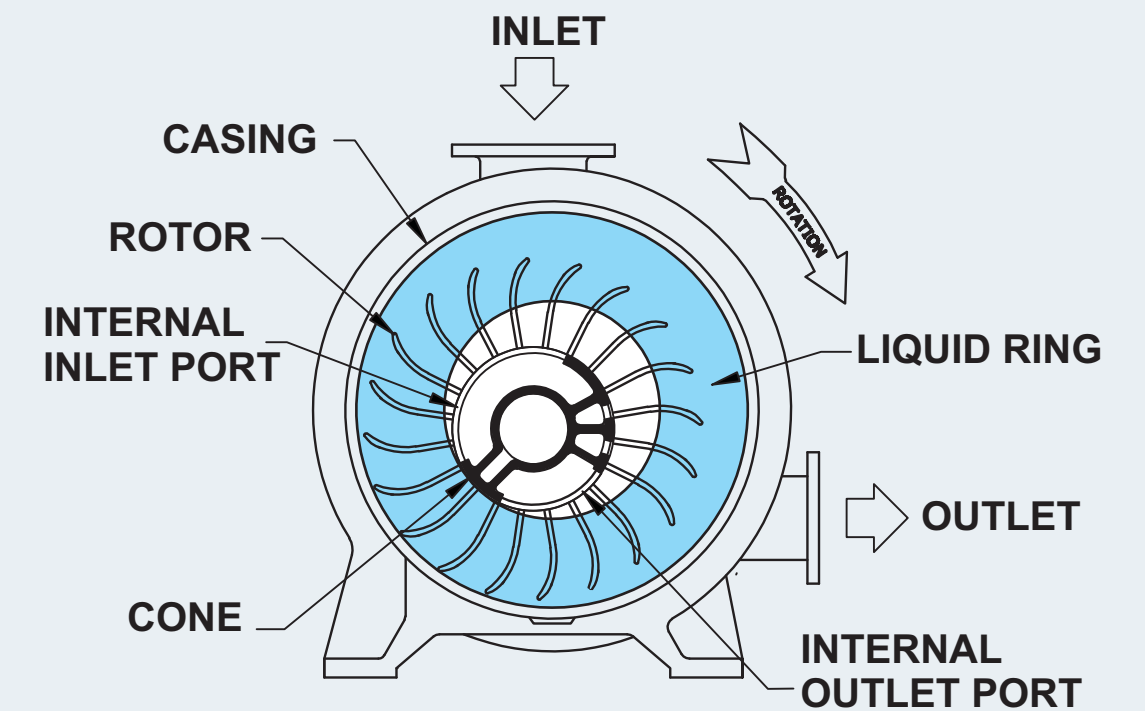
MXQ	*NASH
501 K	904 K
501 L	904 L
501 M	904 M
501 P	904 P
501 R	904 R
501 S	904 S
501 T	904 T

APPLICATIONS

- ❖Pulp & Paper Industry ❖Power Plants ❖Chemical & Pharmaceutical Industry ❖Textile Industry
- ❖Food and Beverages ❖Sugar Industry ❖Fertilizer Plants ❖Other Process Industries

Principle Of Operation

The Liquid Ring Vacuum Pump is a specific form of rotary positive displacement pump utilizing liquid as the principal element in air compression. The compression is performed by a ring of liquid formed as a result of the relative eccentricity between the pump’s casing and a rotating multi vane rotor. The eccentricity results in a near complete filling, and then partial emptying, of each rotor chamber during every revolution. The filling and emptying actions create a piston action within each set of rotor vanes.



The pump’s components are positioned in such a manner as to admit air when the rotor chamber is emptying the liquid, and then allowing the air to discharge once compression is completed. Sealing areas between the suction and discharge ports are provided, to close the rotor areas, and to separate the inlet and outlet flows.

*Gardner Denver Nash® is a registered trademark of their respective original manufacturing pump company, none of which have any affiliation with MXQ, LLC