

Maximizing Hose Life in Peristaltic Hosepumps

Peristaltic hosepumps have numerous and unique performance advantages over most positive displacement pumps today. Typically they are totally self-priming, handle extremely high viscosity and high solids products, are able to run dry, and handle air entrained products without damage over extended periods of time. The absence of shaft seals and moving parts running in the pumpage minimizes pump wear and further extends service life on many difficult applications such as abrasive slurries and sludges.

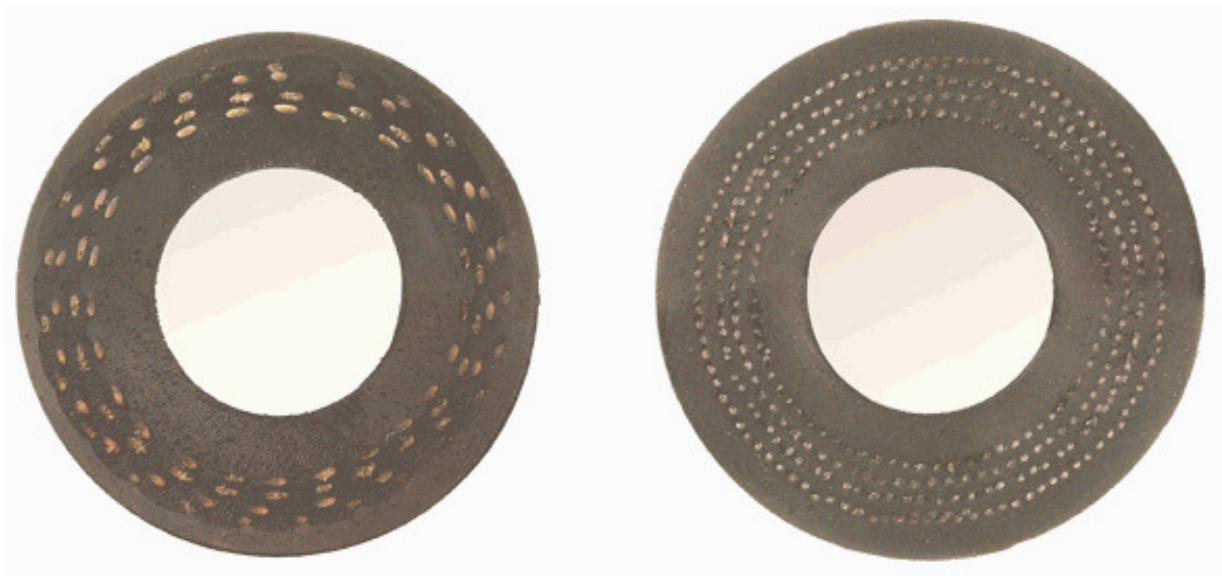
Protecting the initial investment in any pump should always be the goal in any installation. Several steps should be considered when sizing of the pump so that the hose life can meet customer expectations. The following factors strongly influence the life of a hose on a given application:

- Speed
- Discharge pressure
- Temperature
- Chemical compatibility with the pump hose
- Duty cycle – will the pump run continuous or intermittently
- Pulsation – simple dampeners are very effective in reducing pulsation

Extremes of the above factors will adversely affect hose life. The most controllable factor of course is the pump speed itself. Considering smaller pumps for a given duty that runs faster will definitely afford shorter hose life than larger pumps running slower. Selection of the correct pump will increase hose life and reduce maintenance expense.

Concurrently, one should consider the hose design itself as all hoses on the market are not created equal.

- Verderflex hoses have many more re-enforcements than typical hoses available in the market today
- During its manufacture, the rubber is pressed into the reinforcing fibers, trapping the rubber for greater strength
- In use, the compression of the rotor shoes is spread across these evenly wrapped reinforcing fibres yielding better load distribution and reduction of load per area of fiber
- Typical hoses available in the market are extruded
- Extrusion does not permit close diametrical tolerances to be maintained yielding and uneven hose OD
- Extruded hoses must be ground to meet the 2 to 3 tolerance they claim
- Verderflex hoses are not extruded, but are hand made and can meet tolerances without grinding
- Verderflex hoses are totally interchangeable and can be used in many other manufacturers hose pumps on the market today. 40% of Verder's hose sales are used in other pumps today. The Verderflex hose will typically afford better hose life on a given application



Typical Hose

Verderflex Hose