

## **ECLIPSE<sup>®</sup> vs. Peristaltic**

## TOP 10 REASONS WHY ECLIPSE OUT-PERFORMS



## PERISTALTIC PROBLEM

Leakage of Chemicals destroying the pump or surrounding area

<ul> <li>Corrosive, Costly, Hazardous, Regulated, Toxic, Flammable or Explosive will eventually escape from connections or fatigued, ruptured hose or tube</li> <li>Required to use flexible hose for connections that are unreliable and can break or leak</li> <li>Peristaltic hose/tubes are unpredictable and will eventually fail catastrophically</li> <li>Peristaltic hose/tubes requires leak detection to know if there is a problem</li> </ul>	<ul> <li>Sealless design - Housings are seal with two static O-rings</li> <li>Pump is hard piped, no chance of a break or leak point</li> <li>Longest Mean Time Between Failures</li> </ul>
Limited pressure differential, over pressurization	
<ul> <li>Operating pressures vary with peristaltic series, model and hose/tube materials</li> </ul>	<ul> <li>All models designed for 150 psi differential pressures</li> <li>All models designed for 200 psi casing/working pressures</li> <li>Burst pressures to 580 psi</li> </ul>
Viscosity limitations	
<ul> <li>1 to 100 cPs, increased fluid viscosity will result in decreased flow, Max viscosity 2,500 cPs</li> <li>Elevated fluid viscosities require two tubes to draw viscous fluids that need to be merged into one tube to produce a flow on discharge</li> </ul>	<ul> <li>0.3 to 10,000 cPs and higher</li> <li>As fluid viscosity increases pump efficiency increases</li> </ul>
Loss of Repeatability and accuracy	
<ul> <li>Flows vary and accuracy is lost with static head changes</li> <li>Variable flows in suction lift installations – "Suction lift depends on the tube restituting fully before the advance of the next roller, if this does not happen the result is reduced flow"</li> </ul>	<ul> <li>Continuous output flow is not affected by static head changes</li> <li>Operating in vacuum systems (28 in. Hg or 0.1 mm Hg) does not hinder performance</li> </ul>
Pulsating flow	
<ul> <li>Peristaltic pump require multiple rollers to reduce pulsations</li> <li>Multiple rollers mean more hose/tube compressions, increasing fatigue, reduced tube life and increased chances of failure</li> </ul>	<ul> <li>Straight and short flow-through design</li> </ul>

**ECLIPSE SOLUTION**