

GIW Slurry Diverter

A revolutionary design to increase suction liner and impeller wear life.

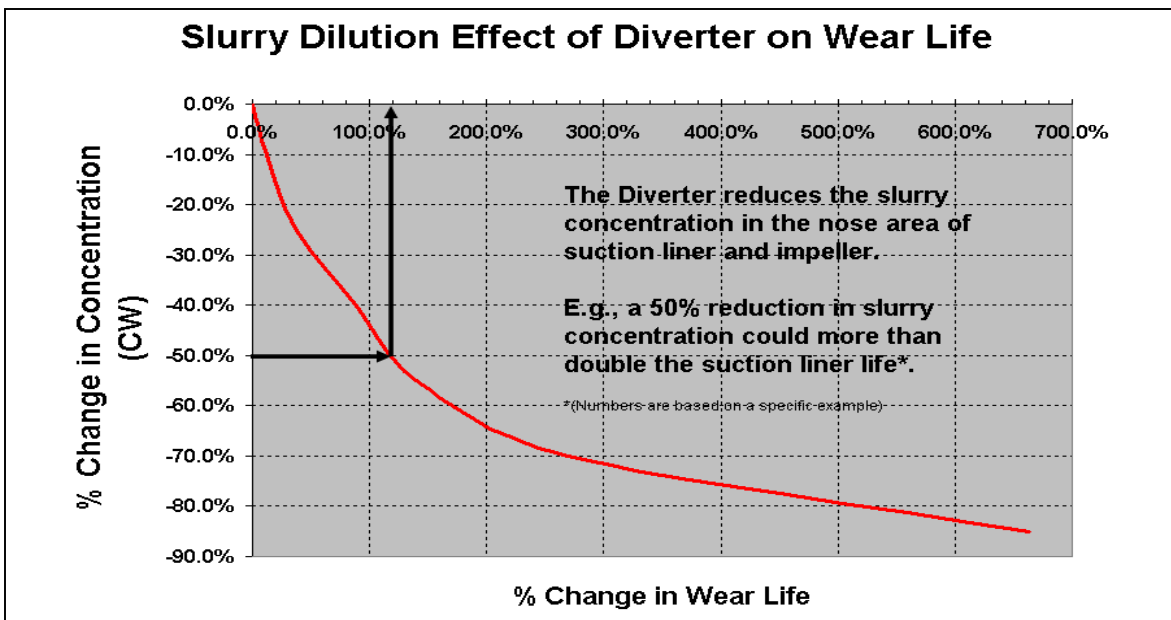
GIW's Theory: If particle contamination can be excluded from the nose gap, wear life can be dramatically improved.

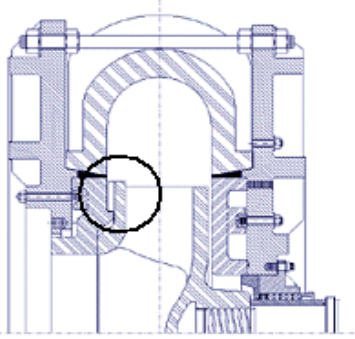
Principle: Research has shown that internal velocity and pressure gradients between the impeller shroud and the pump casing can allow particles to migrate toward the suction eye. These solids contribute to the wear induced degradation of the gap between the suction liner and the impeller. As this gap grows, wear rates increase and pump efficiency is reduced

Lab Testing: GIW verified the particle flow and developed different solutions to

counteract it. By "diverting" particles away from the casing wall, their flow direction could be reversed. The result is the **Patent Pending Slurry Diverter design.**

Application: A carefully calculated step is integrated into both the suction liner and impeller clearing vanes to provide a physical and hydraulic block in the particle path. This transfers the solids from the pump wall into the higher velocity flow path created by the clearing vanes, where they are returned to the process fluid. See the back page for photos of how the new diverter drastically increases part life.





GIW Slurry Diverter

Pump Off Test – 13 Weeks (2184 hours) Operation

Competitor Impeller



GIW Impeller



Competitor Suction Liner



GIW Suction Liner