

MANUFACTURING

Quick STUDY

Hydra-Cell[®]
Seal-less Pumps

www.Hydra-Cell.com

Location:	United States
Application:	Removing laminate build-up from ski edges
Media:	• Grinding fluid
Model No.:	D10XKBGFHCA
Flow Rate:	4 gpm (15 l/min)
Pressure:	800 psi (55 bar)
Hydra-Cell Advantages:	• Ability to handle abrasive liquid containing sticky solids while delivering required pressure • Reliable operation under continuous duty with no breakdowns



Hot Water on Steam Valve Test Rig

The final stages of production at this US ski manufacturing plant were being hampered by the failure of piston pumps to last more than a few hours when handling resinous grinding fluid. Part of the process involved the application of multiple coatings of laminate, and any build-up of excess material on the ski edges was removed by grinding.

But pumping the abrasive grinding fluid (a variable concentration of powder/mash) presented problems. Primary among them was that resin in the fluid stuck to balls and seats of the piston pumps, causing repeated failures. After switching to Hydra-Cell pumps, they ran for six months with no failures at all - working up to 24 hours daily during the manufacturer's busiest production period.

Characteristics of Fluid Pumped:

☒ Contains Abrasives ☐ Corrosive ☒ Solids in Suspension ☐ High-temp. (>158°F/70°C) ☐ Non-lubricating ☐ High-viscosity (>500 cPs)