News from Wanner

Hydra-Cell[®] pumps hot aggressive liquids

There are many reasons why some liquids need to be pumped at higher temperatures, cleaning fluid efficiency, reaction products and products that are solids or semi-solids at ambient temperatures to name but two. This can cause problems for pumps designed to operate at ambient temperatures and reliant on close tolerances for operational efficiency. Differential thermal expansion can also cause fit problems with bearings, bushes and dynamic seals.



Hydra-Cell pumps from Wanner are said not to suffer from such problems and

to handle liquid temperatures as high as 120°C with ease. Their unique, multi-diaphragm design has no dynamic seals and incorporates neither tight fits nor close tolerances.

The increased corrosivity of hot liquids is a further problem encountered. (Water at 90°C is 64 times as corrosive as water at 20°C.) Corrosion of pump internals, including gears, screws, rotors, stators, impellors, bearings, bushes, pins and seals impairs operation, causes leaks and can lead to catastrophic failure.

In a Hydra-Cell pump there are no dynamic seals and no bearings or bushes, operating within the pumped liquid, to be affected by thermal expansion or corrosion. The pumped liquid is always isolated from the fully lubricated drive end of the pump and the selection of appropriate pump head material ensures that corrosion is not a problem.

Where even higher operating temperatures are encountered, Wanner can supply compatible oil coolers to maintain the pump's hydraulic liquid at optimum viscosity.

Further information from:

Nick Herrington, Wanner International. Tel +44 (0)1252 816847 Email: NHerrington@wannerint.com www.hydra-cell.eu

