CLEANING & WASHING

Quick **STUDY**

Hydra-Cell® Seal-less Pumps

www.Hydra-Cell.com

Location:	United States
Application:	Detergent parts wash
Media:	• Recycled water • Hot water • Detergent
Model No.:	D35XKBTHFEHB
Flow Rate:	30 - 35 gpm (114 - 133 l/min)
Pressure:	390 - 695 psi (27 - 48 bar)
Hydra-Cell Advantages:	• Seal-less design • Ability to pump abrasive recycled hot liquid at high pressure

Cleaning Turbocharger Housings after Machining

A new component-wash system, using hot detergent delivered by a Hydra-Cell seal-less pump at high pressure, enabled a leading manufacturer of turbochargers for diesel engines to remove a production bottleneck and increase output. The problem lay in cleaning the turbocharger housings. After their final machining process, the housings are left covered with coolant and a considerable amount of grit and metal fines.

The previous washing system was too slow, relying on a solvent and oil based solution and requiring the housings to dry overnight before they could be painted. The new high-pressure system cleaned effectively and the hot water rinse, evaporating quickly, left the parts clean, dry and ready to paint within an hour of machining, solving a production problem and reducing lead times for customers

The water/detergent mix, filtered to 100 micron particle size, is recycled and is no problem for the Hydra-Cell to pump at high pressure and high temperature 180˚F (82˚C). Pleased with its performance in the cleaning system, the turbocharger manufacturer subsequently installed Hydra-Cell pumps on other operations in the plant.

Characteristics of Fluid Pumped:

● Contains Abrasives ○ Corrosive ● Solids in Suspension ● High-temp. (>158˚F/70˚C) ○ Non-lubricating ○ High-viscosity (>500 cPs)