

CLEANING & WASHING

Quick STUDY

Hydra-Cell
Seal-less Pumps

www.Hydra-Cell.com

Location:	Netherlands
Application:	Cleaning latex tanks
Media:	• Sodium hydroxide
Model No.:	D35EKSJHFTMH
Flow Rate:	20 gpm (75 l/min)
Pressure:	1090 psi (75 bar)
Hydra-Cell Advantages:	• High-pressure capability (versus centrifugal pumps) • Seal-less design • Can operate uncooled up to 194°F/90°C (versus piston pumps)



High-pressure Removal of Hardened Latex/Resin Deposits

A leading tank cleaning company enlisted the help of a Hydra-Cell distributor to develop a new concept for cleaning internal tank surfaces on which latex or other resinous deposits have hardened through exposure to air.

Latex tank cleaning systems usually rely on repeated circulation of 185°F (85°C) sodium hydroxide solution (lye) at 116 to 130 psi (8-9 bar). They remove most of the encrusted deposit - but for the tank to qualify as "clean" under EFTCO Cleaning Codes, no trace of previous content must be visible. Delay in cleaning, sometimes unavoidable, makes it likely that a low-pressure cleaning must be supplemented by manual/mechanical cleaning and polishing to remove traces of hardened resin and restore the surface.

Their solution was to use a D35 pump to circulate hot paint stripper at high temperature and pressure. A mag-drive pump boosts inlet pressure to the high pressure seal-less Hydra-Cell pump operating at 1000 psi (69 bar). Without cooling, the pump handles aggressive cleaning liquid at the high temperatures required and is guaranteed to be leak-free.

The new system has also been able to cut cleaning times by more than 50% in some cases. It leaves tank internals entirely free of residual deposits, making scraping or scrubbing unnecessary.



Characteristics of Fluid Pumped:

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