

WATER & WASTEWATER TREATMENT

Quick

STUDY

Hydra-Cell
Seal-less Pumps

www.Hydra-Cell.com

Location:	United States
Application:	Disinfecting and flushing
Media:	• Sodium hypochlorite
Model No.:	M03XKPGCCTPA
Flow Rate:	3 gpm (11 l/min)
Pressure:	160 psi (11 bar)
Hydra-Cell Advantages:	• Seal-less design • Ability to handle corrosives • Low maintenance • Reliability • Compact build • Drive options



Disinfecting and Flushing Water Mains

A public water utility in New York State had tried various types of pumps on the pipe flushing operations that must be carried out on water mains following repair or service work. None proved satisfactory until the utility found a new solution - a truck-mounted Hydra-Cell pump driven by a Honda engine.

Before a main carrying potable water can be put back in service, utility workers are required to disinfect it by chemical flushing from upstream of the repair downstream to the nearest hydrant. The liquid bleach used for this purpose proved too harsh for the mechanical seals on the original pumps. The result was unreliable performance and high pump repair costs.

The Hydra-Cell unit met all the requirements of the application. Due to the corrosive nature of the fluid, the pump could not contain stainless steel components. It was also required to be portable, low maintenance and capable of pressures of 203 psi (14 bar).

The unit is mounted to the back of a truck with a drum of concentrated bleach, an installation in which all elements are fully mobile. It was an advantage that the Hydra-Cell pump could be engine-driven as an option.

Previous pumps used electric motors, adding to bulk and cost by needing an electrical generator. The pump is actually functioning as a high-pressure metering pump. The disinfecting flush is followed by a pure water flush before the water main is returned to normal service.

Characteristics of Fluid Pumped:

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