ENVIRONMENTAL CONTROL

Quick STUDY

Hydra-Cell® Seal-less Pumps

www.Hydra-Cell.com

Location:	United Kingdom
Application:	Spray control of odors and dust
Media:	• Water
Model No.:	M03XKBTHFECA D10XKBTHFECA
Flow Rate:	M03 up to 3 gpm (11 l/min) D10 up to 8 gpm (30 l/min)
Pressure:	725 bar (50 bar)
Hydra-Cell Advantages:	• Seal-less design • Ability to handle dust particles • Reliability • Low maintenance

Dust and Odor Control

When this UK odor control system builder expanded into the landfill site market, it needed a reliable pump to deliver water-based deodorant solutions to spray nozzles mounted on the perimeter fences of landfill sites. There can be as many as 400 nozzles at nearly 5-ft. (1.5m) centers in the system. To cover long distances, and for satisfactory atomization, the liquid must be pumped at high pressure.

On/Off switching is automatically controlled by wind directional technology (protecting nearby householders from odors) but the pump must be ready to operate 24/7 if activated.

The pumps originally chosen by the OEM were high-pressure piston pumps, but in the harsh, dusty conditions of landfill sites, their seals would wear and they could not sustain continuous duty. Within weeks the company's service engineers were called out on numerous occasions by site operators anxious to avoid public complaints about odors. Pump faults interrupting odor control ranged from oil leaks, which required new o-rings, to leaking valves and cracked ceramic pistons.

With the company's reputation for reliability and good service under threat, it looked for a pump that could handle the pressure requirement of 725 psi (50 bar) at continuous duty and match conditions effectively, especially with regard to sealing needs. Hydra-Cell seal-less pumps offered the solution. All piston pumps were replaced with the D10. A year later the company spokesman was able to report that since switching to Hydra-Cell, "We have not had a single failure. Site visits have been for normal servicing. The pump has saved us many man hours and equipment replacement costs, and most importantly, our reputation."

Characteristics of Fluid Pumped:

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