



APPLICATIONS



AGRICULTURE

REMOTE CONTROLLED AGITATORS

Cornell Pumps Helps Agitate the Liquid Fertilizer Industry –With New Cutter Pump Outperforming Expectations

Site:

Numerous animal farms in the Midwest

The Problem:

A leading Midwest company specializing in liquid manure wants to agitate an entire manure lagoon, without tying up personnel and farm equipment that could be put to other uses. The manure needs to be agitated to ensure that the liquid fertilizer has an even mix of nutrients and to keep solids from settling into the bottom of the pond.

Traditionally, lagoon agitation has been accomplished through use of a pump and/or propeller driven piece of equipment backed into the lagoon. This has often powered by a tractor. Using this method, only the area around the piece of equipment is agitated, tying up a valuable tractor and a farm hand. With this method, as soon as the agitation equipment is removed from that section of lagoon, the solids again begin to settle.



CORNELL'S 6NHTB PUMPS EXCEED EXPECTATIONS!

The Solution:

The company devised three different sized Agitation Boats. The entire lagoon can be agitated continuously using a hand held remote control to move the boat. Once the lagoon is agitated, a properly fitted boat can be pulled up to the bank and used as the lead pump for a drag hose system. Engines on the boat power high-pressure guns that force manure down into the lagoon at rates of 4,000 GPM. The liquid fertilizer expelled is much more consistent, with more predictable nutrient levels.

Powering this innovation are Cornell Pumps. The Cornell 4514T pump is featured on their smaller boat, while the larger craft use either the 6NHTB pump or the new 6NHTB cutter pump.

End Results:

The Cornell 6NHTB cutter pump is performing very well on the lagoons—tackling even those applications with plentiful weeds and garbage that would clog a standard enclosed impeller pump. The extra material to pump doesn't adversely affect pump performance—the 6NHTB still pumps with 80 percent efficiency when pushing the additional solids. A farmer using the boat even purposefully tried to clog the pump to test its efficiency, and was unable to clog it!

