Lakos Turbine Separator Eliminates Routine Maintenance and Expensive Repairs; Protects Pump Bowls/Impellers

Extreme quantities of sand had to be cleaned from a massive in-line filter every 10-12 hours before a Lakos Turbine Separator reduced that requirement to simple inspection and occasional cleaning every 10-14 days. The Separator, installed on the suction of a turbine pump at DeBenedetto Farms of Chowchilla, California not only protects their pump from abrasive wear, but also keeps a 160-acre, drip-irrigation fig orchard virtually free of clogged emitters and plugged drip lines.

“We knew the problem just had to be solved when we found actual pieces of the pump’s brass impellers in the fine screens on our emitters,” said owner-operator Maurie DeBenedetto. “It cost us $2,600 to replace those impellers. We just had to find a way to prevent that from happening again. The Lakos Separator seemed the surest solution to our pump protection and sand filtration problems.”

(Left) Dan Dawson, foreman, changes this huge filter much less often thanks to the Lakos Separator.
(Above) This typical installation of a Lakos Turbine Separator shows how the separator is attached directly to the pump’s bowl assembly.

(Continued on reverse)
Prior to installation of the Lakos Separator, the nearly five-foot long steel screen filter on the pump’s discharge would nearly fill up with sand and, if not removed, cleaned and replaced every 12 hours without failure, would eventually pass sand throughout their drip system, forcing them into a painstaking and time-consuming job of manually flushing the drip lines and emitters.

“This 160-acre drip system has about 40 miles of drip lines and approximately 12,800 emitters,” said Dan Dawson, foreman of DeBenedetto Farms. “If we don’t keep the sand out, we’re dead.”

According to Dawson, the Lakos Separator relieves the worry of having to regularly clean their filter screens. “If we happen to forget to clean [the screen] every so often, it’s no big deal, because the separator removes almost all of the sand anyway.”

Maintenance on the entire drip system has been drastically reduced, allowing one man to work the entire 2,000 acres and freeing Dawson for other duties.

This application was recommended and installed by Anderson Pump Company of Chowchilla, California, their local authorized Lakos Distributor. The pump’s flow rate is 400 U.S. gpm and the separated sand and grit are simply purged deep into the well via a 20-foot tail pipe attached to the Separator’s purge.

The one-time cost of purchasing and installing this Lakos Separator is being offset with reduced routine maintenance costs every 10-12 hours during their six-month irrigation season, when, at one time, their screens had to be replaced and cleaned just that often. As the savings add up, this Lakos Separator is paying for itself in reduced labor costs alone. No less significant are the savings to be realized in reduced pump repairs and downtime as the separator protects the pump as well as the entire irrigation system.

“We’re committed to drip irrigation,” says DeBenedetto, “because it saves time and money. So does the Lakos Separator.”

Protecting their pump, keeping their filter maintenance to a minimum and eliminating problems with clogged drip lines and emitters convinced Dawson and DeBenedetto Farms that the Lakos Separator was a wise purchase.