Chem-Pro C2F Diaphragm Pumps Excel in Liquid Fertigation

Application

Pierce Farm Center is a 22 acre demonstration farm that functions on an educational / agritainment basis, located in the western end of the San Fernando Valley.

Pierce Farm Center crops are grown for fresh market production and sold through their farm market in Woodland Hills, CA. Crops include tomatoes, sweet corn, summer squash, cucumbers, eggplant, bell and chilli peppers, basil and several varieties of pumpkins. They also grow a corn maze for Halloween, planted with field corn.

Problem

Dry fertilizer is applied directly onto the soil at the beginning of every season. This is extremely labor intensive and time consuming since the farm has multiple crops growing at one time, additionally, the crops are spread out amongst several fields.

Because nitrate fertilizer is highly susceptible to leaching, excessive levels of nitrogen need to be distributed pre-plant if it is to last throughout the season. This resulted in higher costs and possible risk of nitrate leaching into the ground water.

A venturi type injection system was originally used to inject liquid fertilizer, however this method was not accurate and required extensive setup time.

Solution

As part of it's modern, eco-friendly farming practices, Pierce uses sub-surface drip irrigation to supply water to the crops. It seemed logical to switch over to liquid fertilizer, utilizing the same installed drip system to also distribute the fertilizer as needed.

Pierce Farm Center contacted Blue-White Industries after visiting their booth at a local Ag trade show. Blue-White assisted in selecting the proper metering pump to meet their fertilizer demands.

The farm has approximately 20 drip irrigation systems. The installation includes permanently installed injection fittings with one-way check valves onto each of the 20 drip irrigation systems. A single portable Chem-Pro[®] C2 diaphragm pump is used to inject fertilizer at each location during the normal watering cycle. The Chem-Pro[®] pump is secured to an optional Pump Caddy for portability (see photo above).

Jeff Bloom with Pierce Farm Center says, "Our crops this year were fantastic, our yields were improved. We used 25% less granulated fertilizer and 25% less liquid fertilizer as compared to the previous farmer who used a venturi type pump."