Ciruli Brothers

“At Ciruli Brothers we believe we have a moral and social responsibility to assure the produce we handle is both safe and wholesome.”

The Temperature Monitoring Challenge

Ciruli Brothers takes extraordinary care in picking, cooling, and loading mangos. Since 1970, Ciruli Brothers has implemented temperature monitoring for its products as a component of its quality assurance program. Back in the ‘70’s, paper strip recorders were the only affordable option and were used to track temperature of mangos in transit from Mexico into the United States. The units were cumbersome, time consuming to deal with, and easily manipulated.

“The solution was not optimal,” explains Chris Ciruli, chief operations officer at Ciruli Brothers. “Drivers quickly learned how to manipulate these recorders by sticking a pin in the device to make it look like a constant temperature was maintained. Integrity of the data was never assured.”

Further complicating the situation was that if temperature excursions were detected, strip chart results had to be faxed to all interested parties. “It took a ton of time. Someone had to baby sit the copier and fax machine,” according to Ciruli.

The Solution

Ciruli Brothers dabbled with newer temperature monitoring devices but was never able to find an optimal solution at the right price. That was about to change. At a chance meeting with PakSense representatives at the PMA show in 2006, Chris Ciruli was introduced to the PakSense temperature monitoring label. Since he was responsible for day-to-day operations, he quickly determined that the PakSense Label was a significant advancement and could help streamline his QA processes. The company purchased 100 labels to do some initial tests on shipments from Mexico into Arizona. After seeing immediate success, they continued testing on another route with shipments from Mexico into Texas.

Today, two PakSense Labels are placed in each shipment of mangos from Chiapis and Nayarit, Mexico into the United States. Labels are placed at the head and tail of each truckload to provide broader sampling information. Shipments are generally in transit for 2-3 days and ideally stay between 45°F-55°F.

Once across the boarder, Ciruli Brothers unloads the trucks, downloads data quickly from each PakSense Label into an Excel spreadsheet, and emails results to their growers in Mexico. Because time and temperature information is stored in each PakSense Label indefinitely, they also keep them on file for future reference in case they ever need to recall the information.
PakSense Labels are used to guarantee that the refrigerated trucks they pay for are doing their job. The results with the new temperature monitoring program have either met or exceeded expectations.

“The PakSense Label has allowed us to get information from inside the pallet close to the product,” according to Ciruli. “Instead of an ambient air reading that the strip recorder and other solutions provided, the two labels per shipment give us accurate, indisputable information as to what occurred to the mangos themselves during the shipment.”

Other benefits of the PakSense Label include the ability to quickly order additional labels when more shipments are scheduled. The size of the labels and the quick turn-around from PakSense makes it easy to adjust to demand. Previously, Ciruli was faced with an almost impossible task when this occurred due to the size of other recorders and the expense of shipping those recorders to growers.

The Future
According to Chris Ciruli, the company is very happy with the PakSense Label and will continue to expand its use. The company recently started using PakSense Labels in warehouse coolers to double check that adequate temperatures are maintained.

“PakSense has given us a product that is instant, fast, and indisputable,” explains Ciruli. “It is just one more way that we can assure that the produce we handle is both safe and wholesome for our customers.”