

## RETAIL VIEW: U.S. misting technology doesn't resonate in Europe

By Tim Linden

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At the Fruit Logistica convention in Berlin, Germany, earlier this year, retailers were intrigued with the produce department misting systems offered for sale, but not enough to purchase them.

"People wanted to see the new technology from America, but we have found that retailers [in Europe and elsewhere] are just not open for change," said Itamar Kleinberge, vice president of ProdeW Misting & Humidification in Marietta, GA.

Mr. Kleinberge and company President Shakeel Merchant estimated that while misting systems have an 80 percent penetration in the U.S. marketplace, only 1 percent of retailers outside the United States use them. That figure baffles the mind, considering the advantage and relative low cost of such systems.

U.S. retailers have long believed in the benefits of keeping produce wet at the point of sale. The "wet rack" is ubiquitous in American retail operations. It hardly matters whether it is a 100,000-square-foot superstore or a roadside stand - most proprietors use some type of method to keep leafy and other highly perishable items wet. Echoing the sentiments of everyone interviewed on the subject, Mark Timmons of U.S. Water Systems in Indianapolis said that "misting systems make the produce more appealing visibly, reduce shrink and increase shelf life three or four times." In the process, retailers save money well beyond the cost of the system in a very short time period. Mike Corrigan of Corrigan Corp. of America in Gurnee, IL, agreed with that premise but was even more generous with the increase in shelf life, pegging it at five to 10 times greater. Mr. Corrigan said that a highly sensitive herb will show signs of distress without water in four hours, but "by misting, you are going to get at least 40 hours" before any wilting occurs.

While these sellers of misting systems do brag about extended shelf life and the appearance of freshness that a mister can connote to the

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impulse-buying consumer, they are apparently preaching to the choir when talking to U.S. retailers - and their efforts fall on deaf ears when they take their systems overseas.

Mr. Kleinberge of ProdeW said that his firm continually tries to sell in overseas markets, but the U.S. marketplace is big enough for continued growth. While there is 80 percent penetration, he said that there are 40,000 supermarkets in the United States, and a good percentage are always being remodeled and new ones are being built every day.

The companies offering misting services apparently compete on both price and quality. There are a handful of competitors in the marketplace, and The Produce News talked to three of those competitors after attempting to reach five different companies. ProdeW and U.S. Water Systems representatives touted the simplicity of their systems, and each claimed to be the low-cost leader. Mr. Corrigan believes his system is the best on the market. "We are known as the 10-year system people," he said, referring to how long one of his installations will last.

He said that there are lower-cost systems, but they will only last a couple of years. Of course, his low-cost competitors dispute that, believing they have created less complicated and less costly systems that work just as well as the higher-priced systems. Each of the companies interviewed could point to a well-known retailer that uses its system.

All agreed that, in the words of Mr. Corrigan, misting systems in the United States "have become a standard in any well-run produce department. We are just as much a standard as refrigeration."

Misting systems apparently date back about 20 years when they started to replace hoses and hand spraying, which were the standard at the time. While some older stores still use the old-fashioned hand sprayers, each of the misting system representatives said that this method puts too much water on the wet rack in an uneven pattern.



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Mr. Merchant of ProdeW said that the different misting systems have different application rates, but a couple of standards in the industry are "10 seconds of spray every 10 minutes or seven seconds of spray every seven minutes."

He said that some systems spray more often, but it is ProdeW's belief that every seven to 10 minutes is sufficient to keep produce moist without inundating it with water. Each of the companies brags about the "fine mist" that its product sprays. The finer the mist, the better it allows for deeper penetration. Mr. Kleinberge called it almost a "fog" which allows for penetration in even the farthest corners of wet racks with double shelves.

The misting representatives were also quick to point out that these systems are not humidifiers. They are typically hooked up to the store's regular water supply, and equipped with filters. The disconnect with humidifiers, explained Mr. Timmons of U.S. Water, relates to an outbreak of Legionnaires' disease in the early 1990s that was traced to a retailer that used a humidifier. The major difference is that the humidifier used a reservoir of water. That allowed for the water to be stagnant and for the disease-causing bacteria to grow. Produce department humidifiers quickly exited the scene after that.

Mr. Corrigan said that misting systems have no such problem and that no bacteria issues have ever been linked to such a system. Likewise, he said that the systems themselves spray nothing more than water. While there has been industry scuttlebutt about using the systems in some way to help disinfect produce, the Corrigan Corp. president said that this is not in the cards. He said that it would be cost-prohibitive and ineffective to try to include some type of ozone cleansing of the water. He said that it is also impractical and ineffective for various reasons to add any type of disinfectant, such as citric acid or chlorine dioxide, to the water itself. He advised retailers to be wary of any mister salesperson who claimed that the system can do anything more than keep produce fresh and moist. However, he did say that with his system, a store can utilize a reverse osmosis process to further filter the store's water supply.

Mr. Corrigan said that the water used is as good as the water in any municipality's water system, so that's how a user should judge the quality of the water in the mist. As such, there is usually no issue with regard to organic produce. In fact, the Corrigan system is used by Whole Foods in its produce department's misting of both organic and conventional fruits and vegetables. Though some have talked about the issue of pesticides leaching from conventionally grown product to organically grown product in adjacent produce racks, the misting representatives say that logically this would be a greater problem with the old hose systems than with the new misting systems. The hose systems can generate lots of water and runoff; the misting systems generally cut way down on that.

Mr. Merchant of Prodew said that the droplets are only 80 microns in size, which he said feels like a fog - certainly not enough concentration of water to create a great deal of runoff.

The cost of the systems can vary quite a bit depending upon the system and the size of the produce department. Mr. Corrigan said that a typical installation will cost about \$400-\$600 for a 24-foot wet rack, with an additional charge for a reverse osmosis filtering system. Mr. Timmons said that his systems costs about one-third as much as some of the systems out there, quoting a price of \$14 per foot, plus filters. For a 24-foot wet rack, that would put the cost at about \$336, plus filters. Mr. Kleinberge didn't break down his cost by foot, but said that the average installation of his competitors' systems is \$2,000 to \$3,000 per store. "We've done lots of installations for under \$1,000," he said.

The bottom line: Misters are apparently a good investment, and the savvy retailer will shop around to find a supplier that fits his needs and philosophy.