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Fresh-cut sector adopts space-age technology

ATTENTION to air quality is intensifying in the fresh-cut produce industry, making airborne cross-contamination control the next frontier in food safety.

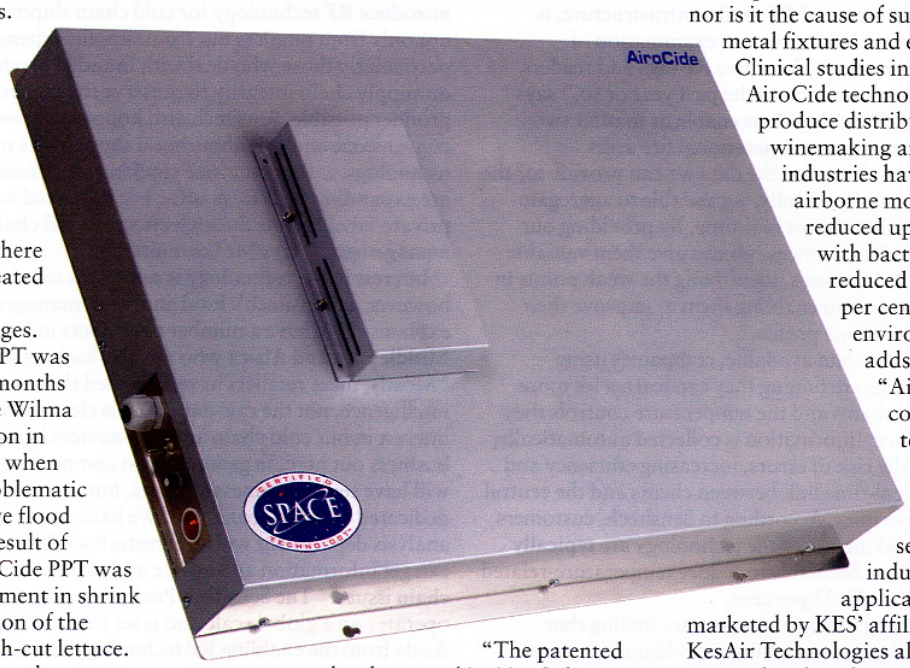
Air inside a processing plant can be a vehicle for contamination of food by mould, yeast dust, or pathogens if not properly controlled. This is why fresh-cut processors are starting to adopt Atlanta, Georgia-based Kes Science's AiroCide PPT – a NASA-developed technology designed to kill airborne bacteria, mould and mycotoxins, and able to break down volatile organic gases like ethylene without using chemicals or ozone.

The technology is currently being used in the supermarket, produce distribution, winery and floral industries, and is now taking hold in food-processing and fresh-cut produce, according to Kes Science director of marketing and communications Kris Morlan.

"Airborne contamination is greatly influenced by environmental and seasonal mould that blooms for processors and produce handlers alike," she says. "This was the case for the largest full-service wholesale distributor in South Florida, The Produce Connection, where a hurricane created even more air quality challenges.

"AiroCide PPT was installed four months after hurricane Wilma struck the region in October 2005, when mould was problematic due to extensive flood damage. The result of installing AiroCide PPT was a vast improvement in shrink and deterioration of the company's fresh-cut lettuce. "The patented installing the system, not one item was lost to shrink."

Other produce and food industry users of AiroCide PPT include Whole Foods Market, DiMare Fresh and Stonyfield Farm, says Ms Morlan.



techniques, photocatalytic oxidation (PCO) and ultraviolet light to destroy harmful airborne microbes," she explains. "This oxidation process occurs within the device itself and does not require OSHA safety regulations, nor is it the cause of surface rust on metal fixtures and equipment."

Clinical studies involving AiroCide technology in the produce distribution, winemaking and floral industries have documented airborne mould levels reduced up to 99 per cent, with bacteria levels reduced as much as 100 per cent in some environments, she adds.

"AiroCide PPT contains the same technology that is used in all AiroCide products that serve multiple industries and applications and is marketed by KES' affiliate company, KesAir Technologies also of Atlanta."

RIPESENSE, THE firm that brought consumers the world's first intelligent fruit label, is planning to launch a new label for avocados early next year, according company ceo Cameron McInness.

The New Zealand firm, which for the past three years has successfully marketed its ripeSense labels for packs of pears, is now rolling out new applications for its product due to popular demand.

Developed by New Zealand HortResearch scientists, ripeSense labels changes colour to indicate the ripeness of fruit, taking the guesswork out of picking ripe fruit.

"Consumers are discovering they can choose fruit to taste without poking, prodding and damaging it in their search for the pick of the supermarket crop," says Mr McInness, who added that he welcomed the launch of similar labelling technology Redi-Ripe onto international markets.

While the way ripeSense works remains a trade secret, Mr McInness reveals it is not ethylene that makes the sensor change colour.

RipeSense labels will hit the shelves for their third North American pear season this fall.