

CA storage gets easier – and demand for it grows



Photo: Dick Lehnert

A box about the size of a refrigerator is all it takes to manage the atmosphere in a CA storage. When Jim Schaefer started in the business in 1982, it took real skill and a good chemist to do what this box will do today.

By Dick Lehnert
Managing Editor

It once took a pretty sophisticated manager and a hefty investment to preserve produce under controlled atmosphere conditions and thus serve out-of-season markets, but today, James Schaefer sells a refrigerator-size “do everything” box that can – and does – manage the atmosphere around apples stored in rural India and mangoes in Peru.

The owner can keep an eye on storage conditions by remote monitoring and cell phones sending messages to Blackberrys or PCs or by e-mail. The box generates the proper atmosphere for the storage.

Schaefer is president of Storage Control Systems (SCS) in Sparta, Mich., a firm he and his father Caryl started in 1982. Back then, it took a pretty good chemist to manage a CA storage. But new developments have now made it possible to provide high-quality storage in areas well off the beaten track.

And the demand for better storage is there and growing.

“We started in Michigan in the early

’80s and now we’re all over the world,” Schaefer said, as he gave a guided tour of the new 34,000-square-foot building the company moved into in August. “We see huge growth coming, all over the world, and we’re prepared and ready.”



The company invested \$1 million to renovate the new building to include office space, manufacturing space, design space and an in-house CA storage room

and laboratory in which to test new equipment and methods. Not only are people learning more about how to store fruits and vegetables other than apples, there are large geographic differences even within apple varieties in the kind of conditions needed to store them.

Storing Honeycrisp in Michigan differs from storing them in Washington, Ontario or Nova Scotia.

“While our primary mode of operation is production and manufacturing, we also operate a research department in cooperation with leading universities throughout the world in an effort to make our equipment and technology state-of-the-art,” Schaefer wrote in a brochure about the company. It’s on the company’s Web site, www.storagecontrol.com.

While the storage regimes will vary, it’s simply a matter of “dialing in what’s best for a region,” Schaefer said, and SCS equipment delivers the perfect atmosphere. “It runs on cruise control. It’s automatic. It takes care of itself.”

In addition to providing various storage control systems and atmosphere-changing equipment, the company has expanded into planning complete storages, all designed around bin-size modules and providing insulated, interlocking wall panels for construction of storages and refrigerators.

“We do it all so people can have a crispy, good-tasting apple,” he said, joking, and omitting the other fruits, like blueberries, strawberries and mangoes, and vegetables, like onions and cabbage, that benefit from his storage designs and systems controls.

While Schaefer said his new designs could take CA storage into remote regions and provide CA storage to smaller farmers, he’s also working on new facilities across the United States, from Washington to New York.

The company was built on nitrogen generators and carbon dioxide scrubbers and the gas analyzers for monitoring levels of oxygen, carbon dioxide

and ethylene. But it also built doors for sealing CA storages and chambers for sectioning off parts of storages as 1-MCP (SmartFresh) treatment rooms.

“We have installations of our products worldwide, including South America, India, Canada, Mexico, Australia, United Kingdom and Europe,” Schaefer said. “In these several hundred installa-

tions around the world, we have supplied Permea Nitrogen Generators, SCS Carbon Dioxide SmartScrubbers, GCS Gas Analyzers, SCS CA Seal Doors and all the piping and valving associated with CA stores.”

The newest products are the storage design drawings, the prefabricated insulated steel-over-foam panels for wall construction in CA rooms, and a device called SCS LiveView, a Web-based monitoring and controlling service.

“Using a personal, custom Web site, users can log in to their building or equipment, see the exact conditions and make changes if needed,” he said.

In a quick demonstration, he dialed up a storage in New York and checked the condition of 10 CA storage rooms – with a cell-phone size device he held in his hand.

It’s a lot different than when he started in 1982, he said, but the real growth is yet to come. **FGN**

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