

Storage Facilities Now Have Digital Climate Control

By Bill Lodato, P.E.

With Controls Technologies, Contractors Can Cater To Finicky Collectors.

Some 40 years ago, the business of self-storage was small business, without much of a future. Improvised buildings were used to store the belongings of people on the move. Back then, customer service was pretty much nonexistent. A tenant rented space, paid the rent, and locked the unit. Managers collected the rent and recorded the sale in a notebook of sorts.

Today, the clientele for storage space has grown to include wine aficionados, antique collectors, and commercial business owners with diverse storage needs. Some of the commercial businesses that benefit from self-storage include manufacturers that need to store equipment or perishable supplies, medical companies with massive amounts of records, media companies with years of archived video and data tapes, and law offices that need to retain documentation for years.

The business of renting storage space has become highly competitive, and most storage space facility owners have made customer service a top priority. They strive to deliver high-quality, secure storage solutions to their customers. For example, many facilities are equipped with intrusion alarms, access control systems, closed-circuit monitoring, fire protection, and 24-hour security guards.

As storage facility owners cater to new and growing markets, they are adding computer-based control technologies to their ensemble of services and benefits.



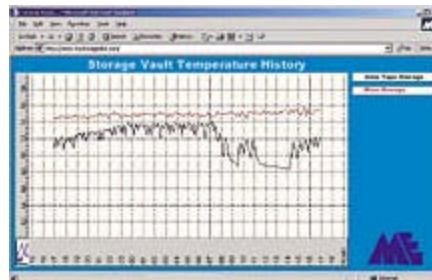
With a BAS in place, owners can check their building's environmental conditions via a wireless device. (Courtesy of Andover Controls Corp.)

GOING HIGH TECH

Digital controls enable a facility storage owner to store sensitive products under absolute climate-controlled conditions. Digital controls, with their microprocessor-based technologies, offer several benefits to the owner, to the client leasing the space, and to the HVAC contractor. One such benefit is the ability to utilize the Internet to instantaneously access current values, as well as historical trends of space conditions.

By taking advantage of digital control technologies, a storage space owner can successfully differentiate his/her business from competing facilities, to attract more commercial tenants who have sensitive storage needs. An owner can capture a prospective client's attention by incorporating space layouts with dynamic displays of the space conditions into a promotional Web page. An owner can create more interest by adding a link to historical data trend reports. Finally, an owner who demonstrates that these reports can be automatically e-mailed to the client will persuade more visitors to sign on the dotted line.

In addition, an owner's risk and liability are lowered. Data trends provide proof that space conditions are being properly maintained. Automatic alarm notifications allow for immediate response to problems, maximizing equipment uptime and life expectancy. The owner can also promote a cleaner, more upscale facility.



This screen shot shows trend data of space temperatures, available via a Web browser. (Courtesy of Andover Controls Corp.)

Obviously, digital controls also benefit tenants. As they shop around for storage space, they will look for facilities that meet their specific needs. Storage space that not only promotes stable climate control, but also provides evidence of a stable storage climate, will quickly win the favor of tenants with sensitive products and materials.

A fine wine collector, for example, may need to store rare and expensive wines at a temperature range of 54 to 57 degrees F. In the case of a collectable wine, the conditions under which the wine ages are as important as the wine itself. If the humidity is too low, a wine bottle's cork may shrink, allowing air to seep into the bottle, causing the wine to age too quickly or even spoiling it. An automated HVAC system will regulate the aging process and maintain a fine wine's delicate properties.

Other examples of sensitive products that need to be stored under a tightly controlled environment include chocolate, art, antiques, furniture, chemicals, cigars, seeds, documents, photographs, videotapes, and other magnetic media.

Climate-controlled conditions provide tenants with a lower risk of damage and loss. In many cases, the stored materials are irreplaceable. Analog or digital magnetic media must be maintained in a regulated climate zone and protected against extremes of relative humidity and heat. Imagine the social implications of damaging video recordings of historic events. Beyond social implications, damage to corporate data stored on magnetic media may have substantial financial implications.

CONTRACTORS BENEFIT

With automated controls, HVAC contractors can create their own opportunities. They can design and modify storage space with HVAC equipment and systems that will meet the demands of a growing clientele.

They can use the inherent digital technologies to generate automatic alarm notification (via e-mail, pager, or central station) of out-of-range space conditions or equipment failure.

With this notification, a trained technician can respond in minutes, via Internet connections, to investigate and diagnose the alarm condition. Often these conditions can be temporarily remedied remotely.

Having diagnosed the condition remotely, a technician can be dispatched to the site with the proper tools and parts to quickly apply the permanent solution. Maintaining this high level of customer response will all but guarantee renewal of the service agreement.

An HVAC contractor is well positioned to garner the benefits of digital controls. For the contractor, it means long-term consultative relationships with owners. For the owner, it means attracting and retaining a larger tenant base. And for the tenant, it means security and peace of mind.

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