


Top Purchasing Considerations for Cold Storage Units

A woman with long dark hair, wearing a white lab coat, is shown in profile, looking towards a computer monitor. The background is a bright, slightly blurred laboratory or office environment. The overall image has a light, airy feel with a soft focus.

On-site cold storage units play a critical role in a wide range of industries. In addition to preventing food and beverage products from spoiling prematurely, they are used to protect temperature-sensitive goods in the electronics, petrochemical, and pharmaceutical industries. Whether a company uses a walk-in freezer, walk-in cooler, or refrigerated trailer, the cold storage unit chosen should fully meet their storage requirements.

In this eBook, we discuss some of the key factors you should consider when selecting and purchasing a cold storage unit for your industrial or commercial facility.

Application/Use of the Cold Storage Unit

When evaluating cold storage unit options, one of the most important considerations is the intended application. This factor covers the following:



Indoor Use vs. Outdoor Use

The location of a cold storage unit—i.e., whether it is inside or outside of the facility—significantly influences its design and construction. Unlike internal facility environments, external facility environments are exposed to fluctuating conditions. For this reason, the cold storage units employed in them must be built to withstand exposure to temperature extremes, rain, snow, hail, wind, UV radiation, and other environmental factors. Additionally, they should provide consistent performance regardless of the conditions, in fact most walk-in manufacturers can provide validation reports for their walk-in units.



Temperature and Humidity Requirements

Temperature and humidity requirements vary from industry to industry and facility to facility, depending on the products and processes handled. The cold storage unit you choose should be able to control both temperature and humidity to the levels you need precisely, accurately, and quickly. For example, customers in the cultivation industry often require storage temperatures of less -50° F. Polar King offers cold storage solutions that can achieve these levels up to three times faster than competing units. Cold storage units that feature internal monitoring and external communication systems facilitate the maintenance of proper temperature and humidity levels. In the event of a system issue, a timely alert to workers can initiate maintenance and repair before your inventory is significantly degraded or damaged.



Duration of Use

If your business requires the use of a cold storage unit all year long and for multiple years, purchasing the refrigerator, freezer, or trailer is reasonable. However, if you only require it for a short-term project or seasonally, it may be more economical to rent it.



Industry Standards and Regulations

Every industry has regulations that govern their products, processes, and equipment. Some industries, such as the food and beverage, medical, and pharmaceutical industries, have very strict standards aimed toward protecting the health and well-being of consumers. In regard to cold storage, temperature, humidity, and air quality must be maintained to precise and accurate levels to preserve the integrity of goods in these industries.



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Type of Cold Storage Unit

Cold storage units are available with different operating temperature ranges, cooling speeds, and storage capacities, depending on the application. The types available at Polar King are:

- Refrigeration units
- Freezer units
- Sub-freezer units
- Combination units

Additionally, they come in walk-in and trailer variations. The latter is suitable for companies that require portable refrigeration. They are designed and built to withstand the stresses of the local roads and highways as well as the harsh environmental conditions.

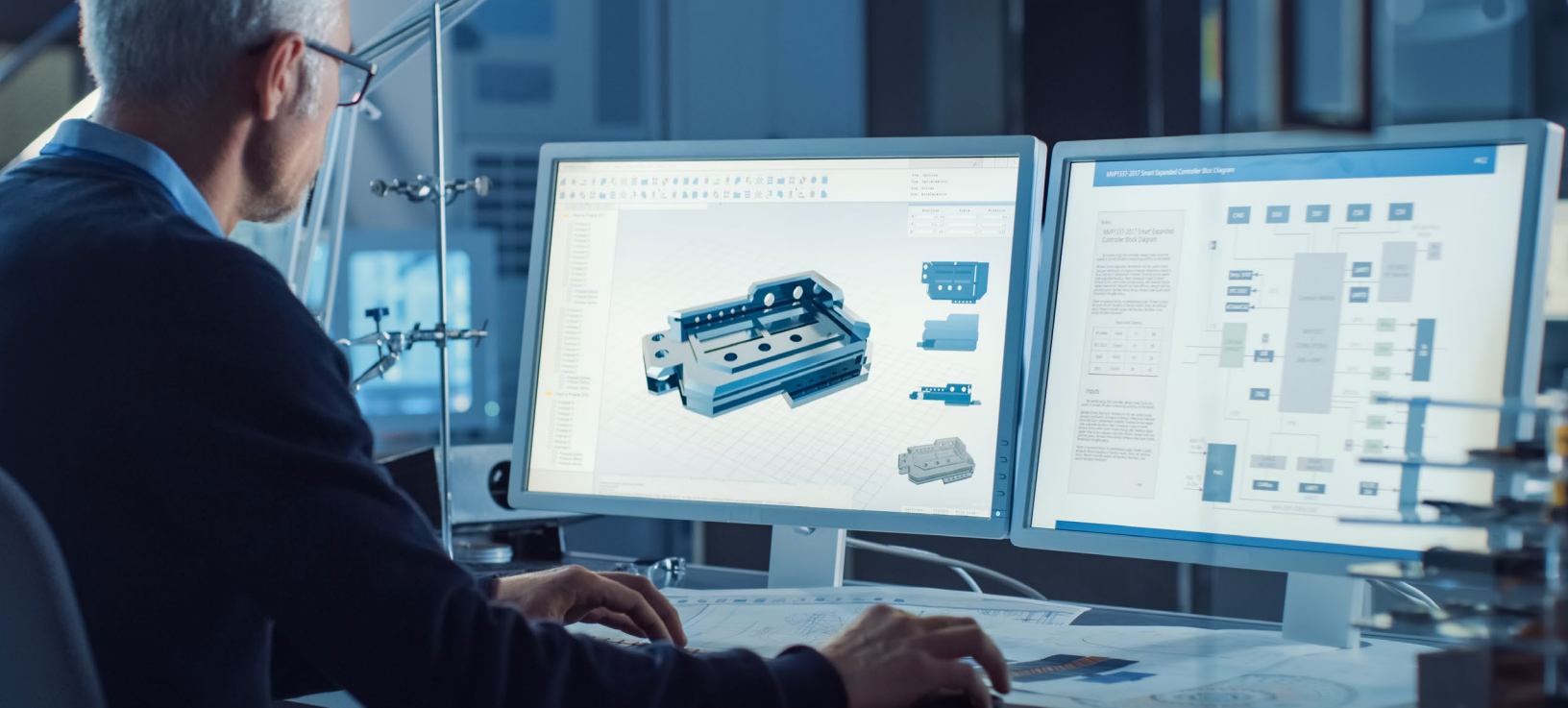


Accessories Integrated into the Cold Storage Unit

The addition of accessories can tailor a standard cold storage unit to better suit the application. Some of the accessory options available include:

- Internal organization, such as shelves
- Transportation solutions, such as ramps
- Monitoring systems for internal conditions, such as temperature and humidity sensors and observation windows
- Security mechanisms, such as video systems and Hasp locks
- Hygienic barriers, such as anti-microbial interior walls
- Protective structures, such as kick plates

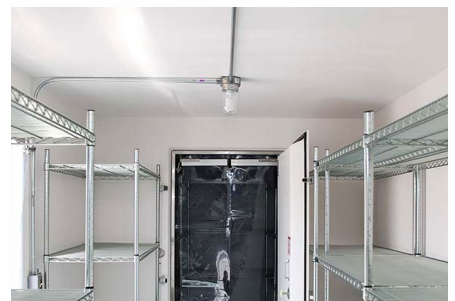
The types of accessories integrated into a cold storage unit depend on the exact storage requirements. For customers with highly unique or specific needs, the accessories may be non-standard. For example, in the cannabis cultivation industry, businesses generally require precise temperature and humidity control to facilitate growth and security locks to prevent theft.



Customization of the Cold Storage Unit

Some companies can satisfy their needs with standard cold storage units, but others require the design and manufacture of custom units tailored to their exact requirements. While the integration of accessories can go a long way in modifying a standard unit, certain system specifications—e.g., size—may necessitate a custom unit design.

When designing and constructing a custom cold storage unit, it is important to partner with an experienced and knowledgeable cold storage supplier, such as Polar King International. The company should be able to build an effective and efficient solution that fully meets your requirements.





Cold Storage Solutions at Polar King International

Polar King International has manufactured and distributed high-quality outdoor cold storage solutions for over three decades. Our clientele stems from a wide range of industries and includes single-unit operators, chain restaurants, healthcare facilities, government agencies, and more.

We offer custom built refrigerated walk-ins up to 16' x 65' and trailer solutions to accommodate virtually any refrigeration requirements. We also offer off-the-shelf trailer units that include 15AMP 120V refrigeration/freezer systems in 6' x 8', 6' x 12', and 6' x 16' sizes. While we can add accessories—such as temperature data logging and monitoring systems, security locks, and redundant refrigeration systems—to tailor the standard unit to your needs, we also offer fully custom trailer solutions for highly specific or unique applications. Equipped with extensive industry experience, our team has the skills and knowledge to turn your ideas into reality.

In addition to selling our walk-in and trailer units, we offer rentals for customers with temporary cold storage requirements. Rentals are available on a weekly, monthly, or yearly basis.

To learn more about our cold storage solutions or speak with one of our experts about your cold storage needs, [contact us](#) today.

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