

Commercial refrigeration adding indispensable support to healthcare

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On a regular basis, almost all businesses and industries depend on commercial refrigeration to function properly. The commercial refrigeration industry is indispensable. Providing solutions and transforming the industries, it has been creating an impeccable impact. Facing challenges and obstacles, the industry has been working as an ally, providing the best of class products.

The medical industry's technical advancements in the last few years have been nothing short of remarkable. These game-changing technologies have had a positive influence on the pharmaceutical industry and its products. The future of the healthcare and pharmaceutical industry that we foresee will be nothing like what we have now. Commercial refrigeration has seen innovation time and again and helped businesses grow. Almost all business, including restaurants, grocery stores, hospitals, and department stores depend on commercial refrigeration for their daily operations. It would be an understatement to conclude that refrigeration has played a significant role. Many sectors, including healthcare, have evolved as a result of advancement in this industry.

Commercial refrigeration is a broad and complex portfolio. If we categorise it into different segments, every refrigerator requires its own set of technologies and features. On a wider level, however, the refrigeration mechanism remains the same. A blood refrigerator, for example, requires a specific temperature to keep the blood bags secure, but the basic system remains the same.

With the rising cases of COVID-19 in this second wave, it is even more imperative to ensure no vaccine gets wasted due to lack of refrigeration or poor infrastructure. According to RTI, it has been revealed that around 44.78 lakh doses of COVID-19 vaccines were wasted in India till April 11.

Considering the current market scenario, providing refrigerators to the pharmaceutical industry is at the topmost priority for commercial refrigeration companies. Recently, the companies have developed COVID-19 vaccine freezers. With IoT-enabled and temperature-based monitoring system, these freezers with a temperature range from 2 Deg Celsius to -20 Deg Celsius and 86 Deg Celsius are equipped with advanced features to maintain the efficiency and efficacy of the vaccine. The products are intended to be a solution, allowing government agencies to reach out to the most remote parts of the world without having to wait for infrastructure to be built.

A vaccine refrigerator requires a very critical application. If a vaccine freezes, the potency is gone which may not be known. To ensure and provide quality performance, we need to understand the requirement for each vaccine and experts are coming

forward to develop the best-in-class products. These portable COVID vaccine carriers are adhering to the current need of the industry.

When it comes to biotechnology refrigerators, a lot of research and experimentation goes behind it. Precision temperature control is the most critical factor and a challenge to deal with. When we look at it from India's perspective, there are places that are so far away that even buses are not accessible. But it is imperative that vaccines are available at every nook and corner of the country. A lot of the rural areas are still facing erratic power fluctuations which makes it challenging for refrigerators to work in such areas. Companies do extensive research and analysis on geographical issues, and they feel compelled to contribute to the betterment of individuals.

As a result, advances in pharmaceutical and healthcare technology aid in extending people's lives. As technology advances in various industries, there are several prospects emerging in the healthcare and pharmaceutical industries as well. As all of the groundbreaking goods associated with this nexus have shown, refrigeration is an indispensable supporting mechanism and using cutting-edge, emerging technology to improve healthcare. Considering India's peculiar challenges, the commercial refrigeration companies are always working on innovation and providing the best of solutions to pharmaceutical and healthcare industry.

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