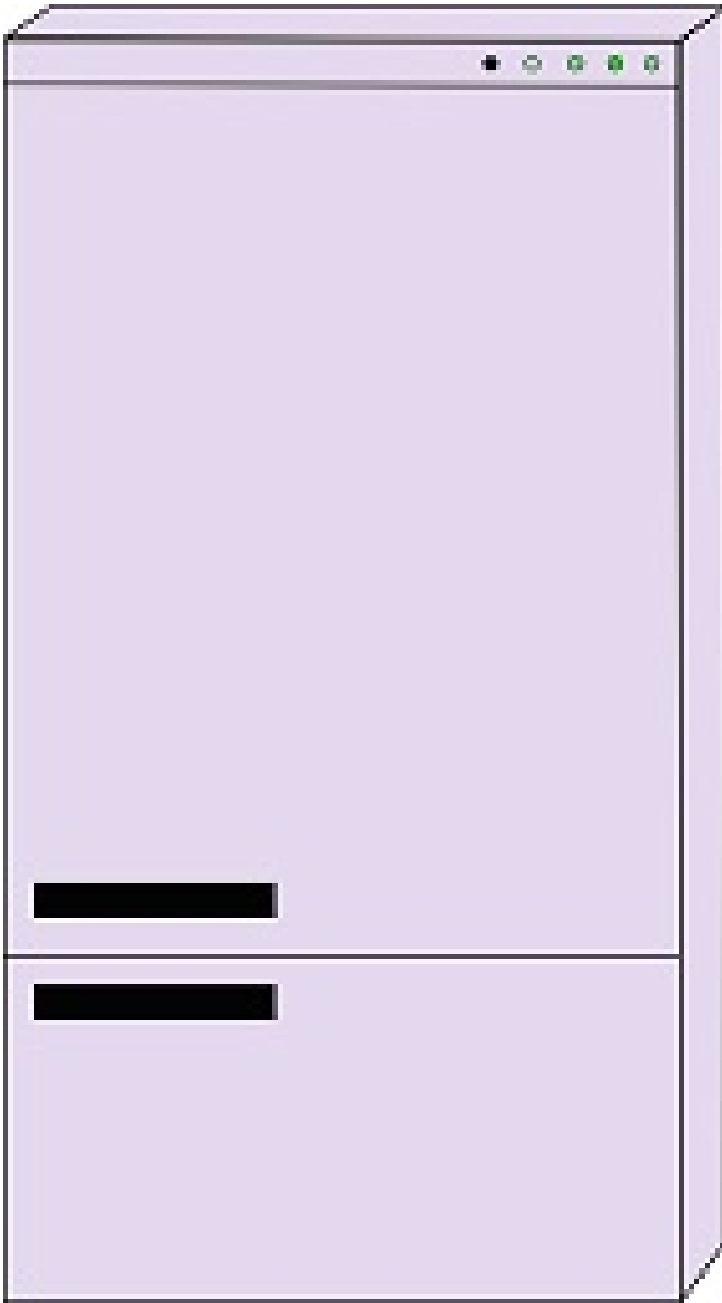


## **Godrej Appliances forayed into healthcare space by manufacturing medical refrigeration with transferred technology**

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By Libin Chacko Kurian

Godrej Appliances, one of the leading players in the Home Appliances industry, in partnership with The UK based The Sure Chill Company, has launched the 'Godrej medical refrigerators with Sure Chill technology'. The specialised medical refrigerators have been designed especially to address a key need of providing precise cooling for preserving vaccines used worldwide in immunization programs and for the storage of blood in blood banks.

With manufacturing the appliances, the venture claims to support Make in India campaign, as Godrej Appliances becomes the only company which manufacture medical refrigeration in India and will also be exporting to more than 75 countries in near future. The manufacturing facilities in Mumbai and Pune have the capacity to produce 10,000 appliances annually, which will be upgraded to 30,000 soon. The company is in talks with the Nepal government to provide more than 100 such refrigerators for disaster relief in that country.

The company have already installed 13 refrigerators for medicinal purposes in West Bengal and is working since September 2014. 50 more refrigerators will be installed in four more states namely, Jharkhand, Uttar Pradesh, Uttarakhand and Meghalaya soon. Godrej appliances have the largest network with more than 500 service centres reaching every district in

the country. The company is releasing an investment of 35 crores in three phases for the manufacturing of medical refrigeration, of which first phase is already in process.

Sure Chill's technology helps to maintain the optimum temperature range of 2 - 8 degrees Celsius - a necessity for vaccine preservation and blood storage. This refrigerator maintains its temperature even in case of power outages for as long as 8-12 days in ambient temperatures of 43°C. In regions without electric supply, the system can be teamed with solar power to deliver the same results, thereby, making it fit for global immunisation needs.

Godrej, making its first foray into the healthcare sector, has signed a technology transfer agreement with The Sure Chill Company Ltd. (UK) to develop & manufacture these refrigerators for sale in India and neighbouring markets covering SAARC and MENA countries including Pakistan, Bangladesh, Bhutan, Nepal, Saudi Arabia, UAE among others.

The partnership between the two companies brings together Godrej's decades of expertise in refrigeration technology and Sure Chill's in-depth technical expertise in medical refrigeration, to create an innovative product that is expected to help governments across the world in their immunization efforts to save millions of lives.

Kamal Nandi, Business Head and EVP, Godrej Appliances, said, "Godrej Appliances has built its expertise in refrigeration over the years. The brand is synonymous with trust and is therefore, best placed to enter a category like medical refrigeration, which delivers critical care. In line with our commitment to a greener planet, we are proud to state that the Godrej medical refrigerators are the world's 1st and only green ILR's currently available."

"Leveraging our core capabilities in the cooling space and our deep understanding of Indian conditions, we have been able to increase the holdover time of the vaccine refrigerators by 30%. We have introduced built in voltage stabilizer and spike guard to take care of voltage fluctuations common to developing countries and also ensured superior performance of the vaccine refrigerator by building in an early intelligent warning system. Our 57 years of existence in the cooling industry coupled with an extensive service network in the country positions us to deliver quick and reliable service to this critical healthcare business," he added.

Godrej Sure Chill will be available in two model variants, 100 liters- priced between Rs 1.35 lakh to Rs 1.5 lakhs, and 50 liters- priced between Rs. 65,000 to Rs.75,000. These medical refrigerators meet strict specifications laid down by WHO and are listed as PQS prequalified. Though the new product is expensive than that of the existing technology, the overall expense is calculated to go down with low wastage and effective cold chain management.

### **The technology**

The Sure Chill Company has developed a completely new approach to refrigeration that radically improves performance and can operate without constant power for days and weeks.

Sure Chill technology is based on the scientific principle that water is at its heaviest at 4°C, which happens also to be the ideal temperature for storing vaccines, fresh food and beverages. The technology harnesses this natural phenomenon to create a constantly chilled environment within the refrigeration unit - whether there is power or not. It is so reliable that it will maintain a completely steady temperature for 10 days or more after power has been interrupted. This is achieved through the movement of dense water at 4°C, generated as the system's ice bank interacts with warmer water circulating within the unit. Once power has been used to generate the ice bank in the first instance, the Sure Chill technology channels the supply of naturally generated 4°C water to the refrigeration compartment without the need for any further power.

This process can continue until the ice bank, the ultimate generator of the dense water, finally melts and needs to be refrozen, which can take as little as two hours. In effect, the Sure Chill system creates a natural and internal energy store that is capable of providing a perfect, constantly chilled storage environment in areas where there is an intermittent power supply. And if there is no power at all, as is often the case in regions where vaccines are most needed, then the system can be teamed with solar power with exactly the same results.

Vaccines are temperature-sensitive and must be stored at the correct temperature. They are irreversibly damaged by exposure to heat or freezing within the cold chain delivery system and once damaged they are less effective and do not protect fully from disease. Some reports say that this occurs in over 70% of vaccine shipments worldwide. Sure Chill's technology solves this problem by providing constant reliable cooling without the need for continuous power. It is already saving lives.

### **Immunization Programme**

Immunization is one of the most basic and effective health interventions. Unfortunately, one in five children is still deprived of these basic defenses for the most prevalent diseases, particularly in developing countries. Large populations and fragile infrastructures make these children difficult to reach. Many developing countries have inadequate 'cold chains' - which means

that optimal temperature control mechanisms for the transport, storage and handling of vaccines are not in place. According to a research estimate, approximately 151 million vaccines, equivalent to approximately \$750 million, are lost annually due to improper refrigeration in developing countries.