

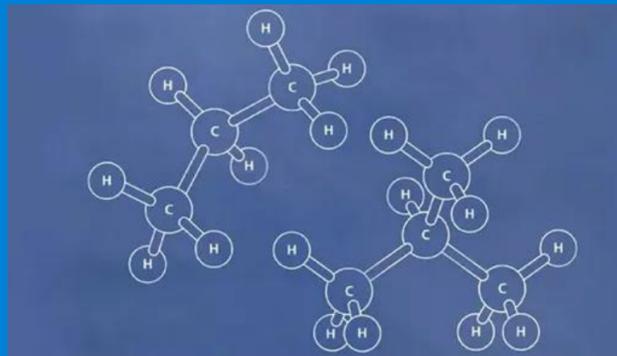
## Protecting the Planet "Earth Shield", Haier Biomedical in Action!

This year marks the 35th anniversary of the adoption of the «Vienna Convention» and the 27<sup>th</sup> anniversary of Global Ozone Layer Protection Day. In the context of the COVID-19 pandemic, the message conveyed by ozone protection-related treaties is about living in harmony and working together for the collective good has become more important than ever. CFCs and HCFCs are currently the main culprits of the deteriorating effect on the ozone layer, they are widely used in the refrigeration sector and the application of new refrigerants is urgent in order to improve the situation as soon as possible.



Hydrocarbon refrigeration technology is currently the world's most advanced refrigeration technology with superior performance, energy efficiency and eco-friendliness, and is most likely to become the dominant alternative to the refrigerant industry.

Definition of HC refrigerant: a type of refrigerant consisting of only two atoms, H (hydrogen) and C (carbon).



Characteristics of HC refrigerants:

- ① Energy saving, less refrigerant is needed for the same cooling capacity.
- ② Environmentally friendly, this refrigerant has Zero effect to the ozone layer and Zero greenhouse effect, which is much safer than HFC refrigerants for our planet (e.g. R404a, R508B).

As a global supplier and manufacturer of complete cold chain solutions, Haier Biomedical continues to practice its corporate social responsibility for environmental protection, and is the first company in China to upgrade its entire line of fluorocarbon free refrigeration, from ULT Freezer, Cryo Freezer, Pharmacy Refrigerator to Blood Bank Refrigerator, contributing to the protection against the deterioration of ozone layer; In addition, Haier Biomedical has also contributed significant efforts towards environmental protection, energy saving and emission reduction: At present, there are 59 models of ULT Freezer worldwide that have passed the Energy Star certification, a key energy-saving indicator, and Haier Biomedical alone has 32 models.

### Haier Biomedical's Environmentally HC Refrigerant Products Line-up



Take the ULT Freezer DW-86L829BP as an example, the product is designed with hydrocarbon refrigeration technology, which can achieve energy savings of more than 50% which reduces operating costs; It also combines Smart Frequency refrigeration technology with a hydrocarbon refrigeration system, the average daily energy consumption of the product is as low as 8.2 kWh; the product is designed with an innovative control algorithm with the unique frequency conversion refrigeration system to balance the temperature loss, the temperature uniformity is  $\pm 3^{\circ}\text{C}$ , which is environmentally friendly and energy saving at the same time.

In this era of extremely serious environmental protection issues, Haier Biomedical is mindful of global environmental protection concerns and has taken the initiative and corporate social responsibility for a large enterprise to lead the global environmental protection trend. At Haier Biomedical, we will spare no effort to continue to develop and research products and solutions that contribute to environmental sustainability and will continue to work closely with our key stakeholders around the world to maintain and improve the environmental health of our planet.

## Haier Biomedical Successfully Completed Emergency Delivery to Colombia

According to The City Paper Bogotá, with record vaccinations for a single day, Colombia also crossed the threshold of 27 million jabs, up 2 million from the original target set for July when the National Vaccine Plan was launched on February 17. The Ministry of Health has confirmed that it has sufficient vaccines from Pfizer, AstraZeneca, Sinovac, Janssen and Moderna to achieve "herd immunity."

In order to better implement the national vaccine network initiative, the Colombian Ministry of Health ordered 585 Ice-Lined refrigerators HBC-260 and 105 Solar Direct Drive Freezers HTD-40 from Haier Biomedical. These products will be deployed and distributed centrally and locally to more than 500 cities and regions throughout Colombia.



Due to a large number of vaccination targets and the urgency of the schedule, the Colombian government had strict delivery conditions, requiring all products to be delivered to Colombia (including remote areas) within 75 days of signing the contract. Considering the short delivery needs and the long transportation time of 30 days to the local area, the Haier Biomedical team cooperated fully to meet the customer's delivery requirements. The first batch of products was shipped urgently at the beginning of August. All production of the remaining units have been finalized, the delivery was completed successfully on August 20!



Haier Biomedical continues to pay close attention to the global pandemic and with a professional first-rate attitude and excellent emergency handling capabilities, we will continue our mission to ensure the safety, security and reliability of the vaccine cold chain.

## Haier Biomedical Aboard the "Vaccine Train" to Support Vaccination in South Africa

According to an announcement by the South African Government, vaccination in South Africa will take a three-phase approach that begins with the most vulnerable in the population. The South African Government's target is to vaccinate 67% of the population by the end of 2021, which will allow the country to achieve herd immunity. In response to the government's request, Transnet, a company from South Africa has launched Transvaco, a new health train designed to bring Covid-19 vaccines to remote communities and places with limited healthcare resources.



The train follows a special rail-based healthcare service that has been in operation in South Africa since 1994. There are nine carriages with features such as a kitchen, dining area, storage facilities, security coach, and power car. Two accommodation coaches house healthcare personnel and other train staff, while the dedicated vaccination coach features individual consulting rooms. Such multi-functional carriages make mobile vaccination more convenient and user-friendly, while Haier Biomedical's Ultra Low Temperature Freezer DW-86W420J, the effective cold chain solution for the entire "vaccine train", safeguards 108,000 vials of temperature-sensitive Covid-19 vaccines, providing the entire "vaccine train" with a safe and secure environment for vaccination. The specialized train is a great way to protect the community and achieve the desired vaccination outcome set by the government.



The DW-86W420J is an ultra-low temperature chest freezer with a three-layer sealed structure, the unit is manufactured with three independent inner doors with superior thermal insulation to ensure good temperature uniformity while reducing energy consumption; in addition, the hydrocarbon refrigeration system design is energy-saving and environmentally friendly; while at the same time, it can be connected to the back-up refrigeration system, which has strong flexibility and practicality.

Onboard the South African "vaccine train", Haier Biomedical is proud to be able to provide safe and reliable cold chain storage for vaccines to assist the South African Covid-19 vaccination program.

Quote: [https://www.gov.za/covid-19/vaccine/vaccine?gclid=EAlaQobChMI\\_ajHqveR8wIVFHZgCh2imQSREAAAYAiAAEgLcbfD\\_BwE](https://www.gov.za/covid-19/vaccine/vaccine?gclid=EAlaQobChMI_ajHqveR8wIVFHZgCh2imQSREAAAYAiAAEgLcbfD_BwE)  
<https://www.businessinsider.co.za/south-africa-covid-19-vaccine-train-transvaco-2021-8>

## Haier Biomedical Wins Bid for Anti-Pandemic Procurement in Bangladesh

For the development and advancement of the national target and deployment in the fight against the pandemic, the Ministry of Health of Bangladesh recently required a number of pharmacy refrigerators to support the national vaccination program.

As a global supplier and manufacturer of complete cold chain solutions, Haier Biomedical has been approved by the Ministry of Health of Bangladesh due to high quality and cost effective performance against many competitors from home and abroad.



With superior production capacity and efficient teamwork, Haier Biomedical responded quickly to the demand and completed the production within one month after accepting the order, with more than 400 pharmacy refrigerators successfully shipped. Under the unified distribution of the Bangladeshi government, Haier Biomedical pharmacy refrigerators will be put into use in major local public hospitals to help fight the epidemic in the region.

The product chosen by the Ministry of Health was the Haier Biomedical Pharmacy Refrigerator HYC-390, which combines safety, intelligence and performance to ensure the security of the vaccines.

Haier Biomedical's Pharmacy Refrigerator HYC-390 is designed with a hydrocarbon compressor and refrigerant, which is environmentally friendly and efficient, with  $\pm 3^{\circ}\text{C}$  temperature uniformity; the unit utilizes a precise temperature control system, the temperature inside the cabinet is always maintained at 2-8 degrees, with an exact temperature adjustment to 0.1 $^{\circ}\text{C}$ .

The HYC-390 is designed with a large, air-cooled condenser to improve the robustness, reliability and efficiency of the refrigeration system; the fault alarm design includes high and low temperature, door ajar, sensor error, power failure, low battery, and remote alarm interface to safeguard vaccine safety.

