

**Haier**  
Inspired living

## 4°C Blood Bank Refrigerator



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Note: If slight difference occurs between pictures and actual products, please refer to actual products. Our company reserves the right of final interpretation to this brochure and please contact with us for future information you might need.

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ECO  LIFE

Leading Solution  
to Life Science

SMARTER LIFE

BETTER PLANET

**Haier Medical and Laboratory Products Co., Ltd**

# Company Profile



Established in 1998 with a registration capital of RMB130 million, Haier Medical and Laboratory Products Co., Ltd is affiliated to Haier Group in Qingdao, China. We have been focused on developing and manufacturing a large variety of low-temperature refrigerators, ice-lined refrigerators, as well as many other types of medical equipment. Our products have a broad application in blood banks, hospitals, epidemic prevention services, pharmaceutical factories, clinics, scientific research institutes, animal husbandry areas, and laboratories in universities and some factories etc. In the first decade after company foundation, our products have been recognized and accepted by various clients from all over the world. To meet the growing market demand and to continuously create products with cutting-edge technology, we specially developed a factory covering 56,700m<sup>2</sup> in Haier (huangdao) Industrial Complex in 2001.

Our company has been certified to ISO9001 quality system, ISO14001 environment protection system, ISO13485:2003 quality system etc. Our products have obtained "People's Republic of China Medical Device Manufacturing Enterprise License", "People's Republic of China Medical Device Registration Record" from relevant government departments. We have also obtained the "Record of Medical Device" for the medical device category A, B and C from State food and drug administration.

Our R&D team is composed of professional and experienced experts in the field of cryogenics, epidemic prevention, hygiene and engineering etc. They have developed a group of core products from 4±1℃ blood refrigerator to -150℃ Cryo Freezer, biological safety cabinet, automatic washer-disinfector etc. The anti-vapor system in 4℃ blood refrigerator, the graded condensing system in -60℃ deep freezer, rapid freezing technology and mobile phone text alarming system in -86℃ ULT freezer, remote monitoring technology, semiconductor refrigeration technology, low temperature operation panel and biological safety cabinet have all been examined and identified by the authorized government departments as advanced technology of the international level. So far, our products have been sold to clients from over 100 countries.

# Brand

In 2008, Haier Group achieved a sales value of RMB1,200 billion. "Haier" brand was evaluated to worth RMB 80.3 billion, as the most valuable brand in China for the 7th consecutive year.

As a sponsor to 2008 Beijing Olympic Games, Haier's slogan of "Dare to break through and dare to innovate" is a perfect interpretation to "Faster, higher and stronger" – slogan of the Olympics Games.

In 2006, Ranked 86th among the world's 500 Most Influential Brands by World Brand Lab – the only Chinese brand ranking in top 100 for three consecutive years.



# Technology



From February 2011, the standard of bio-bank draft by Haier Medical has been released for commissioning.

At present, products from Haier Medical have been widely used in the blood and drug store, biological engineering, medical research, medical clinical and anti-epidemic, agriculture, animal husbandry, etc. Customers include Beijing University, Tsinghua University, Fudan University, over 100 universities, Chinese Academy of Sciences, Microbial Institute, Chinese Academy of Sciences of Genetics and developmental biology research institute, plant genomics state key laboratory for represent numerous scientific research institution, the Chinese people's liberation army general hospital, Beijing union medical college hospital, the capital university of medical sciences affiliated hospital of Beijing You An, over 500 three level of first-class hospital and Beijing Red Cross blood center, over 500 blood stations, Haier Medical provides customized solution to various users to meet their demands.

Our company is certified to CE certificate, ISO9001 quality system, ISO14001 environment protection system, ISO13485:2003 quality system etc. Our products have obtained "Medical Device Registration License of People's Republic of China" from the National and State food and drug administration (SFDA) respectively.

Haier Medical has been insisting the creative spirit of developing itself and specializing in high quality, customized products and service. We will take the spirit of "Create Resources and Worldwide Prestige" and develop our national brand with the goal of providing the tools and solutions to the bio-medical and scientific field.

Blood bank refrigerator is for the legally safe storage of whole blood/erythrocyte concentrates at +4°C. It is applicable in blood banks, hospitals, and centers for disease control (CDC) etc.

In 2011, Haier won MOH tender blood bank refrigerator and -86° C ULT freezer in Russia market. In 2011, Haier won the tender "Third National HIV/AIDS Control Project (NACP - III)" and successfully supplied and installed Blood Bank Refrigerators, -86° C ULT Freezers and -40° C Deep Freezers.

## 1 Design Advantage

- For HXC-158/358/608/1308, baskets or stainless steel drawers for choose
- The Double-glass foaming door with electrical heating are Anti-condensation technology designed which avoids condensation under ambient temperature range 10°C~32°C and humidity below 85%
- Auto defrost
- Forced-air cooling, running reliable, temperature uniformity
- Shelves are adjustable, equipped with baskets or drawers
- Melt water evaporation design

## 2 Alarm Malfunction

- Malfunction alarms :high and low temperature: it will alarm when the cabinet temperature exceeds range 2~6°C
- Power Failure: power off, bad power supply
- Sensor error: temperature sensor malfunction
- Door open: door open 10 minutes alarm
- Batter alarm: backup battery malfunction
- Three alarm patterns: audible alarm,buzzer alarm,visible alarm:flashing light
- Remote alarm interface

## 3 Temperature Control

- High-precision digital sensor: five digital sensors are placed in cabinet to monitor the temperature and evaporator, and to maintain the cabinet temperature at 4°C ± 1°C ( capacity < 600 liters) or 4°C ± 2°C(capacity > 600 liters)

## 4 Safety

- Safety door lock to prevent unauthorized access.

## 5 Environment protection

- CFC Free refrigerant



## 4°C Blood Bank Refrigerator

## 4°C Blood Bank Refrigerator



| Item Code                                    | HXC-158      | HXC-158B     | HXC-358      | HXC-358B     | HXC-608      | HXC-608A      | HXC-608B     | HXC-1308       | HXC-1308B              |
|--|--------------|--------------|--------------|--------------|--------------|---------------|--------------|----------------|------------------------|
| Capacity(L)                                  | 158          | 158          | 358          | 358          | 608          | 608A          | 608          | 1308           | 1308                   |
| Voltage/Frequency                            | 220/50       | 220/50       | 220/50       | 220/50       | 220/50       | 220/50        | 220/50       | 220/50         | 220/50                 |
| Power(W)                                     | 350          | 350          | 460          | 460          | 490          | 900           | 490          | 850            | 850                    |
| Temp.range(°C)                               | 4±1          | 4±1          | 4±1          | 4±1          | 4±1          | 4±1           | 4±1          | 4±1.5          | 4±1.5                  |
| Temp.control                                 |              |              |              |              |              |               |              |                | Microprocessor control |
| Ambient Temp.                                | 10°C-38°C    | 10°C-38°C    | 10°C-38°C    | 10°C-38°C    | 10°C-38°C    | 10°C-38°C     | 10°C-38°C    | 10°C-32°C      | 10°C-32°C              |
| Shelves/Baskets                              | 4/4          | -            | 5/20         | -            | 6/24         | 5/25          | -            | 12/48          | -                      |
| Drawers                                      | -            | 4            | -            | 5            | -            | -             | 6            | -              | 12                     |
| Blood Storage Capacity<br>(450ml blood bags) | 84           | 84           | 200          | 200          | 300          | 300           | 360          | 576            | 720                    |
| Casters                                      | 4            | 4            | 4            | 4            | 4            | 4             | 4            | 4              | 4                      |
| Interior Dimensions<br>(mm)(W*D*H)           | 455*370*1070 | 455*370*1070 | 620*470*1200 | 620*470*1200 | 680*620*1400 | 680*620*1360  | 680*620*1400 | 1320*700*1500  | 1320*700*1500          |
| Exterior Dimensions<br>(mm)(W*D*H)           | 560*630*1530 | 560*630*1530 | 720*690*1730 | 720*690*1730 | 780*840*1960 | 846*913*1980  | 780*840*1960 | 1440*875*1980  | 1440*875*1980          |
| Packing Dimensions<br>(mm)(W*D*H)            | 637*667*1647 | 637*667*1647 | 797*787*1857 | 797*787*1857 | 857*937*2097 | 911*1010*2117 | 857*937*2097 | 1600*1010*2100 | 1600*1010*2100         |
| Net/gross Weight(kg)                         | 107/120      | 107/120      | 158/174      | 158/174      | 204/227      | 220/243       | 204/227      | 310/360        | 310/360                |
| Container Load(sets)<br>20'/40'/40'H         | 27/54/54     | 27/54/54     | 14/30/30     | 14/30/30     | 12/26/26     | 12/26/26      | 12/26/26     | 6/12/12        | 6/12/12                |
| Certificate                                  | CE           | CE           | CE           | CE           | CE           | CE            | CE           | /              | /                      |

### ● Application

- The HXC-1308 is a professional equipment to store whole blood. It is widely applied to store pharmacy and biological products in blood banks, hospitals and disease prevention centers.

### ● Advantage

- More Stable: The temperature range is 4+/-1.5°C, international leading technology
- Safer: Anti-low/high temperature function
- More Ergonomic: double-layer electrical heated glass door, self-closed function
- Multilayer adjustable shelf
- Basket or stainless steel drawer is optional
- Each shelf mounted with label slot
- "One lock one key" ensures the safety in daily use

### ● Function

- Large capacity for blood bags
- Each blood basket can be loaded 12 blood bags (450ml blood); Each drawer can load 60 blood bags (450ml blood)
- One HXC-1308 can load 576 blood bags (450ml blood) and for HXC-1308B can load 720 bags(450ml blood)
- Microprocessor control, three Inner fans guarantee cabinet temperature within 2-6°C and recover temperature fast after door close.
- Mechanical prevention on high and low temperature, even the control board malfunction, the whole unit can still maintain the cabinet temperature and guarantee the blood in safe storage
- Force and automatic defrost to maintain the refrigerant system work stable
- Perfect alarm system: High /Low temperature alarm, door open alarm, sensor malfunction alarm, remote alarm under audible (buzzer) and visible (light flashing) alarm. It can guarantee the blood safe
- Backup battery, it can support the digital display for 72hours after power off.
- Electrical heating door ensures the non-condensation water on surface

### ● Ergonomic Design

- 90 degree self-close design module avoids forgetting to close the door.
- Large view angle double-layer glass door ensures observation of the blood status without opening the door.
- Two testing holes, users could test the inner temperature freely based on daily use.
- Temperature chart recorder mounted with USB outlet could record 7-day temperature data.
- Auto light LED light module, save energy, more environmentally friendly.
- CFC-free refrigerant, environmental protection foam, low-carbon environmentally friendly
- "One lock one key" ensures the safety in daily use



HXC-1308



HXC-1308B



This product is suitable to be installed on ambulance, blood transportation vehicle and vaccine transportation vehicle of medical organizations. Mobile Blood Bank Refrigerator could be used in extremely hostile environment. Ambient temperature ranges from -2°C to 43°C and humidity can be above 80%.

### ● Temperature Control

- Microprocessor controller for accurate temperature control
- Digital temperature display
- Temperature range:4°C or 22°C, can be selected by key on control panel
- Working under ambient temperature range from -2°C to 43°C
- With audible and visible alarm system for high/low temperature and audible alarm can be switched off

### ● Ergonomic Design

- Removable blood storage boxes
- CFC-free insulation and refrigerant
- Chest type with handle and hinged door
- Perfect whole door body design to make better cooling saving
- Main power switch to further box safety protection
- Stable heat-insulating property of insulation
- Ergonomic handle design, rugged, and removable
- Comfortable feel with the protection film of the control panel
- Casters with stabilizer for flexibility and movement



### ● Excellent Performance

- Good performance by SECOP(Danfoss) BDF DC compressor with strong cooling capability
- With low voltage protection system to provide more safety
- Portable-type switch to adjust electronic fuse
- Automatic protection for positive and negative pole
- Auto cooling-heating operation to research 4°C to 22°C temperature quickly and stably
- Forced air cooling system for air distribution for good temperature performance by controlled fan
- Digital displaying with LED indicator, clear and easy to get temperature number inside cabinet
- Whole cabinet body with material of polyethylene ( corrosion free) and whole door body with material of polyethylene( corrosion free)

### ● Easy Installation and Use

- Automatic power selection with DC 12/24V and AC 100-240V,50/60Hz
- With vehicle fixation kit for easy installation
- DC and AC power line



| Item Code                         | HXC-80  |
|-----------------------------------|---|
| Capacity(L)                       | 80  |
| Power(W)                          | DC75 ; AC105  |
| Box Capacity(450ml blood bags)    | 48 bags   |
| Ambient Temp.                     | -2°C to 43°C  |
| Temp.range(°C)                    | 4±2 or 22±2   |
| Voltage                           | DC12/24V; AC100-240V/50-60Hz Automatic power supply selection                   |
| Alarm method                      | Audible and visible   |
| Material                          | Whole polyethylene body(corrosion free) Whole polyethylene door(corrosion free) |
| Insulation                        | Fully CFC-free  |
| Shelves/Baskets                   | -/4   |
| Net/gross Weight(kg)              | 58/65   |
| Interior Dimensions(mm) (W*D*H)   | 504*350*513   |
| Exterior Dimensions(mm) (W*D*H)   | 1000*550*856  |
| Packing Dimensions(mm) (W*D*H)    | 1145*615*950  |
| Container Load(sets) 20'/40'/40'H | 36/76/76  |
| Certificate                       | CE  |