Biological Safety Cabinets

- EN12469 certified product
- American AAF brand ULPA filter for supply and exhaust with 99.9995% efficiency
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 been applied 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 56,700m² 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°C blood refrigerator to -150°C Cryo Freezer, biological safety cabinet, automatic washer-disinfector etc. The anti-vapor system in 4°C blood refrigerator, the graded condensing system in -60°C deep freezer, rapid freezing technology and mobile phone text alarming system in -86°C 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.

Major Events

2001 Haier became the supplier of World Health Organization and provided 10,000 units of Ice Lined Refrigerator to India – a milestone of the product’s entry to the international market.
2004 Upon the requirement of the national Ministry of Health, Haier established a new “National Standard for ULT Freezer” in China.
2005 Haier -150°C cryogenic freezers launched into the market – Haier medical and laboratory freezers covered most of the temperature range required by market.
2006 Haier is certified to ISO13485: 2003 and we are the first Chinese company got this certification.
2007 Haier won the government procurement tender for International Assistance Program to Cuba from China.
2008 Haier Blood Transportation Box – HKC-80, won the bid of UNOPS India/NZCO/BBT/35/2008, from India Procurement Office.
2009 The ice-lined refrigerators under the item code of HBC-70 and HBC-200 and -25°C Vaccine Ice pack Freezer under the item code of HBD-286 and HBD-115 have passed the examination and included into the list of pre-qualified products of WHO (World Health Organization).
2010 Haier Medical successfully won the bid of 20,930 units vaccine refrigerator from UNOPS (United Nations Program India Purchasing Agency).
2012 Haier won MOH tender of blood bank refrigerator and -86°C ULT freezer in Russia market.
2013 Haier won MOH of the Republic of Uzbekistan tender to supply 520 units Pharmaceutical Refrigerator with Freezer HYCD-282A.
2012 Haier won “Follow up cooperation for maternal and Child Health Project” to supply 300 units vaccine refrigerators.
2011 Haier won MOH tender of blood bank refrigerator and -86°C ULT freezer in Russia market.
2008 Haier Blood Transportation Box – HKC-80, won the bid of UNOPS India/NZCO/BBT/35/2008, from India Procurement Office.
2008 Haier won the UNOPS tender in India, and successfully supplied 15,000 sets of Ice-lined Refrigerators and Vaccine and Ice Pack Freezers to the program.
2007 Haier won the government procurement tender for International Assistance Program to Cuba from China.
2006 Haier is certified to ISO13485: 2003 and we are the first Chinese company got this certification.
2005 Haier -150°C cryogenic freezers launched into the market – Haier medical and laboratory freezers covered most of the temperature range required by market.
2004 Haier laboratory equipment entered in southeast Asia market.
2004 Upon the requirement of the national Ministry of Health, Haier established a new “National Standard for ULT Freezer” in china.
2001 Haier became the supplier of World Health Organization and provided 10,000 units of Ice Lined Refrigerator to India – a milestone of the product’s entry to the international market. 
Biological Safety Cabinet

HR40-IIA2

304 stainless steel operation platform and internal wall

- Stainless steel operation platform without screws, no accumulation of contaminant
- Dismountable air in-flow plate, easy to clean and disinfect.
- Internal wall is constructed by a single plate, and the 12mm arc angle corner leaves no cleaning blind area
- The volume of liquid tank is over 4L, equipped with outlet valve for convenient cleaning and maintaining
- Concaved operation platform, waste liquid easily collected.
- Adjustable supporter (0-75mm) without exposed screw thread, preventing the germs from multiplying.

Ultra Low Penetration Air Filtration System

- American AAF brand ULPA filter
- Tested to a typical efficiency of 99.999% for 0.12 micron particles
- Provides FED STD 209E class 1 (or ISO14644.1 class 3) clean air to work surface in a stable vertical laminar flow to protect samples
- The exhaust ULPA filter traps biohazard particles acquired from the work surface before air is exhausted to the room, offering personnel and environmental protection.

High Efficiency Blower System

- The blower system is designed for high performance operation, maximum energy efficiency and minimal maintenance
- Self cooling system reduces energy consumption while enhances reliability

Main Features

- American AAF brand ULPA filter are tested to a typical efficiency of >99.999% for 0.12 micron particles
- Reverse centrifugal fan allows double-side air inflow, decreasing noise and saving energy
- Negative pressure area surrounds contaminated positive pressure area perfectly, preventing leakage of microorganism
- Digital microprocessor control system for easy operation
- Intelligent alarming system
- Multiple interlocking functions eliminate potential safety problems caused by misoperation.
- Removable stainless steel work surface makes cleaning easier
- Ergonomic angled design to improve comfort
- Adjustable support with caster
- Adjustable foot
- Airflow auto-compensation function guarantees stable wind speed
- Provide uniform airflow by adjusting working voltage of fan.

Reverse centrifugal fan

Double-side air inflow design decreases running noise

Air velocity auto-compensation function guarantees stable wind speed

Provide uniform airflow by adjusting working voltage of fan.
Digital microprocessor control system

- LCD display
- Real-time display of key parameters: downflow velocity, inflow velocity, airflow volume, static pressure, negative pressure, accumulative running time of fan and UV lamp, left lifetime of filter
- Sound & light alarming function
- UV sterilization reservation setting function
- Time setting function

Ergonomic Design

- The 10° angled viewing window improves comport and alleviates fatigue of operator
- 75mm adjustable supporter ensures correct height for different users
- UV sterilization reservation function
- Lamp is set behind supporter, making eyes more comfortable
- Automatically remind when filter lifetime less than 10%, so that filter can be changed in time
- Removable stainless steel work surface makes convenient cleaning
- Draining valve is easy to clean and maintain

Interlock Safety Protection

- Glass sash and the blower/motor interlocking
  Close sash, blower/motor stop automatically to avoid malfunction of blower/motor free-running.
- Fluorescent light & UV light interlocking
  Close sash, the fluorescent light stays the status of on; Only after turning off fluorescent light, the UV light can be turned on, to avoid exposure of ultraviolet light.
- UV light, blower/motor and fluorescent light interlocking
  When sash closed and UV light on, if sash is opened, UV light turns off automatically, while fluorescent light and blower/motor turn on automatically simultaneously, to avoid exposure of ultraviolet light and microorganisms.
- Sash and fluorescent light interlocking
  When opening height of sash exceeds the safety limit line, fluorescent light turns off to avoid operator working in insecure environment.

Intelligence alarm system

- Alarm when opening height of sash exceeds the safety limit line
- Alarm when airflow fluctuation exceeds 20%
- Alarm when sash is not closed properly but blower turned off
- Alarm when filter life is less than 10% of total lifetime

Specifications

- Standards Compliance
  - Biosafety Cabinets: EN 12469, Europe, SFDA YY-0569, China
  - Air Quality: ISO 14644.1, Class 3, Worldwide
  - Filtration: US Fed Std 209E, Class 1 USA
  - Electrical Safety: EN61010

- Model
  - HR30-IIA2
  - HR40-IIA2
  - HR60-IIA2

- Capacity (L)
  - Class I, Type A2
  - Class II, Type A2

- Packing Dimensions (W x D x H)
  - 1230*910*2180
  - 1405*910*2180

- External Dimensions (W x D x H)
  - 1100*780*2200
  - 1360*780*2200
  - 1960*780*2200

- Internal Dimensions (W x D x H)
  - 900*610*680
  - 1167*610*680
  - 1735*610*680

- Airflow Circulation
  - 70% downflow, 30% exhaust

- Main Filter Typical Efficiency
  - ULPA, 99.9995%@0.12μm
  - HEPA, 99.995%@0.12μm

- Exhaust Filter Typical Efficiency
  - ULPA, 99.9995%@0.12μm
  - HEPA, 99.995%@0.12μm

- Downflow Velocity
  - 0.30 m/s
  - 0.28 m/s
  - 0.32 m/s

- Inflow Velocity
  - 0.58 m/s
  - 0.55 m/s

- Fluorescent Lamp Intensity
  - ≥ 1200 Lux
  - ≥ 1200 Lux
  - ≥ 1200 Lux

- Alarm
  - Sound and Flash
  - Sound and Flash

- Supporter
  - 75mm adjustable height
  - 75mm adjustable height

- Working Voltage & Frequency
  - 220V±10%, 50Hz
  - 220V±10%, 60Hz
  - 220V±10%, 50Hz

- Power (W)
  - 1300
  - 1300
  - 1300

- Power of Blower (W)
  - 350
  - 350
  - 350

- Net Weight (Gross Weight) (kg)
  - 220/248
  - 258/293
  - 328/350

- Container Load (sets) 20’/40’/40’H
  - 8/18/18
  - 7/16/16
  - 6/13/13

- Certificate
  - SFDA
  - EN12469, SFDA, CE
  - SFDA