Haier Biomedical Intelligent Protection of Life Science

Newsletter

HB Attains Remarkable Milestones in the Hong Kong Market

In early May, Haier Biomedical once again announces ground-breaking developments in the Hong Kong market. Following numerous university acquisitions of centrifuge equipment in 2023, both Hong Kong Science Park and the University of Hong Kong have completed their equipment installations, leading to a significant increase in the penetration of medical groups within universities.



Hong Kong, distinguished as a dynamic nucleus for scientific exploration, attracts world-class research technology and exceptional scholars from across the globe. Its research landscape adheres to global benchmarks, offering unparalleled resources for researchers. Here, state-of-the-art research equipment and tools have emerged as the foremost preference for research pioneers, providing robust backing for their pioneering studies. From Haier Biomedical's establishment of a university cluster model in Hong Kong to its current presence in Hong Kong Science Park and the University of Hong Kong, Haier Biomedical has solidified its position as the favoured brand in the international medical research equipment sector.

"Cutting-edge high-speed and low-speed centrifuge experiments - expertly crafted and dependable!" "Whisper-quiet operation fostering a serene and efficient laboratory ambiance!" "Sleek ergonomic design complemented by an intelligent touch screen interface!" "Professionally managed operations guaranteeing a secure centrifugation process!" Our diverse product merits have garnered consistent global admiration. Serving as an indispensable laboratory apparatus, centrifuges cater to varied user requirements across blood stations, pharmaceuticals, university research facilities, and healthcare institutions.



To elevate user satisfaction levels, Haier Biomedical prioritizes innovation within life sciences and healthcare domains by accelerating technological advancements and broadening digital solutions. We are steadfastly dedicated to delivering precise centrifugation solutions tailored for all scenarios while infusing more technological prowess into global health infrastructure.

Haier Biomedical centrifuges are currently accessible at esteemed research institutions across Hong Kong:

- HK PolyU (Hong Kong Polytechnic University)
- HK CityU (City University of Hong Kong)
- HKBU (Hong Kong Baptist University)
- HKU (University of Hong Kong)
- HKSTP (Hong Kong Science and Technology Parks Corporation)

HB's Liquid Nitrogen Containers: The Guardian of IVF

Every second Sunday of May is a day to honour great mothers. In today's world, in vitro fertilization (IVF) has become a crucial method for many families to fulfil their dreams of parenthood. The success of IVF technology hinges on the careful management and protection of embryos and germ cells. Haier Biomedical's liquid nitrogen containers play a vital role in maintaining stable cell activity within a low-temperature environment, serving as an ideal storage solution for umbilical cord blood, tissue cells, and various biological samples. This innovative technology provides essential support for IVF procedures,



ensuring a smoother journey towards motherhood



Ensuring Optimal Conditions with Smart Monitoring Systems

Haier Biomedical's liquid nitrogen containers are equipped with advanced dual independent high-precision measurement systems that monitor temperature and liquid levels accurately. This precise monitoring ensures the ideal conditions necessary for the growth and preservation of embryos and germ cells during IVF procedures. By maintaining consistent temperatures, this technology not only enhances the success rate of IVF treatments but also minimizes the risk of embryo damage caused by fluctuations in temperature, offering a secure environment for implementing IVF techniques effectively.



Enhanced Storage Capabilities for Long-Term Preservation

The interior design of these containers incorporates special materials and structural innovations that enhance thermal insulation capabilities, ensuring stable temperatures over extended periods. This feature is particularly beneficial for families requiring remote sample transport or awaiting transfers as it guarantees the safety of embryos during transportation and preservation processes. By extending storage times safely, more opportunities are created for individuals seeking to expand their families through assisted reproductive technologies.

Efficient Cryopreservation with Large Capacity and Low Consumption

Haier Biomedical's liquid nitrogen containers boast substantial storage capacities ranging from 13,000 to 94,875 pieces of 2ml cryopreservation tubes-meeting diverse storage requirements efficiently. Additionally, minimal liquid nitrogen consumption reduces replacement frequency while cutting down on labour costs and material usage. Lowering environmental impact aligns with sustainable development goals while providing cost-effective cryopreservation solutions across different sectors such as medical facilities, laboratories, cryogenic storage units, bio-series applications among others.

Real-Time Monitoring Enhancing Operational Efficiency

These containers come equipped with real-time temperature monitoring systems that ensure sample safety round-the-clock. Remote alarm notifications through apps like SMS or email enable seamless communication between users and devices-allowing optimal sample preservation conditions at all times through IoT intelligent management solutions. Cloud-based data synchronization ensures traceability throughout the process maximizing operational convenience while safeguarding stored samples effectively.



Pioneering Technological Solutions in Liquid Nitrogen Container Storage

Haier Biomedical leads technological advancements in liquid nitrogen container storage solutions by focusing on user-centric innovation tailored across various volume segments within medical settings or laboratory environments including cryogenic storage units or bio-transportation scenarios among others-maximizing sample value while contributing continuously to life sciences field advancements.

HB Supports Oxford Research Centre

Haier Biomedical recently delivered a large cryogenic storage system to support multiple myeloma research at the Botnar Institute for Musculoskele-

"Everything has worked perfectly since it has been up and running, from the autofill and carousel to the one-touch defogging feature. Importantly, we are

tal Sciences in Oxford. This institute is Europe's largest center for studying musculoskeletal conditions, boasting state-of-the-art facilities and a team of 350 staff and students. The cryogenic storage facility, a part of this infrastructure, attracted the Oxford Centre for Translational Myeloma Research, aiming to centralize its tissue samples.



Alan Bateman, a senior technician, oversaw the extension of the cryogenic facility to accommodate the new project. Haier Biomedical's Liquid Nitrogen Container - Biobank Series YDD-1800-635 was chosen for its vast capacity of over 94,000 cryovials. The installation was seamless, with Haier Biomedical handling everything from delivery to ensuring safety protocols.

confident that sample integrity is all but guaranteed, with effortless 24/7 monitoring via the touchscreen user interface. It has certainly been a step up from the old-fashioned push button instruments we are used to. There is also better security, as only certain individuals can change vital parameters - such as fill rate, level, and temperature - meaning most researchers can only access samples. This is especially important in helping us comply with the requirements stipulated by the Human Tissue Authority, UK's independent regulator of human tissue and organ donations."

The Biobank Series offers advanced features such as precise temperature control and monitoring, enhancing sample integrity and complying with regulatory standards. Users appreciate its user-friendly interface and security features, ensuring only authorized personnel can access vital parameters. Additionally, small design details like quality racks and ergonomic handles improve usability.



Despite doubling storage capacity, liquid nitrogen usage has only increased marginally, highlighting the system's efficiency. Overall, the Oxford Centre for Translational Myeloma Research team is delighted with the system, anticipating broader usage beyond the current project.

Revolutionizing Cold Chain Technology with HB

The landscape of the global medical and pharmaceutical industry is undergoing rapid transformation fuelled by cutting-edge medicines, vaccines, biologics, and stem cell products. This evolution extends to the equipment realm encompassing medical refrigerated trucks, cold storage facilities, and medical incubators. The robust growth of the medical cold chain market signifies a shift towards elevated standards, seamless integration, automation, and modernization. Standing at the forefront of this dynamic sector is Haier Biomedical-a distinguished global leader in delivering comprehensive cold chain solutions. Armed with unparalleled expertise, extensive industry experience, and an unwavering commitment to innovation, Haier Biomedical sets the benchmark for ensuring the safety and efficiency of the global cold chain network.





Driving Global Health Initiatives through Technological Innovation

Our impact transcends conventional boundaries as we actively combat malaria in Africa; extend steadfast cold chain product support for neurological disease research endeavours; and uphold vaccine storage integrity through intelligent solutions. By championing lives and spearheading technological breakthroughs in healthcare infrastructure development globally, Haier Biomedical underscores its exceptional leadership role in advancing public health initiatives.



Pioneering Digital Intelligence in Industrial Supply Chains

At Haier Biomedical, our mission is centred on constructing an intelligent, secure, efficient, and traceable cold chain system that caters to burgeoning market demands. Leveraging state-of-the-art IoT technology coupled with seamless integration of digital advancements into cold chain logistics operations forms the cornerstone of our strategy.



Embracing Low-Carbon Innovations for Sustainable Development

Haier Biomedical's unwavering dedication to green practices and low-carbon progress underscores our commitment to fostering sustainable development models encapsulated within "LIFE" - Leadership Integrity Future Ecosystem ethos across all operational spheres. Our relentless pursuit of green scientific innovations has propelled advancements in low-temperature storage technologies towards environmentally conscious solutions. The ground-breaking utilization of Hydrocarbon Refrigerant technology has yielded a 30% increase in refrigeration efficiency while pioneering developments like large-cooling capacity Stirling Refrigeration Technology have augmented supply chain autonomy and controllability significantly. Furthermore, our journey towards sustainability encompasses innovative zero-carbon initiatives such as Solar Direct Drive Refrigerators, Solar Direct Drive Cold Storage units, and Solar Mobile Laboratories.

Future-Focused Commitment to Technological Advancements

Looking ahead, Haier Biomedical remains resolute in its pursuit of enhancing existing cold chain solutions while introducing more reliable, safe, and intelligent products through continual technological innovation efforts aimed at bolstering biomedical safety standards worldwide.

Qingdao Haier Biomedical Co., Ltd.

No.280 Feng Yuan Road, High-tech Zone, Qingdao, 266109, P.R. China E-mail: inquiry@haierbiomedical.com Website: www.haiermedical.com

















Haier Biomedical

Haier Biomedical Internationa

@haiermedicalint

Haier Biomedical Internation

Haier Biomedical

Intelligent Protection of Life Science

Haier Biomedical Internationa