

Haier

Liquid Nitrogen Storage System Solutions



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Better Planet
Smarter Life

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Haier Liquid Nitrogen Storage System
Biobank Series

- LN2 Splash Proof
- Self Diagnostic
- Data Logging
- "Dry" Sample Storage
- Quick Chill
- Lockable Lid
- Rapid Specimen Storage
- 5 Year Vacuum Warranty
- Liquid Or Vapour
- From 13000 To 94875 Cryovials
- One-touch Defogging



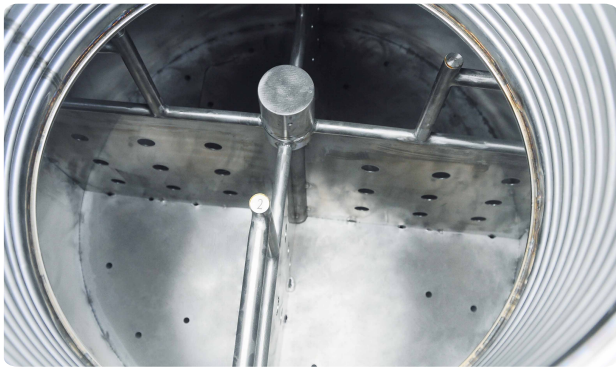
Haier Liquid Nitrogen Storage System Biobank Series

Biobank Series has six models with capacity of 300, 500, 800, 1000, 1500, and 1800. Biobank Series is designed to ensure the maximum storage capacity with the minimum consumption of liquid nitrogen to lower the overall cost of operations.

Product Advantages

Optimal Use of Storage Space

Racks are stored on the rotating tray with an appropriate distance from the wall of the chamber. Liquid nitrogen or supercooled nitrogen vapor is filled in the space between the tray and the wall to maintain temperature uniformity. Storage space is equally divided into four or six fan-shaped storage rooms which are clearly labeled. Each storage room is easily rotated to the opening of the tank for convenient sample access.



Designed for Both Liquid and Vapor Phase Storage

Each model of Biobank Series is designed for both liquid and vapor phase storage. For vapor phase storage, samples are kept away from the liquid nitrogen while stored in a uniform temperature that is close to the temperature range of liquid nitrogen.



Advanced Vacuum Technology and Superinsulation Technology

Haier Liquid Nitrogen Storage System Biobank Series applies advanced vacuum technology and superinsulation technology to ensure storage safety and temperature uniformity while reducing the consumption of liquid nitrogen. The temperature difference of the entire storage area does not exceed 10°C even in vapor phase storage, and temperature near the top of the shelf can be as low as -190°C.

Cryosmart Intelligent Liquid Nitrogen Control System

Haier Liquid Nitrogen Storage System Biobank Series features Cryosmart system for complete monitoring and controlling. High-precision temperature and liquid level sensors are used to ensure accuracy. All data and samples are protected by secure access control system.

Features

- ▶ Massive capacity between 13000 to 94875 ×2ml Vials.
- ▶ Vapor phase storage is the only guaranteed method to prevent cross-contamination
- ▶ Vapour phase storage at -190 °C .
- ▶ 5 year vacuum warranty
- ▶ One-touch defogging for easier access.
- ▶ LN2 splash proof make the operation more secure.
- ▶ Biobank storage compatible.

Product Details

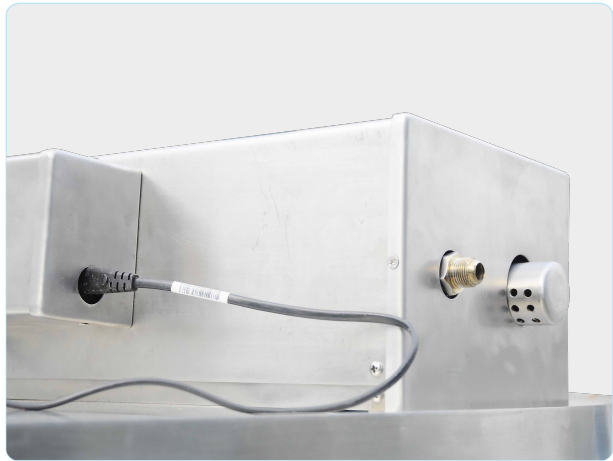
Top of the Container



Lid Open



- ▶ A Low-temperature hose connects the inlet and liquid nitrogen tank for supplement. A silencer reduces the noise of nitrogen emission to grant a quiet environment.



- ▶ Vapor condensation near the container opening is controlled. The strength of the container is reinforced at liquid nitrogen temperature to extend service life.



- ▶ Small self-pressurized liquid nitrogen supply system suitable for research institutes dealing with fewer samples.



Technical Parameters

Model	YDD-300-326	YDD-500-440	YDD-800-460	YDD-1000-610	YDD-1500-610	YDD-1800-610
			Maximum Storage Capacity			
2 ml Vials (Internal Thread)	13000	26000	42900	58500	76050	94875
Freeze Rack (100 wells)	12	24	32	54	54	60
Freeze Rack (25 wells)	4	8	4	18	18	13
Layers of each rack	10	10	13	10	13	15
0.5 ml Vials (Internal Thread)	18200	33800	56100	81900	99450	126500
Freeze Rack (100 wells)	12	24	32	54	54	60
Freeze Rack (25 wells)	4	8	4	18	18	13
Layers of each rack	14	13	17	14	17	20

Capacity

Volume of LN2 (L)	280	470	675	895	1316	1520
Volume of LN2 under the tray (L)	50	70	115	195	254	265
Static Evaporation (L/Day)	≤3	≤5	≤6.5	≤8	≤10.5	≤12.5

Dimensions

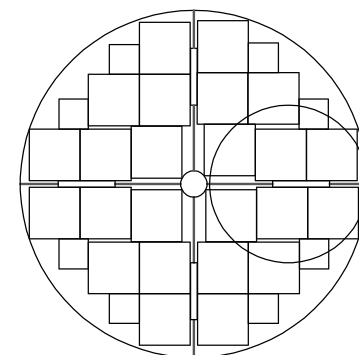
Inside Neck Diameter (MM)	326	440	460	610	610	610
Height (MM)	1180	1160	1435	1360	1570	1680
Operating Height (MM)	1180	1160	1110	1060	1070	1080
Outside Diameter (MM)	870	1080	1180	1565	1565	1565
Door Width Requirements (MM)	1000	1200	1300	1700	1700	1700
Empty Weight (KG)	219	328	441	733	840	925
Gross Weight (KG)	490	771	1089	1627	2127	2389

Blood bag capacity

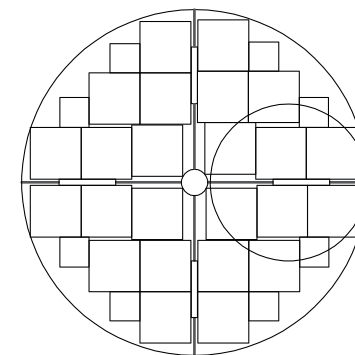
	Total No. of Bags	Rack Layers	No. of Racks	Total No. of Bags	Rack Layers	No. of Racks	Total No. of Bags	Rack Layers	No. of Racks	Total No. of Bags	Rack Layers	No. of Racks	Total No. of Bags	Rack Layers	No. of Racks	Total No. of Bags	Rack Layers	No. of Racks
25 ml	1272	6	212	2376	6	396	3360	7	480	4716	6	786	5502	7	786	7758	9	862
50 ml	792	6	132	1416	6	236	2016	7	288	2916	6	486	3402	7	486	4905	9	545
250 ml	288	3	96	552	3	184	944	4	236	1560	4	390	1560	4	390	2095	5	419

Distribution of Racks and Holders

YDD-300-326

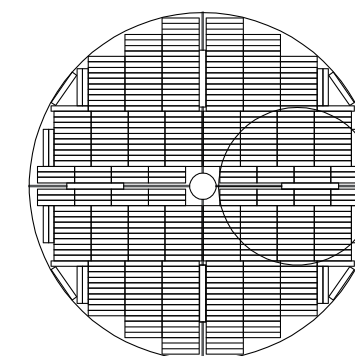
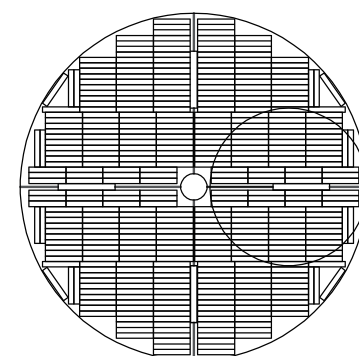


YDD-500-440

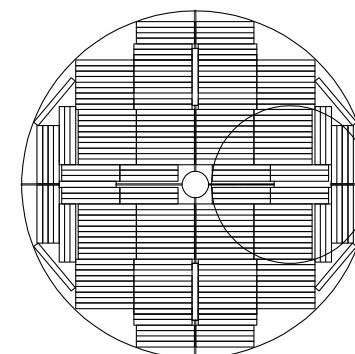
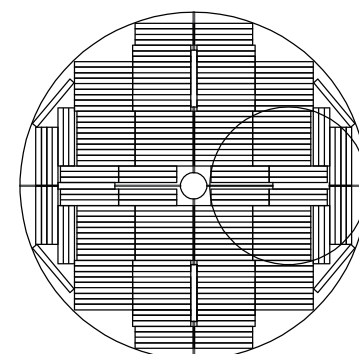


Holdes

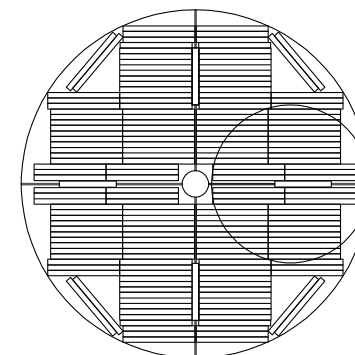
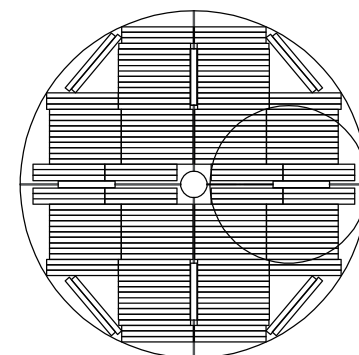
25 ml Racks



50 ml Racks



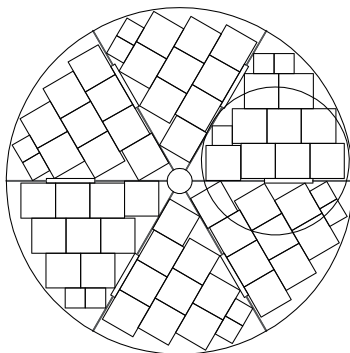
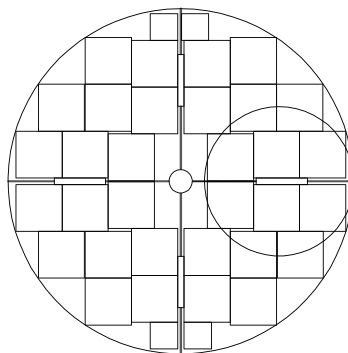
250 ml Racks



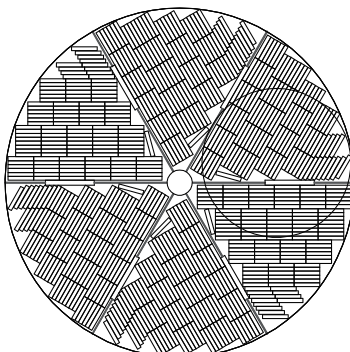
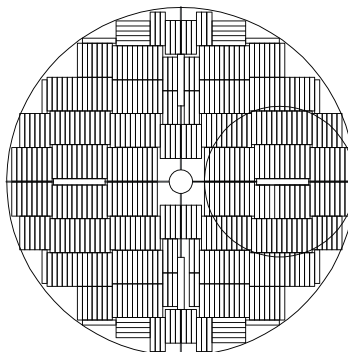
YDD-800-460

YDD-1000/1500/1800-610

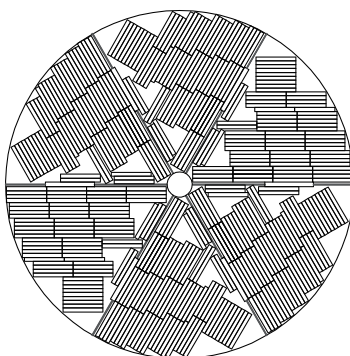
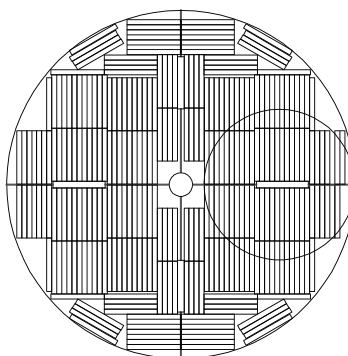
Holders



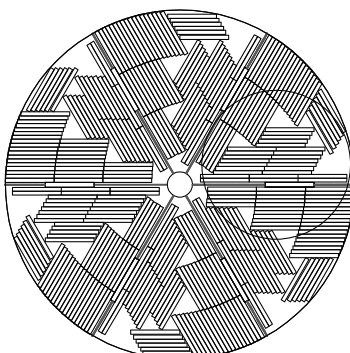
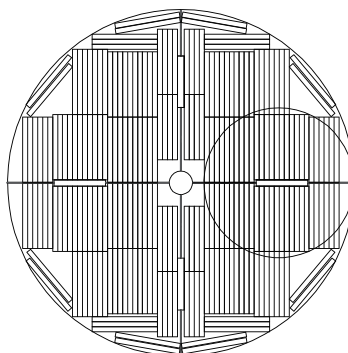
25 ml Racks



50 ml Racks



250 ml Racks



Haier Liquid Nitrogen Storage System Medical Series

5 Year Vacuum Warranty

Cryobox Storage

High Thermal Efficiency

Liquid and Vapour

Durability

Auto Fill

Security



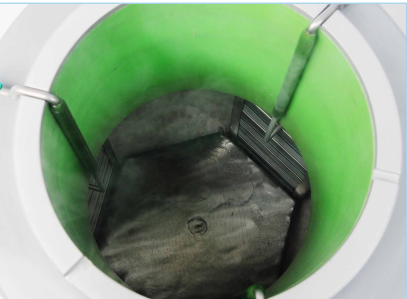
Medical Series

Haier Liquid Nitrogen Storage System Medical Series features low LN2 consumption and relatively small footprint for medium capacity sample storage.

Product Advantages

▶ ULT Storage with Extremely Low LN2 Evaporation

Freezer racks are in the ultra-low temperature environment with extremely low LN2 evaporation. Even stored in vapor phase, the temperature will be below -190°C for a long time.



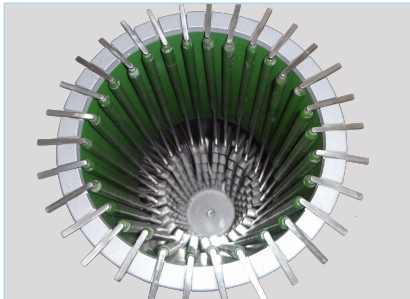
▶ Advanced Vacuum Technology and Superinsulation Technology

Advanced vacuum and insulation technologies ensure cryopreservation for as long as four months.



▶ Compatible for Blood Bag Storage

According to users' needs, Medical Series can be adapted to LN2 tanks for temporary storage of blood bags before transferred to larger scale LN2 storage.



▶ Auto-Refill System

Auto-refill system is particularly suitable for vapor phase storage. For liquid phase storage, it can also facilitate users' operations by avoiding frequent refills. The auto-refill system continuously monitors the inside temperature through ZTC-100B/100C Level Monitor, and automatically controls inlet valve to replenish LN2. Although less economical, it provides accurate control and ensures safety storage for over 8 weeks.

▶ Level Monitor

Liquid level monitor continuously and reliably monitors the temperature inside the tank and informs users to refill LN2. It is suitable for institutes that require long time cryopreservation. Three models (ZTC-100A/100B/100C) are available. The monitor offers real-time temperature display and audible/visual alarms for high temperature, sensor failure, and low liquid level.



Features

- ▶ 5 models from 2400 to 6000 cryovial capacity
- ▶ Heavy duty lockable enclosure offers excellent security
- ▶ Compatible with all major cryobox brands
- ▶ Durable aluminium construction
- ▶ Temperature data-logging monitoring available
- ▶ Liquid or vapour phase option available
- ▶ high thermal efficiency
- ▶ 5 year vacuum warranty
- ▶ Ultra-low evaporative Losses

Technical Parameters

Model	YDS-65-216-F	YDS-95-216-F	YDS-115-216-F	YDS-140-216-F	YDS-175-216-F
Maximum Storage Capacity					
No. of holders	6	6	6	6	6
2 ml Cryovials (100 per box)	2400	3000	3600	4800	6000
No. of boxes in (2ml each holder)	4	5	6	8	10
5 ml Cryovials (36 per box)	648	864	1080	1296	1728
No. of boxes in (5ml each holder)	3	4	5	6	8
Capacity					
Volume of LN2 (L)	65	95	115	140	175
Static Evaporation * (L/Day)	0.79	0.81	0.83	0.87	0.87
Working Volume	55	85	105	130	165
Duration of Normal ** Operation (Day)	44	66	80	94	126
Dimensions					
Opening Diameter(MM)	216	216	216	216	216
Height(MM)	710	726	796	910	1026
Outside Diameter(MM)	681	681	681	681	681
Empty Weight(KG)	27.5	34.5	38.5	42.5	55
Gross Weight(KG)	80.8	112.4	132.8	157.3	198.5

* Static evaporation and static holding time is theoretical value. Actual evaporation and holding time is affected by usage, atmospheric conditions, and manufacturing tolerances.

** Duration of normal operation is for reference only to estimate container performance under normal operating conditions. Actual duration may differ due to different atmospheric conditions, usage history, manufacturing tolerances, and particular circumstances.

Accessories:

Trolley	Holders	Cryogenic Boxes
216 Diameter Lock Cap	5 ml Customized Holder	5 ml Customized Cryogenic Box

Haier Liquid Nitrogen Storage System

LAB Series

5-Year Vacuum Warranty

Durability

High Thermal Efficiency

Strong and Lightweight

Security

30 Litre To 50 Litre Capacity

Super-Insulation

Ideal For Lab Applications



LAB Series

Widely used in laboratories around the world

Product Advantages

► Low LN2 consumption and small storage capacity

Haier LAB Series Liquid Nitrogen Storage System features low LN2 consumption and small storage capacity for laboratory applications. The light-weighted tanks require smaller space while provide efficient small capacity cryogenic storage.

► Advanced Vacuum Technology and Super-insulation Technology

Advanced vacuum and insulation technologies provide ultra-low liquid nitrogen evaporation loss and ensure three months cryogenic storage.

► Five Models Available

LAB Series offers five models with different capacity from 600, 750 to 900 standard 2 ml cryovials. All models are supplied with stainless steel holders and cryogenic boxes.



Features

► 5 models, from 30 litres to 50 litres capacity

► Heavy duty lockable enclosure offers excellent security

► Strong, lightweight aluminium construction

► Dual handles

► Temperature data-logging monitoring available

► Roller bases available

► High thermal efficiency

► 5 year vacuum warranty

► Ultra-low evaporative losses

Haier Liquid Nitrogen Storage System

BIO Series

Technical Parameters

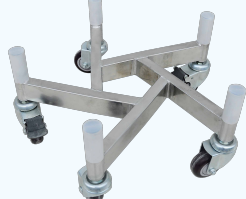
Model	YDS-30-125-F	YDS-35-125-F	YDS-35B-125-F	YDS-47-127-F	YDS-50B-125-F
Maximum Storage Capacity					
No. of holders	6	6	6	6	6
1.2&2 ml Cryovials (25 per box)	600	750	750	900	900
No. of boxes in (holder)	4	5	5	6	6
Properties					
Volume of LN2 (L)	31.5	35	35	47	50
Static Evaporation * (L/Day)	0.28	0.29	0.35	0.33	0.37
Working Volume	31.5	35	35	47	50
Duration of Normal ** Operation (Day)	71	76	63	90	85
Dimensions					
Opening Diameter(MM)	125	125	125	127	125
Height(MM)	659	700	700	753	753
Outside Diameter(MM)	461	461	461	461	461
Empty Weight(KG)	14.3	14.5	14.8	15.4	21
Gross Weight(KG)	38.9	43.2	43.5	53.9	62

* Static evaporation and static holding time is theoretical value. Actual evaporation and holding time is affected by usage, atmospheric conditions, and manufacturing tolerances.

** Duration of normal operation is for reference only to estimate container performance under normal operating conditions. Actual duration may differ due to different atmospheric conditions, usage history, manufacturing tolerances, and particular circumstances.

Accessories :

Caster base



Holders



Level Monitor



125 Diameter Lock Cap



Straws

Numbered Index Canister Locations

High Capacity

High Thermal Efficiency

LN2 Dispenser

Roller Bases

Lockable

Extended Hold Time

5 Year Vacuum Warranty



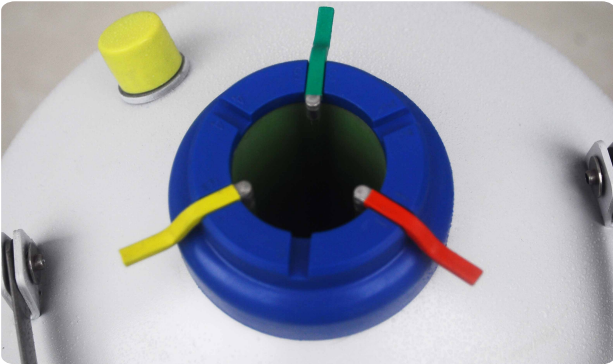
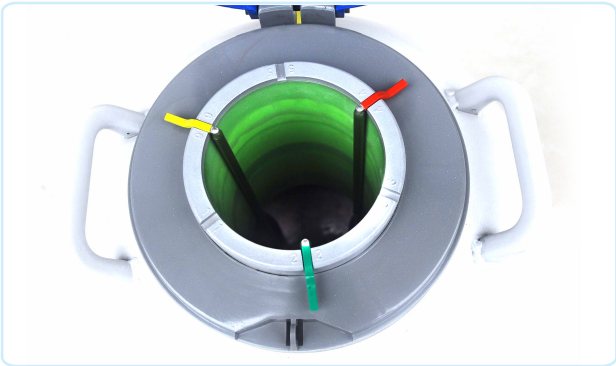
BIO Series

BIO Series provides two cryopreservation solutions for long-term static storing and transporting of biological samples.

Product Advantages

► Narrow neck design and excellent thermal conductivity reduces evaporation loss of liquid nitrogen for extended storage time.

► Large-capacity models have wider necks for easier access to biological samples.



► Long-term cryopreservation models have narrower necks for better thermal conductivity.

► 28 models, capacities range from 1 to 50 liters.

Features

► Strong and lightweight aluminium construction

► Heavy duty lockable enclosure offers excellent security

► Numbered index location points for canisters

► Straw storage

► LN2 dispense available

► Roller bases available

► High thermal efficiency

► 5 year vacuum warranty

► Ultra-low evaporative losses

Technical Parameters

STORAGE MODELS

	Model	YDS-1-30	YDS-2-30	YDS-3	YDS-6	YDS-10	YDS-10-80
Max-imum Capacity	No. of Canister	1 (1)	3 (3)	6 (3)	6 (3)	6 (3)	6 (3)
	No. of Straws (Single Layer) (0.5ml each holder)	60	90	792	792	792	2040
	No. of Straws (Single Layer) (0.25ml each holder)	120	204	1788	1788	1788	4554
Capacity	Volume of LN2 (L)	1	2	3.15	6	10	10
	Static Evaporation* (L/Day)	0.06	0.06	0.10	0.10	0.10	0.18
	Duration of Normal** Operation (Day)	11	21	20	38	63	35
Dimen-sions	Opening Diameter(MM)	30	30	50	50	50	80
	Height(MM)	315	378	429	476	536	540
	Outside Diameter(MM)	180	224	224	300	300	300
	Canister Outside Diameter (MM)	26	19	38	38	38	63
	Outside Height(MM)	120	120	120	120	120	120
	Empty Weight(KG)	2	2.9	3.5	5	6.3	6.5
	Gross Weight(KG)	3	4.5	6	9.9	14.5	14.7

	Model	YDS-10-125	YDS-13	YDS-15	YDS-15-125	YDS-20	YDS-30
Max-imum Capacity	No. of Canister	1 (0)	6 (3)	6 (3)	1 (0)	6 (3)	6 (3)
	No. of Straws (Single Layer) (0.5ml each holder)	—	—	792	—	792	792
	No. of Straws (Single Layer) (0.25ml each holder)	—	—	1788	—	1788	1788
	No. of Straws (Double Layer) (0.5ml each holder)	1508	1284	—	1508	1284	1284
	No. of Straws (Double Layer) (0.25ml each holder)	3324	2832	—	3324	2832	2832
Capacity	Volume of LN2 (L)	10	13	15	15	20	30
	Static Evaporation* (L/Day)	0.30	0.10	0.10	0.30	0.10	0.11
	Duration of Normal** Operation (Day)	21	82	94	31	126	172
Dimen-sions	Opening Diameter(MM)	125	50	50	125	50	50
	Height(MM)	546	610	575	585	656	655
	Outside Diameter(MM)	300	310	394	394	394	461
	Canister Outside Diameter (MM)	97	38	38	97	38	38
	Outside Height(MM)	276	276	120	276	120/276	120/276
	Empty Weight(KG)	6.9	6.6	8.2	10.2	11.7	12
	Gross Weight(KG)	15.1	17.3	20.5	22.5	28.1	36.6

	Model	YDS-30-80	YDS-30-125	YDS-35	YDS-35-80	YDS-35-125	YDS-47-127
Max-imum Capacity	No. of Canister	6 (3)	6 (3)	6 (3)	6 (3)	6 (3)	6 (3)
	No. of Straws (Single Layer) (0.5ml each holder)	2244	5124	792	2244	5124	5124
	No. of Straws (Single Layer) (0.25ml each holder)	5022	11952	1788	5022	11952	11952
	No. of Straws (Double Layer) (0.5ml each holder)	3624	9048	1284	3624	9048	9048
	No. of Straws (Double Layer) (0.25ml each holder)	8460	19944	2832	8460	19944	19944
Capacity	Volume of LN2 (L)	30	30	35	35	35	47
	Static Evaporation* (L/Day)	0.18	0.28	0.11	0.19	0.29	0.33
	Duration of Normal** Operation (Day)	105	67	200	116	76	90
Dimen-sions	Opening Diameter(MM)	80	125	50	80	125	127
	Height(MM)	655	659	695	698	700	754
	Outside Diameter(MM)	461	461	461	461	461	461
	Canister Outside Diameter (MM)	63	97	38	63	97	97
	Outside Height(MM)	120/276	120/276	120/276	120/276	120/276	120/276
	Empty Weight(KG)	12.4	14.3	14	14.2	14.5	15.4
	Gross Weight(KG)	37	38.9	42.7	42.9	43.2	54

TRANSPORT MODELS


	Model	YDS-20B	YDS-30B	YDS-30B-80	YDS-30B-125	YDS-35B
Max-imum Capacity	No. of Canister	6 (3)	6 (3)	6 (3)	6 (3)	6 (3)
	No. of Straws (Single Layer) (0.5ml each holder)	792	792	2244	5124	792
	No. of Straws (Single Layer) (0.25ml each holder)	1788	1788	5022	11952	1788
	No. of Straws (Double Layer) (0.5ml each holder)	1284	1284	3624	9048	1284
	No. of Straws (Double Layer) (0.25ml each holder)	2832	2832	8460	19944	2832
Capacity	Volume of LN2 (L)	20	30	30	30	35
	Static Evaporation* (L/Day)	0.18	0.17	0.23	0.34	0.17
	Duration of Normal** Operation (Day)	70	111	82	56	129
Dimen-sions	Opening Diameter(MM)	50	50	80	125	50
	Height(MM)	656	656	656	659	695
	Outside Diameter(MM)	394	461	461	461	461
	Canister Outside Diameter(MM)	38	38	63	97	38
	Outside Height(MM)	120/276	120/276	120/276	120/276	120/276
	Empty Weight(KG)	11.5	12.5	13	14.6	14.1
	Gross Weight(KG)	27.9	37.1	37.6	39.2	42.8

	Model	YDS-35B-80	YDS-35B-125	YDS-50B	YDS-50B-80	YDS-50B-125
Max-imum Capacity	No. of Canister †	6 (3)	6 (3)	6 (3)	6 (3)	6 (3)
	No. of Straws (Single Layer) (0.5ml each holder)	2244	5124	792	2244	5124
	No. of Straws (Single Layer) (0.25ml each holder)	5022	11952	1788	5022	11952
	No. of Straws (Double Layer) (0.5ml each holder)	3624	9048	1284	3624	9048
	No. of Straws (Double Layer) (0.25ml each holder)	8460	19944	2832	8460	19944
Capacity	Volume of LN2 (L)	35	35	50	50	50
	Static Evaporation* (L/Day)	0.23	0.35	0.20	0.26	0.37
	Duration of Normal** Operation (Day)	96	63	157	121	85
Dimen-sions	Opening Diameter(MM)	80	125	50	80	125
	Height(MM)	698	700	770	766	753
	Outside Diameter(MM)	461	461	461	461	461
	Canister Outside Diameter (MM)	63	97	38	63	97
	Outside Height(MM)	120/276	120/276	120/276	120/276	120/276
	Empty Weight(KG)	14.3	14.8	19.3	20.1	21
	Gross Weight(KG)	43	43.5	60.3	61.1	62


† A(B): A for maximum number of canisters, B for number of canisters in standard configuration
* Static evaporation and static holding time is theoretical value. Actual evaporation and holding time is affected by usage, atmospheric conditions, and manufacturing tolerances.
** Duration of normal operation is for reference only to estimate container performance under normal operating conditions. Actual duration may differ due to different atmospheric conditions, usage history, manufacturing tolerances, and particular circumstances.

Accessories:


Canisters




Self-pressurized liquid nitrogen hand pump



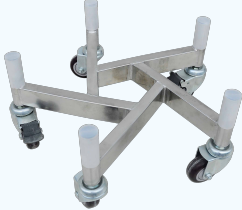
Self-pressurized liquid nitrogen foot pump



Liquid Level Measuring Rods



Caster base



Canister Holder Parameters

Canister Parameters	120 mm Long, 38 mm diameter (50-diameter storage tank)				276 mm Long, 38 mm diameter (50-diameter storage tank)			
Cryovial Parameters	No. of holders in a canister	No. of vials in a holder	No. of vials in a canister	No. of vials in a storage tank	No. of holders in a canister	No. of vials in a holder	No. of vials in a canister	No. of vials in a storage tank
0.5 ml	3	3	9	54	3	6	18	108
1.5 ml	3	3	9	54	3	6	18	108
2.0 ml	3	3	9	54	3	6	18	108
3.0 ml	3	3	9	54	3	6	18	108
5.0 ml	3	1	3	18	3	3	9	54
Canister Parameters	120 mm Long, 63 mm diameter (80-diameter storage tank)				276 mm Long, 63 mm diameter (80-diameter storage tank)			
Cryovial Parameters	No. of holders in a canister	No. of vials in a holder	No. of vials in a canister	No. of vials in a storage tank	No. of holders in a canister	No. of vials in a holder	No. of vials in a canister	No. of vials in a storage tank
0.5 ml	11	3	33	198	11	6	66	396
1.5 ml	11	3	33	198	11	6	66	396
2.0 ml	11	3	33	198	11	6	66	396
3.0 ml	11	3	33	198	11	6	66	396
5.0 ml	11	1	11	66	11	3	33	198
Canister Parameters	120 mm Long, 97mm diameter (125-diameter storage tank)				276 mm Long, 97 mm diameter (125-diameter storage tank)			
Cryovial Parameters	No. of holders in a canister	No. of vials in a holder	No. of vials in a canister	No. of vials in a storage tank	No. of holders in a canister	No. of vials in a holder	No. of vials in a canister	No. of vials in a storage tank
0.5 ml	27	3	81	486	27	6	162	972
1.5 ml	27	3	81	486	27	6	162	972
2.0 ml	27	3	81	486	27	6	162	972
3.0 ml	27	3	81	486	27	6	162	972
5.0 ml	27	1	27	162	27	3	81	486

Haier Liquid Nitrogen Storage System

Biotrek Series

3 Year Vacuum Warranty

Rugged And Durable

Dry Shippers

Cryo absorbant

Vapour Phase Storage

Security

No LN2 Spillage

Durability



Biotrek Series

Biotrek Series is designed for safe sample transportation under cryogenic conditions (vapor phase storage, temperature under -190°C). As the risk of LN2 release is avoided, it is suitable for short-haul air transportation.

Product Advantages

► Liquid Nitrogen Adsorption

Adsorbent materials are used to absorb and retain LN2 for safe transport. There will not be spillover of liquid nitrogen even when the tank is capsized.

► Five Models Available

Biotrek Series offers five models of shippers with different capacities for the storage of straws and 2 ml vials.

► Stainless Steel Mesh

Special stainless steel mesh divides storage space and LN2 absorbents to prevent absorbent materials from contaminate the samples.

► Complete Accessories Set

All models are offered a variety of stainless steel canisters and polycarbonate cryogenic boxes. Locking cover is optional.



Technical Parameters

Model	YDS-3-H	YDS-6-80-H	YDS-8-80-H	YDS-10-125-H	YDS-10-125-H(F)	YDS-25-216-H(F)
Maximum Capacity						
No. of holders	1	1	1	1	1	1
No. of Straws (0.5ml each holder)	214	820	820	1508	—	—
No. of Straws (0.25ml each holder)	472	1780	1780	3324	—	—
2 ml Cryovials (25 per box)	—	—	—	—	75	500
No. of boxes in (2ml per holder)	—	—	—	—	3	5
Capacity						
Volume of LN2 (L)	3	6	8	10	10	25
Static Evaporation* (L/Day)	0.14	0.22	0.22	0.37	0.37	0.75
Duration of Normal** Operation (Day)	13	17	23	17	17	21
Dimensions						
Opening Diameter(MM)	50	80	80	125	125	216
Height(MM)	428	481	581	546	546	705
Outside Diameter(MM)	224	300	300	300	300	394
Canister Outside Diameter (MM)	38	63	63	97	—	—
Outside Height(MM)	120	120	120	276	—	—
Empty Weight(KG)	3.5	5	5.8	6.9	6.9	15
Gross Weight(KG)	4.7	7.5	9.1	11	11	26

* Static evaporation and static holding time is theoretical value. Actual evaporation and holding time is affected by usage, atmospheric conditions, and manufacturing tolerances.

** Duration of normal operation is for reference only to estimate container performance under normal operating conditions. Actual duration may differ due to different atmospheric conditions, usage history, manufacturing tolerances, and particular circumstances.

Features

- Straw and cryovial storage options
- Rugged and durable aluminium construction
- NO LN2 spillage
- Vapour phase cryogenic storage
- Faster LN2 fill times
- Lockable lids
- 3 year vacuum warranty

Haier Liquid Nitrogen Storage System

Cryostor series



Cryostor Series

Cryostor Series is the latest innovation for high-performance liquid phase cryopreservation. The container uses the pressure generated from vaporization of small amount liquid nitrogen to discharge LN2 for other containers. Storage capacities range from 5 to 500 liters.

Product Advantages

► Stainless Steel Structure

Stainless steel structure can withstand the most demanding environment and ensure long-lasting security. It also provides reduced evaporation loss rate, compared with conventional welding insulation tanks.

► A variety of accessories

Each Cryostor Series model is equipped with a pressure valve, a drain valve, a relief valve, and a pressure gauge. For 200 L and above models also apply safety structures such as rupture discs and silencers.

► Self-pressurized LN2 Backup System

Self-pressurized LN2 back up system is used for Cyro freezers. In extreme cases, such as power outage, system failure and so on, the backup system automatically opens cryogenic solenoid valves and injects liquid nitrogen to ensure the set temperature and protect samples.

Compared to traditional high pressure cylinder backup system, the self-pressurized LN2 backup system has the following advantages:

- Safer: under required operating condition, self-pressurized LN2 backup system has lower working pressure and hence safer than traditional high-pressure backup system.
- More Economical: self-pressurized liquid nitrogen tank has better insulation performance, lower evaporation losses and longer working duration with the same amount of LN2.
- More convenient: self-pressurized LN2 backup system combines the controllers with self-pressurized components and greatly reduces pipelines and cables used in traditional backup systems.
- More stable: due to the reduction of intermediate pipe connections, impact of environmental factors on the system is reduced.
- Cheaper: self-pressurized LN2 backup system costs less than traditional backup systems.

Features

- Ten models with capacities range from 5 to 500 liters.
- All models are equipped with safety valves, 200 L and above models have additional rupture disc.
- All welded stainless steel construction

► Casters

All models have four casters for better mobility and convenient use in different occasions.



- Rotary ring construction
- Labelled valves for easy identification.
- 5 year vacuum warranty

Technical Parameters

Model	YDZ-5	YDZ-15	YDZ-30	YDZ-50	YDZ-100
Capacity					
Volume of LN2 (L)	5	15	30	50	100
Static Evaporation* (L/Day)	0.15	0.38	0.75	1	1.3
LN2 output (L/Min)	2	2	3	3	4
Dimensions					
Height(MM)	510	750	879	991	1185
Outside Diameter(MM)	329	404	454	506	606
Empty Weight(KG)	15	23	32	54	75
Gross Weight(KG)	19.1	35.3	56.6	95	157
Pressure Parameters (MPa)	1. Standard working pressure 0.05, 2. Maximum working pressure 0.09, 3. First stage safety valve relief pressure 0.099 4. Second stage safety valve release pressure 0.15, 5. Pressure gauge range 0-0.25				

Model	YDZ-150	YDZ-175	YDZ-200	YDZ-300	YDZ-500
Capacity					
Volume of LN2 (L)	150	175	200	300	500
Static Evaporation* (L/Day)	1.95	2.1	2.4	3.3	5.5
LN2 output (L/Min)	6	6	8	8	10
Dimensions					
Height(MM)	1188	1298	1265	1459	1576
Outside Diameter(MM)	706	706	758	857	1008
Empty Weight(KG)	102	120	130	202	255
Gross Weight(KG)	225	264	294	448	665
Pressure Parameters (MPa)	1. Standard working pressure, 2. Maximum working pressure, 3. First stage safety valve relief pressure 4. Second stage safety valve release pressure 5. Pressure gauge range 6. Rupture disc burst pressure				

* Static evaporation and static holding time is theoretical value. Actual evaporation and holding time is affected by usage, atmospheric conditions, and manufacturing tolerances.



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