

Introduction

Cryomatrix series provide the user with a fully automatic, safe and reliable cryogenic liquid nitrogen storage system. All tanks are made of high quality stainless steel, equipped with automatic caster wheel, brake device, convenient open hinged lid, and large diameter openings for sample storage. The sample can be stored in liquid phase (-196°C) or vapor phase (-190°C). Microcomputer touch control system provides greater convenience and security. In order to achieve the most economical operation, we design the biggest sample storage capacity under the condition of the minimum consumption of liquid nitrogen.

Cryomatrix series adopt advanced technology and super vacuum thermal insulation technology to assure the safety of the barrier-free sample storage and good properties uniform temperature and characteristics of the minimum consumption of liquid nitrogen. Even if it gas storage, the whole storage area temperature difference is less than 10°C.

Key Features

- | | |
|---|--|
| 1 Dry sample storage | 6 Storage a variety of blood bags |
| 2 -185°C at top | 7 De-Fog and liquid nitrogen splash proof |
| 3 Maximum capacity of liquid nitrogen storage capacity below rotating tray | 8 5 years vacuum warranty |
| 4 One-piece folding stage | 9 CE certification |
| 5 Automatically liquid nitrogen supply | |



ANTECH
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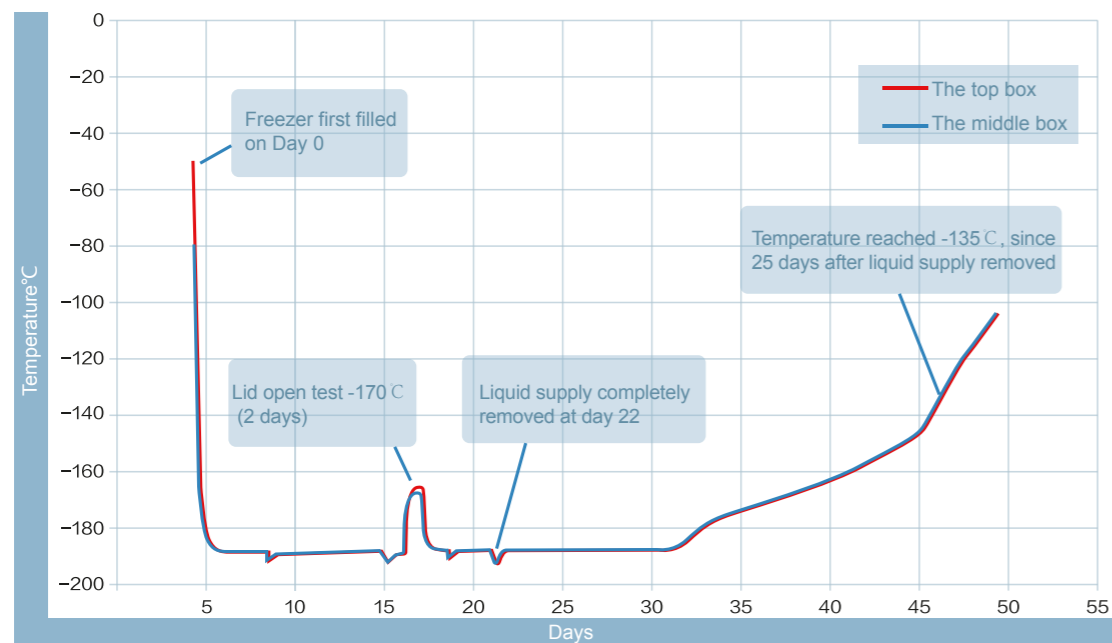


CryoMatrix series

Advantages

- 1 The world's largest single storage capacity, Small footprint.
- 2 Vapor or liquid phase storage, meet all user needs.
- 3 Unique vacuum technology and cervical mouth technology, liquid nitrogen evaporation loss rate is extremely low.
- 4 Temperature close to the neck could reach -190°C stably.
- 5 2 steps and partition rotating tray design for easy and quick access to samples.
- 6 special strengthen structure to make the tank stable , earthquake resistant up to 8 magnitude, be able to be moved with samples inside.
- 7 5 years vacuum warranty as standard.
 1. One-piece folding stage
 2. Cryomonitor 3000 intelligent control system

Temperature Test Graph

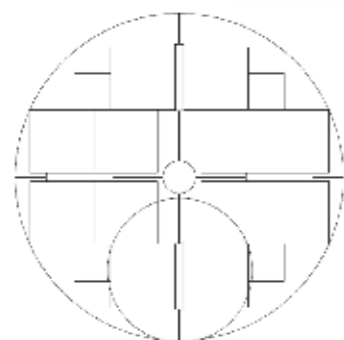


Cryomonitor 3000 Intelligent Control System

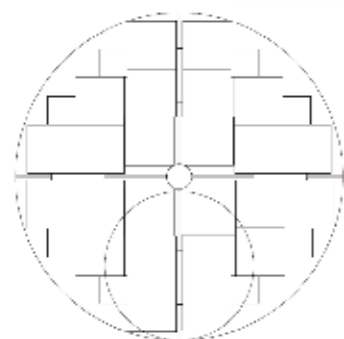


- 1 Automatically filling liquid nitrogen
- 2 Liquid nitrogen splash proof structure
- 3 Triple solenoid valve structure
- 4 Platinum resistance temperature sensor
- 5 Differential pressure type liquid level sensor
- 6 Recording temperature and alarm data, automatically
- 7 Remote monitoring
- 8 Self-diagnosis
- 9 User authority setting
- 10 Run/alarm parameters setting
- 11 Abnormal alarm to reminder
- 12 Standby power and UPS power
- 13 Cloud storage database center(optional)

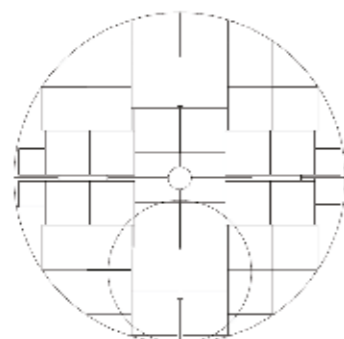
RackLayouts



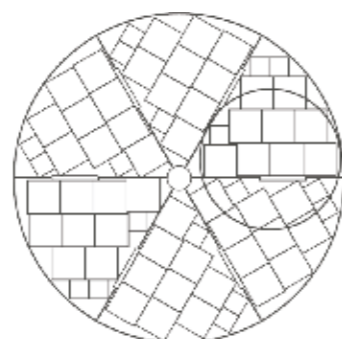
Cryomatrix 13k/19K



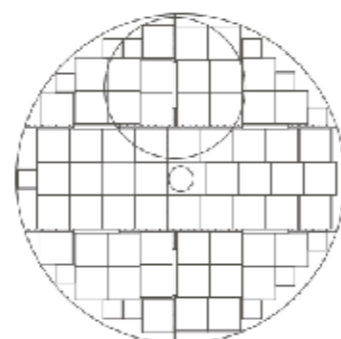
Cryomatrix 26k/36K



Cryomatrix 43k/50K



Cryomatrix 59k/76K/88K



Cryomatrix 95K



Technical Parameters

Model Cryomatrix 13K Cryomatrix 19K Cryomatrix 26K Cryomatrix 36K Cryomatrix 43K

Maximum storage capacity					
2 ml Vials (Internal Thread)	13000	18200	26000	36400	42900
Number of Racks (100 cell boxes)	12	12	24	24	32
Number of Racks (25 cell boxes)	4	4	8	8	4
Number of Stages per Rack	10	14	10	14	13
0.5 ml Vials (Internal Thread)	18200	23400	33800	46800	56100
Number of Racks (100 cell boxes)	12	12	24	24	32
Number of Racks (25 cell boxes)	4	4	8	8	4
Number of Stages per Rack	10	14	10	15	13

Performance					
LN2 Capacity (L)	350	460	587	783	135
LN2 Capacity Under Tray (L)	55	55	80	80	890
Static evaporation (L/day)*	≤3	≤4	≤5	≤6	≤6.5

Unit Dimensions					
Neck Diameter (mm)	326	326	445	445	465
Overall Height (mm)	1326	1558	1321	1591	1559
Operated Height (mm)	1263	1212	1266	1216	980
Outside Diameter (mm)	875	875	1104	1104	1190
Door Width Requirement** (mm)	895	895	1124	1124	1210
Weight Empty (kg)	219	277	328	372	441
Weight Liquid Full* (kg)	502	649	802	1005	1160

	Blood Bag Capacities														
	Total bags	No. Stages	No. Racks	Total bags	No. Stages	No. Racks	Total bags	No. Stages	No. Racks	Total bags	No. Stages	No. Racks			
25ml (791 OS/U)	1296	6	216	1728	8	216	2376	6	396	3168	8	396	3360	7	480
50ml (4R9951)	792	6	132	1056	8	132	1416	6	236	1888	8	236	2016	7	288
250ML (4R9953)	300	3	100	500	5	100	552	3	184	920	5	184	944	4	236

*Static evaporation rate and static holding time are nominal. Actual rate and holding time will be affected by the condition of container usage, atmospheric conditions, and manufacturing tolerances.

Technical Parameters

Model	Cryomatrix 50K	Cryomatrix 59K	Cryomatrix 76K	Cryomatrix95K	Cryomatrix 128K										
Maximum storage capacity															
2 ml Vials (Internal Thread)	49500	58500	76050	94875	128350										
Number of Racks (100 cell boxes)	32	54	54	60	72										
Number of Racks (25 cell boxes)	4	18	18	13	14										
Number of Stages per Rack	15	10	13	15	17										
0.5 ml Vials (Internal Thread)	66000	81900	99450	126500	166100										
Number of Racks (100 cell boxes)	32	54	54	60	72										
Number of Racks (25 cell boxes)	4	18	18	13	14										
Number of Stages per Rack	15	10	13	15	17										
Performance															
LN2 Capacity (L)	1014	1340	1660	1880	2270										
LN2 Capacity Under Tray (L)	130	265	300	320	262										
Static evaporation (L/day)*	≤7	≤8	≤10.5	≤12.5	≤12.5										
Unit Dimensions															
Neck Diameter (mm)	465	635	635	635	635										
Overall Height (mm)	1704	1398	1589	1883	1680										
Operated Height (mm)	950	997	967	1097	1120										
Outside Diameter (mm)	1190	1565	1565	1565	1565										
Door Width Requirement** (mm)	1210	1585	1585	1585	1700										
Weight Empty (kg)	495	851	914	985	920										
Weight Liquid Full* (kg)	1314	1934	2255	2504	2754										
Blood Bag Capacities															
	Total bags	Stages	No. Racks	Total bags	Stages	No. Racks	Total bags	Stages	No. Racks	Total bags	Stages	No. Racks	Total bags	Stages	No. Racks
25ml (791 OS/U)	4320	9	480	4716	6	786	5502	7	786	7758	9	862	10540	10	1054
50ml (4R9951)	2592	9	288	2916	6	486	3402	7	486	4905	9	545	6540	10	654
250ml (4R9953)	1180	5	236	1170	3	390	1560	4	390	2095	5	419	3060	6	510

*Static evaporation rate and static holding time are nominal. Actual rate and holding time will be affected by the condition of container usage, atmospheric conditions, and manufacturing tolerances.

Optional Functions

Liquid Nitrogen Tank Cloud Storage Intelligent Control Management System

Liquid nitrogen tank cloud storage intelligent control management system aims to provide concentrated monitoring and management solutions for multiple liquid nitrogen tanks, which realize remote monitoring and controlling, the cloud storage backup ensures key operation data never lost. This system is composed by monitoring workstation, system server, storage server, WEB server, router, printer, online UPS, voice alarm system, SMS alarm system, large-screen LCD (optional) and intelligent control management software, etc.

The intelligent management software is composed by liquid nitrogen tank monitoring, safety monitoring (hypoxia concentration alarm, power distribution monitoring) and sample management. The features as follows:

1. Based on cloud calculation, cloud storage, the internet concept development and big data calculation.
2. More than 25 years key data storage.
3. Convenient to access other types data monitoring systems.
4. Multiple data security protection system.

