

Introduction

CryoMatrix Series tanks provide users with a fully automatic, safe and reliable cryogenic liquid nitrogen storage system. The sample can be stored either in liquid phase (-196°C) or vapor phase (-180°C). Microcomputer touch control system CryMonitor 3000 provides convenience and security. Cryomatrix series introduced advanced technology and perfect 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 is vapor phase, the whole storage area temperature difference is less than 10°C.

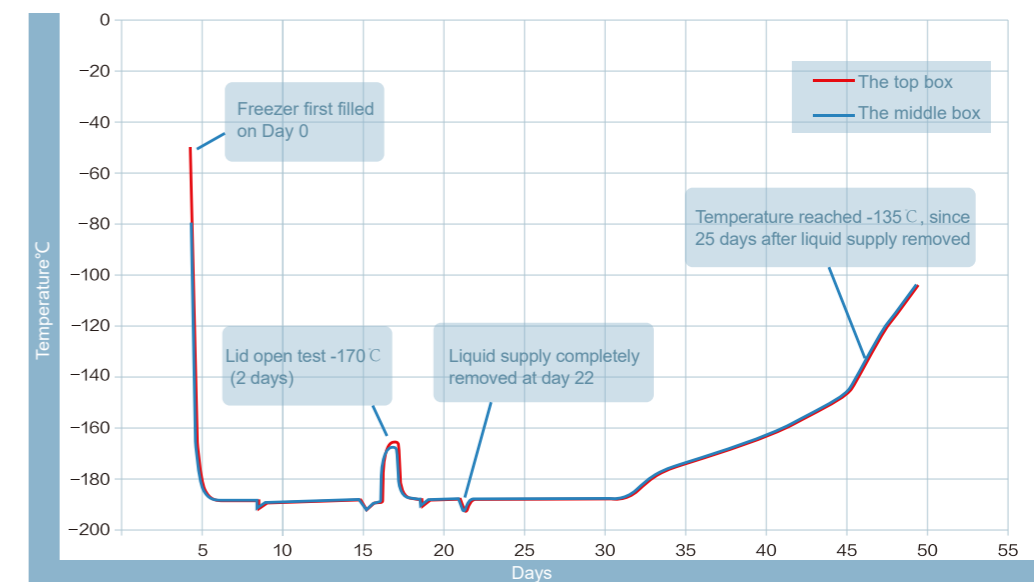
CryoMatrix Series



Key Features

- 1 Dry sample storage available
- 2 At least -180°C at top of tank
- 3 Maximum capacity of liquid nitrogen storage capacity below rotating tray
- 4 One-piece folding stage
- 5 Automatically liquid nitrogen supply
- 6 Variety of blood bags storage available
- 7 De-Fog and liquid nitrogen splash proof
- 8 5 years vacuum warranty
- 9 CE certificate

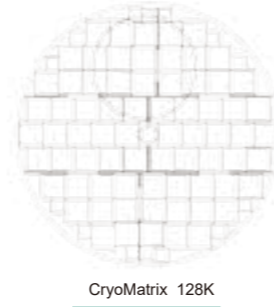
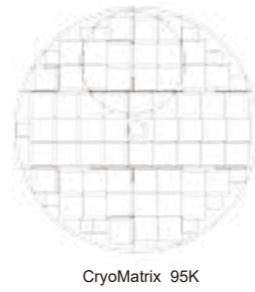
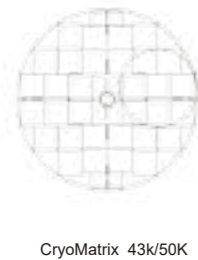
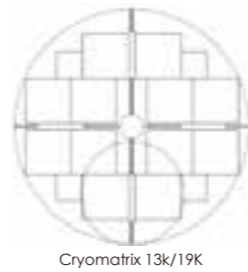
Temperature Test Graph



Advantages

- 1 The largest single storage capacity (CryoMatrix 128k), Small footprint.
- 2 meet customers' variable requirements.
- 3 Unique vacuum technology and cervical mouth technology ensures extremely low liquid nitrogen evaporation loss rate.
- 4 Temperature close to the neck could reach -180 C stably.
- 5 Two 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

RackLayouts



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 Automatically recording temperature and alarm data
- 7 Remote monitoring
- 8 Self-diagnosis
- 9 User authority setting
- 10 Run/alarm parameters setting
- 11 Abnormal alarm reminder
- 12 Standby power and UPS power(optional)
- 13 Cloud storage database center(optional)

Technical Specification

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					
Liquid nitrogen capacity (L) (Liquid phase storage)	350	460	587	783	890
Liquid nitrogen capacity (L) (Vapor phase storage)	55	55	80	80	135
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 Specification

Model CryoMatrix 50K CryoMatrix 59K CryoMatrix 76K CryoMatrix 95K CryoMatrix128K

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					
Liquid nitrogen capacity (L) (Liquid phase storage)	1014	1340	1660	1880	2270
Liquid nitrogen capacity (L) (Vapor phase storage)	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	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)	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.