

-196 °C Liquid nitrogen cryopreservation system

Biobank series Crobank series

MYDD-450(R)



Classic Edition



Smart Connect Edition



MYDD-450(R) Classic Edition

Applications

Biobank series provides users with a safe and reliable deep cryogenic LN2 storage system. The tank is made of high-quality stainless steel, with casters and brakes, a hinged lid for easy opening, and a large aperture opening facilitates sample storage. Samples can be stored in liquid and vapor phases, and the microcomputer touch control system provides greater convenience and safety.

Features

- Dual Vapor & Liquid Phase Compatibility**
 During vapor-phase operation, ensure samples are isolated from liquid nitrogen contact to prevent contamination while maintaining the storage zone temperature within a range close to that of liquid nitrogen.
- High-density storage**
 Compact footprint with high sample capacity, capable of storing up to 13,000 2ml cryotubes. This design not only saves space but also reduces the unit storage cost per sample.
- Card reader and fingerprint module**
 Optional card reader and fingerprint module enable convenient login, effectively ensuring sample security.
- Temperature Monitoring system**
 The microprocessor-based and dual platinum RTD probes (top/bottom) monitoring system display real-time maximum/minimum temperatures inside the tank with $\pm 1^{\circ}\text{C}$ accuracy. Users can set their own alarm point, there are alarm mute options.
- Automatic filling and liquid level monitoring**
 The liquid level monitoring system with capacitive sensor shows the liquid level in real time to ensure safe liquid nitrogen automatic filling. The 10-inch LCD touch screen can display top and bottom temperature, liquid level, operating status and other parameters.
- Hot gas bypass**
 The hot gas bypass design can remove room temperature nitrogen in the pipeline before the liquid nitrogen is injected. It ensures only ultra-low temperature liquid nitrogen into the tank, avoiding temperature variation in the tank when charging liquid, affecting the safety of the sample, and reducing the additional liquid nitrogen consumption.
- Dual Solenoid Valve Control System**
 The Liquid Nitrogen Filling System employs dual solenoid valve control, effectively preventing overflow and sample contamination caused by single valve failure.
- Humanized design**
 One-touch defogging ensures clear visibility for sample taking and placing; The integrated folding step reduces the height of operation, convenient for taking and placing. Internal rotating tray spare opening to find dropped samples expediently.

Technical Parameters

Model	MYDD-450(R)
Liquid nitrogen at the bottom of the tray(L)	55
Effective Volume of the Tank	445
Caliber(mm)	317
Internal effective height(mm)	888
Outer diameter(mm)	860
Total height(mm)	1645
Lifting arm height(mm)	2688
Empty tank weight(kg)	320
Tank operating height(mm)	1050
Total weight at full load(mm)	700
Door width requirement \geq mm	900
Maximum storage quantity of 2ml revolve freezing tube	
1.2、1.8、2ml revolve freezing tube quantity	18200
5*5 square bucket quantity	4
10*10 square bucket quantity	12
5*5 box quantity(25)	56
10*10 box quantity(100)	168
Layers of square bucket	14

Sample management system

It can realize digitization, informatization, and standardized management. It can also realize information interaction between touch screen, PCs, and mobile interfaces, further improving the safety, accuracy, and convenience of sample management and maximizing the use of sample resources.

