

K Series Cryogenic Storage Systems



K Series systems are used throughout the world wherever it is necessary to store biological specimens or larger objects such as organs for transplantation. Like all Taylor-Wharton vessels, the ultra high capacity refrigerators use nitrogen in liquid or vapor phase for cooling. This provides a series of important benefits as compared with mechanical refrigeration systems, especially in terms of environmental considerations:

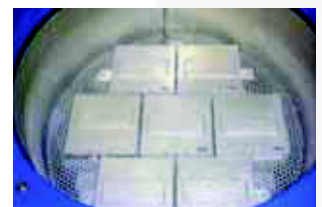
- Greater reliability
- No heat output
- Silent operation
- Lower temperature
- Virtually maintenance-free
- Safety back up to power failures

Taylor-Wharton K Series systems are designed to accommodate various inventory control systems. The high capacity makes it possible to hold up to 38,350 2ml vials or up to 739,500 0.25ml straws. Normally 10K and larger systems are connected

to a liquid nitrogen tank by means of a hose (see p. 14) equipped with a CryoCon unit, which is an electronic Taylor-Wharton automatic level controller that is available in various models (see p. 8/9).

In case it is necessary to make absolutely sure that specimens do not come into contact with liquid nitrogen (to avoid cross contamination), it is possible to place a gas phase frame inside the system. The liquid tight frame ensures a reliable separation of the specimen from the liquid nitrogen and at the same time functions as a guide for the individual racks (see p. 11).

10K and larger systems are available with the CE mark in compliance with the Medical Devices Directive MDD 93/42EC.



» For the storage of large volumes of specimens and larger objects «



SPECIFICATIONS					
Models		3K	10K	24K	38K
LN ₂ capacity	l	48	165	365	590
Overall diameter (width x depth)	mm	391	587 x 775	864 x 965	1067 x 1397
Overall height (with lid open)	mm	-	1753	1930	2286
Overall height	mm	754	1118	1118	1245
Internal diameter	mm	356	533	787	991
Usable height	mm	488	737	737	737
Evaporation rate ⁽¹⁾	l/24 h	2,5	5,0	7,0	8,0
Static holding time ⁽¹⁾	Days	19	33	52	74
Weight, empty	kg	19,1	111,0	184,0	256,0
Weight, full (without inventory control systems)	kg	56,7	243,0	474,0	733,0
Recommended LN ₂ supply tank		XL Series	XL Series	XL Series	XL Series
Suitable for bag storage		•	•	•	•
Special remarks		Optional roller base recommended (see p. 26)	90 mm distance rear to wall required	270 mm distance rear to wall required	1155 mm door width required

⁽¹⁾ Evaporation rate and static holding time are nominal. A actual rate may be affected by the nature of the contents, atmospheric conditions, container history and manufacturing tolerances

STRAW CAPACITY					
Number of canisters 67 mm		21	46	107	174
Number of levels (goblets)		3	5	5	5
Number of goblets 65 mm		63	230	535	870
Number of straws 0,25 ml		50.400	184.000	428.000	696.000
Number of straws 0,50 ml		22.680	82.800	192.600	313.200

VIAL CAPACITY					
Liquid phase		3.726	10.400	24.050	38.350
Vapor phase		2.484	8.800	20.350	32.450
Vapor phase with sealed frame		-	9.100	21.775	-