

| MODELS | EXTENDED-TIME REFRIGERATORS | | | | HIGH-CAPACITY REFRIGERATORS | | | LIQUID NITROGEN DEWARs | | |
|--|-----------------------------|------------------|------------------|---------------------|-----------------------------|-------------------|-------------------|------------------------|-------------|--------------|
| | XT10 | XT20 | XT21-AI | XT34 | HC20 | HC34 | VHC35 | LD4 | LD10 | |
| Static Holding Time ¹ days | 100 | 230 | 221 | 340 | 87 | 200 | 130 | 10 | 45 | |
| Working Time ² days | 62 | 140 | 138 | 212 | 54 | 125 | 81 | - | - | |
| Evaporation Rate ¹ Liters/Day | 0.10 | 0.09 | 0.095 | 0.10 | .23 | .17 | .27 | .40 | .22 | |
| Liquid Nitrogen Capacity (liters) | 10 | 20.7 | 21 | 34 | 20 | 34 | 35 | 4 | 10 | |
| Weight Empty | lb. kg. | 16.5 7.5 | 26 11.8 | 26 11.8 | 34.75 15.8 | 26.4 12 | 35.38 16.1 | 37.9 17.2 | 6.6 3.0 | 14.5 6.6 |
| Weight Full ³ | lb. kg. | 34.3 15.6 | 62.8 28.6 | 63.4 28.8 | 95.3 43.3 | 62 28.2 | 95.9 43.6 | 100.2 45.5 | 13.7 6.2 | 32.3 14.7 |
| Neck Diameter | in. mm. | 2.0 51 | 2.0 51 | 2.18 55.4 | 2.0 51 | 3.6 91 | 3.6 91 | 4.7 119 | 1.2 30 | 2.0 51 |
| Overall Height | in. mm. | 23.8 597 | 25.8 655 | 25.8 655 | 26.3 668 | 24.25 615 | 26.31 668 | 26.8 681 | 17 432 | 23.5 597 |
| Overall Diameter | in. mm. | 11.4 290 | 15.6 396 | 15.6 396 | 18.8 478 | 15.6 396 | 18.8 478 | 18.8 478 | 7.6 193 | 11.4 290 |
| Number of Canisters | | 6 | 6 | 6 | 6 | 6 | 6 | 6 ⁴ | | |
| Canister Dimensions ⁴ | in. mm. | 1.5x11 38x279 | 1.5x11 38x279 | 1.65x11 41.9x279 | 1.5x11 38x279 | 2.75x11 70x279 | 2.75x11 70x279 | 3.7x11 94x279 | | |
| Number of 1.2 ml & 2.0 ml vials (5/cane) | | 150 | 150 | 210 | 150 | 570 | 570 | 1050 | | |
| Number of 1.2 ml & 2.0 ml vials (6/cane) | | 180 | 180 | 720 | 180 | 684 | 684 | 1260 | | |
| Number of .5cc straws (10/cane) | | 540 | 540 | | 540 | 1850 | 1850 | 3000 | | |
| Number of .5cc straws Bulk (1 level) | | 750 | 750 | 1122 | 750 | 2940 | 2940 | 4950 | | |
| Number of .5cc straws Bulk (2 levels) | | 1500 | 1500 | | 1500 | 5880 | 5880 | 9900 | | |
| Item Numbers | | TW4 | TW5A | TW5B | TW6 | TW8 | TW11 | TW13 | TW17 | TW19 |

| ACCESSORIES | Cat. No. | |
|--|----------|--|
| • DIP STICK Fits Taylor or MVE tanks | TW26 | |
| • CANISTER Specify tank model | TW10 | |
| • ROLLER BASE — Allows easy movement of full tanks | TW28 | |
| • SPARE NECK CORK/FOAM Specify tank model | TW26A | |

Taylor-Wharton's advanced range of cryogenic refrigerators meet your needs — flexibly, efficiently, economically. Their comprehensive series of high-performance refrigerators incorporates durable, lightweight construction with a full range of optimum holding times and maximized capacities. The result is an entirely new standard of cryogenic efficiency.

Nitrogen Tanks by TAYLOR-WHARTON
THE CRYOGENIC STANDARD IN REFRIGERATORS
THE HC SERIES REFRIGERATORS

The High-Capacity HC Series of Taylor-Wharton Refrigerators enables you to store more semen, embryos or biological material at liquid-nitro-

gen temperature. Seven different unit sizes with convenient holding times and capacities are available to satisfy a broad range of storage demands. Two low profile HCL models are also available providing reduced unit height for transit or storage.

THE XT SERIES OF REFRIGERATORS

The XT Series of Taylor-Wharton Cryogenic Refrigerators offers Extended-Time, cost-effective storage for semen, embryos or biological samples. Each of the six different sizes maximizes holding time for a given quantity of liquid nitrogen, fulfilling a variety of user requirements. In addition, the low profile XTL models provide an answer to space problems.

Tanks and accessories are not stocked. Please allow 7-14 days for product delivery.



Footnotes:

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

²Work time is an arbitrary, reference-only value to estimate container performance under the actual operating conditions.

³Without canisters or racks.

⁴Canisters also available in 5.0 in. (127 mm) height for XT10, XT20 and XT34.

⁵Optional 7th canister available to increase storage capacity by 23%.

Vacuum Warranty
5 years

| SPECIFICATIONS | VAPOR SHIPPERS | | | STORAGE | | | STORAGE | | |
|--|----------------|------------|----------|----------|-----------|-----------|----------|------------|----------|
| | MODEL | MINIMOOVER | SC 4/2 V | SC 4/3 V | SC 3/3 | SC 11/7 | SC 20/20 | XC 34/18 | XC 47/11 |
| MAXIMUM STORAGE CAPACITY | | | | | | | | | |
| Number of canisters | 1 | 1 | 1 | 6 | 6 | 6 | 6 | 6 | 6 |
| Number of 1/2 cc straws (10/cane) | 60 | 280 | 120 | - | 540 | 540 | 2,100 | 4,500 | |
| Number of 1/2 cc straws (1 level Bulk) | 88 | 440 | 210 | 732 | 732 | 780 | 3000 | 6216 | |
| Number of 1/4 cc straws (1 level Bulk) | 904 | 938 | 952 | - | 150 | 150 | 630 | 1320 | |
| Number of 1.2 & 2.0 ml vials (5/Cane) | 20 | 95 | 40 | | | | | | |
| Number of 1.2 & 2.0 ml vials (6/Cane) | 24 | 106 | 48 | | | | | | |
| Number of blood bag storage | - | - | - | | | | | | |
| PERFORMANCE | | | | | | | | | |
| Liquid nitrogen capacity (liters) | 2.9 | 3.6 | 4.3 | 3.6 | 11.0 | 20.5 | 34.8 | 47.4 | |
| Static evaporation rate (liters/day) | 0.20 | 0.26 | 0.20 | 0.12 | 0.15 | 0.09 | 0.18 | 0.39 | |
| Normal working duration | 14 | 14 | 21 | 19 | 46 | 142 | 123 | 76 | |
| UNIT DIMENSIONS | | | | | | | | | |
| Neck opening (in/mm) | 1.4 35 | 2.75 70 | 2 51 | 2 51 | 2 51 | 2 51 | 3.5 89 | 5 127 | |
| Overall height (in/mm) | 19.5 495 | 18.4 468 | 19.4 492 | 16 406 | 21.6 549 | 25.7 652 | 26.6 675 | 26.5 673 | |
| Outside diameter (in/mm) | 7.2 184 | 8.7 222 | 8.7 222 | 8.7 222 | 10.2 260 | 14.5 368 | 18.2 464 | 20 508 | |
| Canister height (in/mm) | 11 278 | 11 278 | 11 278 | 5 127 | 11 279 | 11 279 | 11 279 | 11 279 | |
| Canister diameter (in/mm) | 1.2 31 | 2.62 67 | 1.81 46 | 1.5 38 | 1.5 38 | 1.5 38 | 2.81 71 | 4 102 | |
| Weight empty (lbs/kg) | 8 3.6 | 11 5 | 13 5.9 | 8 3.6 | 17 7.7 | 26 11.8 | 34 15.4 | 42 19 | |
| Weight full (lbs/kg) | 11.6 5 | 18 8.1 | 20.6 9.3 | 14.4 6.5 | 36.6 16.6 | 62.5 28.3 | 96 43.5 | 120.4 54.6 | |
| Item # | MVMM | MV26 | MV26A | MV50 | MV52 | MV35 | MV40 | MV42 | |

| MODEL-DEWAR TANK | LAB 10 |
|--------------------------------------|--------|
| PERFORMANCE | |
| Liquid nitrogen capacity (liters) | 10 |
| Static evaporation rate (liters/day) | 0.18 |
| UNIT DIMENSIONS | |
| Neck Opening (in/mm) | 2.2 |
| Usable height (in/mm) | 13.5 |
| Overall height (in/mm) | 21.5 |
| Outside diameter (in/mm) | 10.3 |
| Internal diameter (in/mm) | 8.3 |
| Weight empty (lbs/kg) | 13 |
| Weight full (lbs/kg) | 31 |
| Item # | MV57 |



The MVE Vapor Shipper

The MVE Vapor Shipper containers are designed for the safe transportation of biological samples at cryogenic (-150°C) temperatures. Fabricated from durable, lightweight aluminum, they contain a hydro-phobic absorbent that contains the liquid nitrogen. The absorbent also repels moisture and humidity, assuring the maximum holding time.

A protective shipping carton is available for all models which protects the container from being placed on its side and helps in withstanding the rigors of transportation. These containers can be used to ship your samples with a "non-hazardous" classification throughout the world.

The SC series

The SC series is designed for the user who has small capacity needs, but requires long-term storage and low liquid nitrogen consumption in a convenient lightweight package. MVE Aluminum Freezers are the units of choice.

The XC series

The XC series is designed for the user who requires large capacity storage and low liquid nitrogen consumption in a convenient lightweight package.

Vacuum Warranty 3 years on vapor tanks, 5 years on all others

** Static evaporation rate and static holding time are nominal. Actual rate and holding time will be affected by the nature of container use, atmospheric conditions, and manufacturing tolerances and any individual patterns of use.

** Normal Working Duration is an arbitrary reference, to estimate container performance under normal operating conditions, container history, manufacturing tolerances and any individual patterns of use.

Tanks and accessories are not stocked. Please allow 7-14 days for product delivery.

| ACCESSORIES | Cat. No. |
|--|----------|
| • SHIPPING CARTON - Protective container for SC4/2V, Minimoover, SC4/3V, SC11/7, specify tank model. | MV30 |
| • CANISTER Holds straws or canes | MV31 |
| • SPARE NECK CORK High efficiency foam | MV32 |
| • ROLLER BASE Specify tank model. | MV44 |

| 36" Claw Pick Up Tool | | |
|---|-----|--|
| • Flexible shaft, with 4-prong claw, 36" overall length. Arrives straight, shown curved below to demonstrate that it's flexible. Push the plunger and the claw appears and opens at the opposite end. Release the plunger and the claw retracts around the straw or object. | H06 | |

