

ADVANTAGE™ BENCHTOP FREEZE DRYERS



Committed to Product Excellence...and Continuous Support





VirTis® AdVantage™ ...

The Most Advanced Freeze Dryer You Can Put on a Bench

Precise Freeze Drying in the Smallest Possible Footprint

The VirTis AdVantage is the most advanced laboratory freeze dryer ever built. It incorporates proven VirTis freeze drying technology with the small footprint users demand in a benchtop freeze dryer. As user-friendly as it is sophisticated, the VirTis AdVantage comes supplied with the powerful Wizard™ 2.0 controller to monitor and control all aspects of the lyophilization cycle. The optional Wizard workstation includes a PC powerful computer, color printer, and all interfacing which provides user-friendly automated controls, synoptic monitoring screens, complete cycle documentation, computerized menu control, and historic trend printouts.

The VirTis AdVantage is a freeze-drying system that:

- Provides advanced process control and safeguards for your valuable biological materials
- Processes materials quickly, efficiently, and conveniently
- Is offered with advanced control and documentation
- Combines productivity and energy efficiency at an affordable price
- Comes with a limited 2-year refrigeration warranty—the best in the business

Loaded with Functions, Yet Affordable

AdVantage freeze dryers are designed and produced under stringent ISO 9001 standards to guarantee the highest quality and the longest life. A long list of innovative features results in the widest range of capabilities ever put into a benchtop model. The new features coupled with state-of-the-art control systems make freeze drying processing more precise, providing extra insurance when working with valuable product.

- Complete flexibility to process bulk product, vials, and flasks safely and efficiently
- External Quickseal™ valves allow flask drying in addition to shelf drying
- Shelf temperature ranges from -70°C to +60°C
- Process condenser temperatures as low as -85°C
- All models contain environmentally friendly CFC-free refrigeration systems

Unique turbo accelerators direct warm air onto flasks to reduce the drying period, conserving valuable time and energy.

Four patented Quickseal™ valves allow you to process flasks or product in the chamber.

One ultra-flat, Teflon®-coated 10-3/4" x 14" product shelf is provided.

Full-view crystal-clear acrylic door with double-action catch assures positive sealing.



The easy-to-use, panel-mounted Wizard™ 2.0 control system allows precise control of freezing (12 steps/ramp), primary drying (16 steps/ramp), and a secondary drying step or ramp operations. The system includes user-friendly menu options, up to 16 recipes, and a synoptic screen of all critical operations.



Advantage allows you to process samples in bulk or in vials with the optional top-down stoppering system.

Advantage is available with bulk or removable bottom stainless trays, special plastic bulk product trays, filter-seal trays or thermal guard trays

Only VirTis freeze dryers offer the optional Chamber Drying Indicator, which provides quick, visual indication of end of drying.

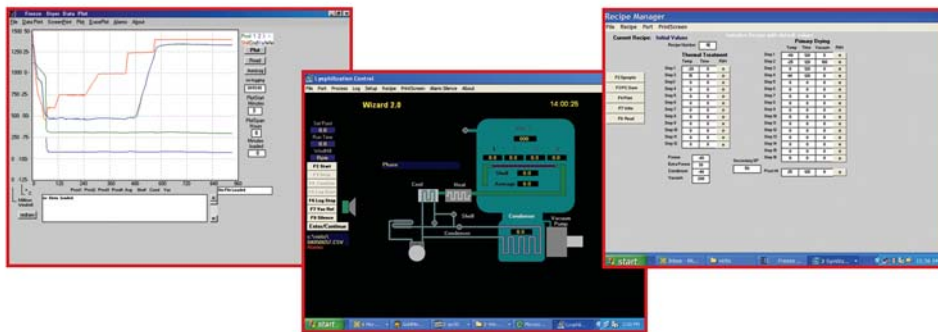
Rapid Hot Gas Defrost for fast turnaround and segmented defrost tray quickly removes condensate and prevents spilling.



Optional Control Package

For the ultimate in process control, AdVantage offers a Wizard* 2.0 workstation with synoptic monitoring screens, cycle documentation, and historical printouts. The system includes powerful recipe-handling, and alarms to protect valuable product, and complete, full-cycle documentation.

*Call **800.431.8232** to request information on Wizard 2.0 control and workstation package.



More Features in Less Space

At only 22.5" (57.2 cm) x 23" (58.4 cm) x 27" (68.6 cm) and up to 260 lbs. (117.9 kgs), the AdVantage packs more features into less space than you ever thought possible. Designed from the benchtop up to meet customer needs, AdVantage is a highly efficient and productive freeze dryer with full system control and advanced safeguards.

All our freeze dryers are built in ISO 9001-registered facilities to meet the most exacting current Good Manufacturing Practices (cGMP) standards, and all have validation packages available. VirTis brand freeze dryers offer the best warranties in the business with SP TechCare's 24-hour emergency support line **877.548.4666**. Experienced product managers are waiting to work with you to meet your requirements, budget, and time line.

For more information, call SP Industries at **800.431.8232** or contact your local representative today.

Freeze Dryer Flasks

High quality, durable VirTis brand freeze dryer flasks are available. Visit our web site at www.virtis.com and click on *literature* or call **800.431.8232**.

Specifications and Ordering Information

Model	ES	XL	EL
Condenser Temperature (min.)	-53°C	-70°C	-85°C
Shelf Temperature Range	-50 to +60°C	-60 to +60°C	-70 to +60°C
Condenser Capacity	2 Liters	2 Liters	2 Liters
Number of Compressors	1	1	2
System Refrigerants	CFC-free	CFC-free	CFC-free
Cabinet Dimensions W x D x H	footprint	22.5 x 23 x 27 (in.)	57.2 x 58.4 x 68.6 (cm)
	overall	25.75 x 28 x 27 (in.)	65.4 x 71.1 x 68.6 (cm)
Shelf Size	10.75 x 14 (in.)		27.3 cm x 35.6 (cm)
Gross Weight	lb	180	260
	kg	81.6	99.8
Vial Capacity	2 mL - 420, 5 mL - 168, 10 mL - 138, 20 mL - 87, 50 mL - 47, 100 mL - 32		
Electrical 15 Amp Service	100-115V, 50/60 Hz	100-115V, 50/60 Hz	-
	200-240V, 50/60 Hz	200-240V, 50/60 Hz	200-240V, 50/60 Hz
Top Down Stoppering System	Option	Option	Option
Wizard Work Station	Option	Option	Option

Accessories

Part Number	Description
37 LPM	37 LPM Vacuum Pump – 2 stage w/gas ballast, built-in VBS, and Oil Mist Eliminator
65 LPM	65 LPM Vacuum Pump – 2 stage w/gas ballast, built-in VBS, and Oil Mist Eliminator
353730	Manual drying rate windmill
351577	Replacement Condenser Drain Tray, 10.5" x 15.5"
363952	Stainless Steel Condenser Drain Tray, 10.5" x 15.5"
351999	Removable Bottom Stainless Steel Tray, 10" x 14"
401357	1" Low profile removable stainless steel tray
400664	1" Thermaguard Rack
400671	1.5" Thermaguard Rack
400688	2" Thermaguard Rack
400695	1" Thermaguard Removable Bottom SS Tray, 10" x 14"
400701	1.5" Thermaguard Removable Bottom SS Tray, 10" x 14"
400718	2" Thermaguard Removable Bottom SS Tray, 10" x 14"

ISO 9001:2000 REGISTERED

Warranty All VirTis Freeze Dryers are covered by a limited one year, all parts and labor, and two year refrigeration warranty.



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