CRYODRY®

CD60 ELITE

Remote Control
Automatic Modes
Energy Efficient
Ultra Fast



BLASTFREEZE® BLASTMELT®

owned engineered supported AUSTRALIA

*Preliminary document. Technical specifications subject to change.

Strictly for internal use

Distributor Information

CryoDry is pleased to introduce the CD60 Elite Freeze Dryer. Building on our proven CD8 Pro and Home platform, the CD60 Elite has been developed to deliver high production capacity, advanced automation, exceptional energy efficiency and industry-leading remote control functionality.

The CD60 Elite is designed for demanding food production, bulk sample laboratory and industrial users, requiring reliable large-scale freeze drying with simplified operation.
Building on the CD8 Pro platform CD 60 Elite will have a similar user interface, however with market disruptive new technologies on board.

MARKET DISRUPTIVE TECHNOLOGY

BlastFreeze™

Fan-assisted fast freezing technology reduces product freezing times by more than 30% by moving cold air through the chamber at high velocity.

BlastMelt™

The same fan system assists rapid condenser defrost by moving warm air through the chamber thus melting a full machine ice load in typically 2-3 hours.

On-Point Vacuum Control

Intelligent fine vacuum control adjusts vacuum pump speed to improve drying accuracy, drying speed and energy efficiency. This technology is made possible by using the smart control interface built into the Pfeiffer HiScroll 12 vacuum pump. A control valve is still part of the system to enable our autodry technology and act as vacuum stop valve.

Built-In Redundancy

The triple-redundant refrigeration system minimises downtime risk and allows continued operation in the event of compressor issues. This type of technology is normally only facilitated in high capacity industrial or pharmaceutical production machines. Having three compressors further enables ultra-power-efficient operation.

Energy Efficiency

The combination of our multiple inverter-based wide range compressors, highly efficient global power supply, solid state relays and other high efficiency components, such as the Pfeiffer HiScroll 12 vacuum pump, result in the CD60 Elite having market leading energy efficiency.

Autodry Mode
Advanced automatic algorithms adapt drying parameters and determine process end automatically.

CUSTOMER PRODUCTION COST ADVANTAGES

Ultra Fast
Optimised pressure control, BlastFreeze™ and BlastMelt™ technologies reduce total batch processing times.

Electricity Cost
With its unmatched energy efficiency, CD60 Elite offers lowest-in-class production cost, by saving on electricity with every operating hour.

Low Service Cost
The German made Pfeiffer HiScroll 12 dry scroll vacuum pump delivers high pumping speed with low noise and excellent service life.

Quality & Durability
CryoDry freeze dryers are engineered for demanding long-term operation using rigorously tested high-quality components and environmentally friendly R290 refrigerant.

Low Services Footprint
CD60 Elite operates from a standard single-phase 15A power supply. Other freeze dryers require high current or three phase power supplies as well as compressed air, plant cooling water and other services.

REMOTE SUPPORT & SERVICE CAPABILITIES
CryoDry service engineers will be able to offer remote support and service plans to suit customers needs. This is enabled through

Real Time Full Remote Control
Monitor, control and program the CD60 Elite remotely using any device with a web browser.

CryoDry Remote Support
Remote diagnostics and technical support simplify troubleshooting and application assistance.

Over-The-Air Updates
Software and firmware updates can be installed directly through the internet.

ADVANCED GENERAL FEATURES

HACCP International Certified (Under assessment)

All food contact materials are certified food safe and the chamber design avoids use of heater adhesives that may release VOCs.

Global Certification

Certified for UL, CSA, CE and RCM compliance for global market acceptance.

Product Temperature Sensors

CD60 Elite will feature 5 product temperature sensors to assist with the tracking freeze drying process.

Programmable Shelves

Temperature range from -40°C to +60°C allows full programmable process control from freezing through drying.

Natural Refrigerant

R290 refrigerant provides low environmental impact, long-term availability and simplified servicing.

Energy Recovery

Automatic power outage recovery restores operation after transient power interruptions.

High Resolution Touchscreen

The 7-inch touchscreen interface offers intuitive operation and integrates with the CryoDry Console remote portal.

Gastronomy Trays

Compatible with standard EU and US gastronomy tray formats for seamless production integration.

CRYODRY CONSOLE & REMOTE ACCESS

SMS & Email Notifications

Receive alerts for cycle completion, power interruptions and unexpected operating events.

Live Graphic Display

Real-time graphs display condenser temperature, shelf temperature, chamber pressure and process status.

Limitless Programming

Unlimited recipe creation, editing, version control and graphical recipe previews.

User Access Management

Assign user permissions to improve process security and prevent accidental setting changes.

Multi-Machine Management

Manage and synchronise multiple CD60 Elite freeze dryers from a single interface.

TECHNICAL SPECIFICATIONS

Specification	Value
Typical Product Capacity	75 kg at 80% moisture
Shelf Area	31,005 cm^2
Ice Condenser Capacity	60 kg
Condenser Performance	30 kg per 24 hours
Ice Condenser Temperature	< -45 °C
Refrigerant	R290
Vacuum	1.5 x 10^{-1} mbar
Number of Shelves	9
Shelf Temperature Range	-40 °C to +60 °C
Electrical	AC 200-240V 15A 50/60Hz
Interfaces	USB-A, Wi-Fi
External Dimensions (DxWxH)	1,300 x 1,100 x 1,600 mm
Weight	600 kg
Noise Level	54 dB(A)

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