

LYODRY PRODUCTION FREEZE DRYER

UP TO 42 TEMPERATURE CONTROLLED SHELVES,
DATA LOGGING/ANALYSIS, TOUCH SCREEN CONTROL



LyoDry Freeze Dryers provide an extended choice of process and control options for reliable, reproducible freeze drying of a wide range of sample types.

The LyoDry Production Freeze Dryer is the largest in the LyoDry range, for production scale, controlled freeze drying of bulk samples in a single cycle. The LyoDry Production Freeze Dryer is equipped with a rectangular drying chamber, containing up to 42 temperature controlled shelves, controllable $\pm 60^{\circ}\text{C}$. It uses the latest technology in vacuum, refrigeration and control, providing unrivalled product protection and operator interfacing. A full system mimic on the touch screen display provides a user friendly interface, giving a clear indication of system status. It is a 'through-the-wall' configuration with a separate plant room, and therefore ideally suited to freeze drying pharmaceutical product in a clean room environment.

UK designed, manufactured and maintained. Quality assured.



Large shelf area (up to 16.8m ² , high capacity ice condenser)	42 temperature controlled shelves (including 2 radiant shelves) $\pm 60^{\circ}\text{C}$
Fully automated, touch screen control, automatic end point determination	Data logging, real time and historical analysis, remote view (option), audit trail
Up to 200 reproducible process profiles (recipes)	Password protected user accounts
Comprehensive alarms and security configuration, password protected user accounts	Ideal for clean room with external plant room
Manufactured in 316L stainless steel	UK designed, manufactured and maintained

MechaTech Systems Ltd, Units 9 & 10 Brunel Way,
Thornbury Industrial Estate, Thornbury, Bristol, UK. BS35 3UR.
Registered in England and Wales No. 6469333

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TECHNICAL SPECIFICATION



SHELF	dimensions (w x d)	600 mm x 680mm
	surface area (each)	0.4m ²
	thickness	11.55mm ± 0.15mm
	material	316L stainless steel
	flatness / m	± 1.5mm
	temp. variation across shelf (with static load)	± 1.2°C
	cooling rate / min	0.5°C / min
	heating rate / min	2°C/min
	temperature control (stable state)	± 1°C
	temperature range	-60°C to 60°C
	temperature control	± 1.0°C
	CONDENSER material	316L stainless steel
	Condenser minimum operating temperature (no load, under vacuum)	≤ -80°C
	ice capacity: single condenser	15
	dual condenser	30
	condensing rate	10 L/hr
POWER	supply voltage	415V
	phase	3ph
	power	~60kW
	frequency	50Hz
	fused supply	125A
REFRIGERATION	cooling	Semi-hermetic compressor - CFC free - water cooled
	gas type	R507
	cooling power	15 HP (11KW)
VACUUM	ultimate vacuum	0.037 Torr
	pressure control (stable state)	± 0.075 Torr
	evacuation time: atmosphere to 20 Torr	< 5 minutes
	20 Torr to 0.5 Torr	< 5 minutes
WEIGHT		Approx. 4500kg
NOISE		< 50db

MechaTech Systems provide installation, commissioning and end user training for the entire range of LyoDry freeze dryers. All freeze dryers are fully assembled and tested prior to shipment. A comprehensive FAT programme is submitted to the client for approval. Full design, installation and operational qualification support can be undertaken in the presence of the client.

CONTACT US FOR A QUOTATION AND/OR FURTHER INFORMATION:
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