Environmental Specialties
An EMCOR Company

ES MultiCore ULT

Low Maintenance, Fully - Redundant ULTs

More Reliable.
Longer Life.

The ES MultiCore ULT provides dependable ultra-low temperature storage through a durable cold-wall freezer farm architecture designed for pharmaceutical, biotechnology, and life science applications.



Featuring remote mechanical skids, refrigeration redundancy, advanced controls, and OverShield® by Predictive Monitor®, it delivers reliable inventory protection, simplified maintenance, and a quieter storage environment.

-40°C to -80°C TEMPERATURE RANGE

498 ft³ TOTAL CAPACITY

6 MODULAR CABINETS

ALLEN-BRADLEY COMPACTLOGIX CONTROLS

COLD WALL TECHNOLOGY

WHY ES MULTICORE ULT?

MODULAR EXPANSION CAPABILITY
Add capacity as your facility grows without disrupting operations.

INDEPENDENT CABINET REDUNDANCY
Individual refrigeration systems protect inventory and minimize risk.

OVERSHIELD BY PREDICTIVE MONITOR
Predictive analytics and alerts help prevent issues before they happen.

COLD WALL TECHNOLOGY
Superior temperature stability and uniformity throughout the storage space.

REDUCED VALIDATION BURDEN
Modular system simplifies IQ/OQ/PQ and outgoing qualification requirements.

SERVICE-FRIENDLY DESIGN
Critical components are accessible outside of the storage environment.

ADVANCED CONTROLS
Allen-Bradley CompactLogix platform for reliability, security, and scalability.

IMPROVED USER EXPERIENCE
Remote mechanical systems reduce noise and heat in the freezer location.

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919-829-9300

eschambers.com

PRODUCT SPECIFICATIONS

Temperature Range (Standard)	-40°C to -80°C
Temperature Uniformity	±4°C
Refrigerants (High and Low Stage)	R-454A & R-508B
Cooling / Airflow Method	Cold Wall
Redundancy (Mechanical)	100% - A/Primary & B/Backup
Cabinet OD (W x D x H)	4’-8” x 5’-2” x 8’-5”
Cabinet ID (W x D x H)	3’ -9” x 3’ -1” x 5’ -4”
Storage Capacity (Maximum)	498 ft^3
Cabinets per System	4 to 6
Capacity per Cabinet	83 ft^3
Ambient Conditions	65°F to 85°F, <60% RH
Electrical Utilities Required	(2) 460 V / 3 PH / 60 A & (1) 120 V / 1 PH / 20 A
Cooling Water Required (Per System)	4 GPM @ 42°F or 18 GPM @ 85°F
Air Cooled Heat Rejection (Optional) (Per System)	66.8 MBH
Controls & User Interface	Allen-Bradley CompactLogix, PLC & 10” Touchscreen
Predictive Analytics & Diagnostics	OverShield by Predictive Monitor

ES MULTICORE ULT KEY FEATURES

- **Independent Cabinet Design**
- **Skid pair supports 6 Storage Cabinets**
- **Modular Design for Future Expansion**
- **Low Heat of Rejection**
- **24/7 Visibility with OverShield by Predictive Monitor**
- **100% Refrigeration Redundancy**
- **Cold Wall Temperature Stability**
- **Service Components remote from Cabinet**
- **Factory Built & Field Installed**

BUILT FOR CRITICAL APPLICATIONS



Biobanking



Cell & Gene Therapy



Pharmaceutical Manufacturing



Research Laboratories



Clinical Trial Storage

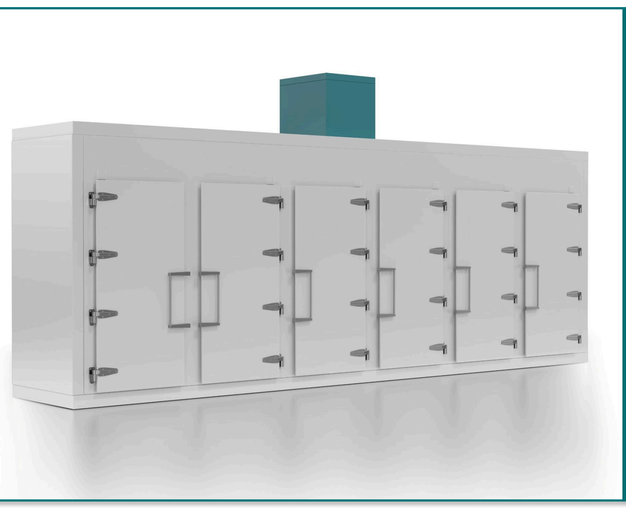


Bulk Material Storage

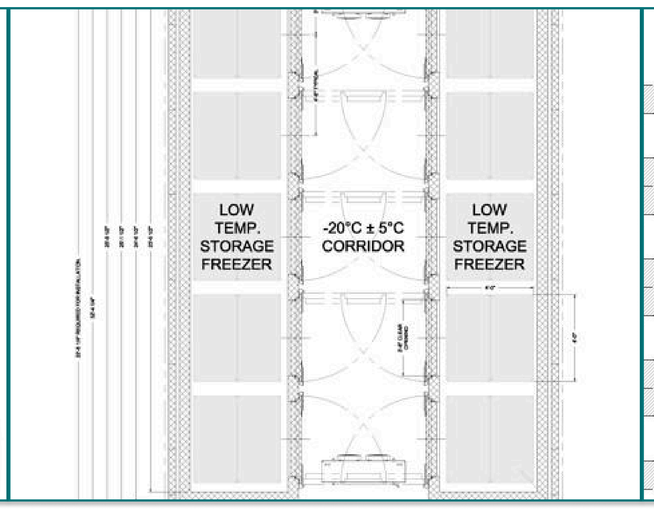
ULT PRODUCT FAMILY



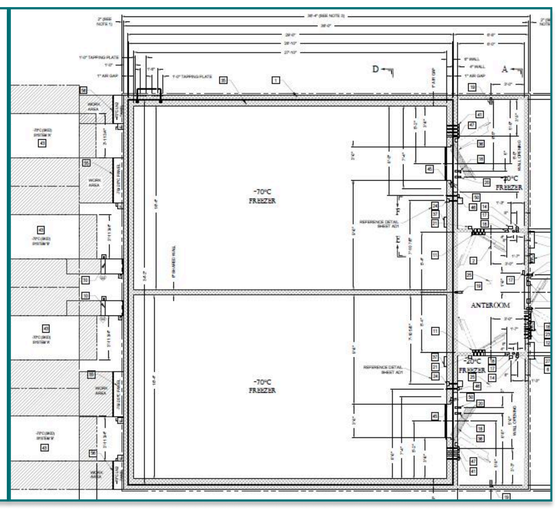
ES POWERCORE ULT



ES HERDMAN ULT



ULTRA-LOW SUITES



-70°C/-80°C OPEN ROOM

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