

COLD ROOMS

Our walk-in cold rooms offer reliable, efficient environmental controls for a variety of applications; including: GMP Storage and Cold Storage for Seed and Agricultural Products, Nutritional Supplements, and more. Our cold rooms are typically supplied with desiccant or refrigeration based dehumidification in order to maintain a low dew-point and prevent ice accumulation on both product and equipment surfaces. Typical temperatures for our cold rooms range from of 0° C to 10° C.



Benefits

- Tight temperature control for reliability and accuracy
- Tight temperature uniformity of $\pm 0.5^{\circ}$ C or better throughout the room.
- Work with any space constraints, flexible custom applications.
- Conditioning system can be replaced or relocated quickly due to simple water-type connections.
- Precision Fluid Temperature Control Unit cooling system utilizes a combination of refrigerant technologies and glycol/water heat exchange technologies
- Eco-friendly and typically require fewer than 1000 Watts to operate
- System can be restored by a technician with no down time on the chamber.
- Special accessories that allow uninterrupted operation and great convenience.
- ADA compliance available with no additional cost to the customer.
- Simple, easy-to-use, easy-to-service control systems.
- Oversize evaporator fan coil eliminates the need for a defrost at 4° C or more.
- Smooth ceiling, aluminum or steel, for optimal performance over competitors who use egg crate ceiling. Egg crate ceilings promote mold growth, difficult to service equipment, difficult to clean, and interfere with lighting and airflow.
- Supplied with LED lights which emit significantly more light per unit of input energy than fluorescent bulbs. They also produce less radiant heat, and with less heat used, the cooling requirement for the controlled environment is diminished and the total energy used by an LED-equipped chamber is substantially reduced.

Standard Features

- 4" to 6" Polyurethane Foam Insulated Panels, R- Value 31+ or Higher
- Embossed White Aluminum Interior Surface Finish
- Embossed White Galvanized Steel Exterior Surface Finish
- Exceptional Temperature Uniformity
- Temperature Control At Sensor / Set-Point: $\pm 0.2^{\circ}$ C
- High / Low Alarms
- Flexible Configurations
- Complies With LEED Standards
- Energy Efficient Offering Lowered Maintenance Costs
- Pre-tested, Pre-charged Refrigeration Systems
- Non-proprietary Controls
- Corrosive Resistant Equipment
- Precision Sizing
- Diurnal Cycling Temperature
- CSA certified control panel (UL equivalent)

Optional Feature

- Added Dehumidification and/or Ultrasonic Humidification
- Extended Temperature And Humidity Ranges
- Stainless Steel / Special Surfaces
- Ethernet / Remote Monitoring / Alarming
- Corrosive Resistant Equipment
- Added Redundancy in Controls and/or Conditioning system
- Data Logging
- Water-Cooled Or Air-Cooled Condensers
- Custom Lighting Systems
- High Density Shelving
- Unlimited Door / View Window Sizing
- Insulated Glass View ports
- High Weight Capacity Flooring
- Calibration / Validation / Maintenance Services
- Touchscreen Control Interface

The Darwin Advantage

All installed instrumentation is calibrated to NIST traceable standards and provided with a calibration form. In-house, factory calibrations are performed using state-of-the-art equipment with great accuracies. These reports are three-point verifications, traceable calibration documents.