



AIR MANAGEMENT TECHNOLOGIES, INC.

Building Energy & Environmental Services

Call us today at  
**1-877-PICK-AMT**

## Commercial & Industrial Bakeries

# Central Glycol Refrigeration System



Air Management Technologies has been providing centralized industrial cooling solutions for over 15 years and has installed numerous systems in bakeries throughout the United States. We pride ourselves on innovation and value. With each new project, we explore what can be done to not only **meet product temperature requirements**, but also address other key elements including **diversity, energy efficiency, and ease of maintenance**.

Our commitment to excellence has earned us the respect of our customers and major bakery equipment vendors who have chosen Air Management Technologies to deliver adequate cooling to their devices. In fact, several have even employed our services to troubleshoot problems with systems installed by other vendors.

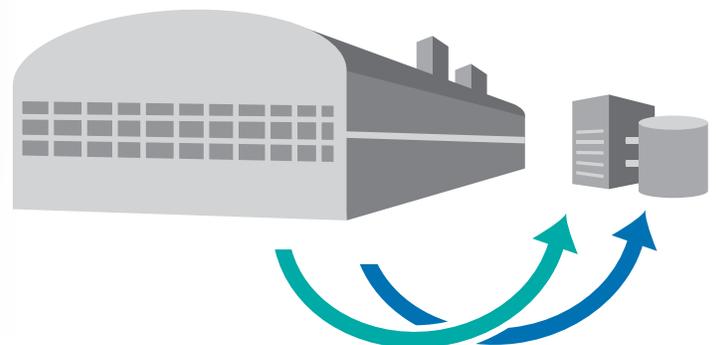
### Engineering & Installation

Engineering and installation of our glycol refrigeration systems are typically accomplished with packaged air-cooled chillers that require no interior equipment room. Even the circulating pumps can be mounted outdoors to free-up valuable floor space. Circulating loops can serve all of the plant process cooling requirements even if design temperatures vary. This process allows mixers, ice water, rounder beds, cold hold tanks, and more to operate on the same system.

Circulating loops are typically constructed with steel piping and insulated with closed cell insulation and jacketing as required. Loop configuration is a primary and secondary arrangement, which allows variable flow adjustment to meet loop demand requirements with 80% redundancy. Each usage point has an automatic control valve that can be manually positioned in the event of a failure,

and combined with an automatic balancing valve to maintain precise flow rates. The Glycol Management System automatically maintains system charge with a portable spill containment unit. The system is completely automated and has the capacity for both in-plant and remote monitoring, alarming, and control.

No interior equipment room is required with our Central Glycol Refrigeration System.



# Central Glycol Refrigeration System

## Energy Savings

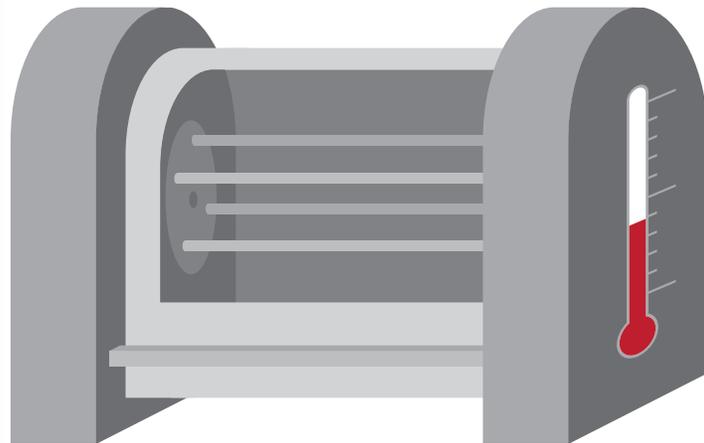
Our systems are simple to operate and typically use one-third less energy by incorporating loop design concepts that maximize chiller performance. Condensers are oversized and provide lower condensing temperatures that compete with water-cooled chillers' efficiencies, while the system eliminates the need for water treatment and decreases maintenance costs. Other energy saving features include variable frequency drives for flow control and direct digital Web-based control systems.

## Environmental Benefits

Environmental impacts now and in the future are a major consideration as we all commit to better managing air and water quality. Our glycol refrigeration system design concept conserves energy and has the potential to eliminate several hundred tons of greenhouse gas emissions per year. In addition, refrigerant charges are normally less than half those of built up systems providing a first line of defense in managing refrigerant loss.

## Get Started Today!

When considering all of the benefits of our glycol refrigeration system, it is hard to imagine constructing a bakery without employing our enhanced design that satisfies the bakery requirements of time and temperature. In most cases, new installations will be at or less than standard built-up system costs. Plus, the energy efficiency benefits will be yours for the lifetime of the equipment. There is also ample opportunity to retrofit existing plants with satisfactory returns on investment. The future of bakery energy management is available today.



Our Central Glycol Refrigeration System maintains a consistent temperature while drastically reducing greenhouse gas emissions and refrigerant inventories.



Reduce energy costs



Lower installation and maintenance costs



Remote monitoring, alarming, and control

