



Air Management Technologies, Inc.
Building Energy & Environmental Services



Guaranteed Solutions:

Process Cooling

- ◆ Mixer & Sponge Systems
- ◆ Chilled Ingredient Water
- ◆ Finished Product Cooling
- ◆ Blast Freezing
- ◆ Refrigeration

Process Heating

- ◆ Water Heating
- ◆ Steam & Hot Water Systems

Environment Conditioning

- ◆ Proofing/Retarding
- ◆ Spiral (Finished) Products
- ◆ Oven Steam
- ◆ Mold & Particulate Control

Industrial HVAC

- ◆ Makeup Air Systems
- ◆ Spot Cooling
- ◆ Space Pressurization
- ◆ Filtration
- ◆ Mechanical Cooling
- ◆ Ventilation

Waste Heat Recovery

- ◆ Ovens & Oxidizers
- ◆ Solar/Fuel Cells
- ◆ Compressed Air
- ◆ Industrial Fryers

Specialized Technologies

- ◆ Absorption Refrigeration
- ◆ Cascade Refrigeration
- ◆ Industrial Heat Pumps
- ◆ Solar/Fuel Cells
- ◆ Organic Rankine Cycle

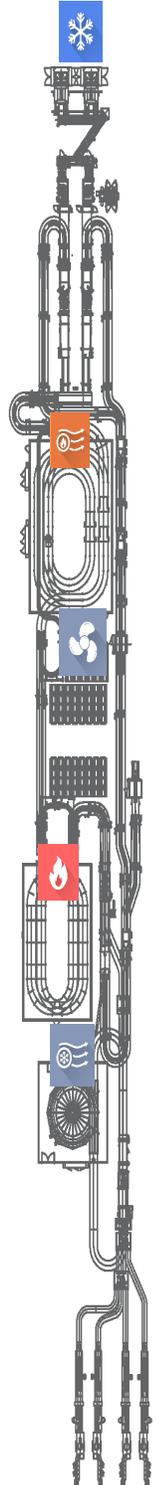
Construction Baking Facilities Process Supporting Systems

Food Processors are constantly needing to make “business case” decisions based on consumer demands and the anticipated return on investment that it will provide. Air Management understands that in order to be a trusted partner our solutions need to be based on both initial capital and long term operational costs. Our synergistic approach considers the various “systems” as one which allows innovative thermal and environmental solutions to provide reliable process and building requirements, many for the same investment as the “traditional way”, while achieving much more. Systems considered include:

- Chilled Ingredient Water
- Glycol Refrigeration Mixers
- Rounder Bed Cooling
- Proofer Heating/Cooling
- Oven Waste Heat Recovery
- Oven Saturated Steam
- Final Product Conditioning
- CIP
- Basket/Tray Washing
- Industrial Ventilation/HVAC
- Central Electric Panel Cooling

Food Safety & Quality

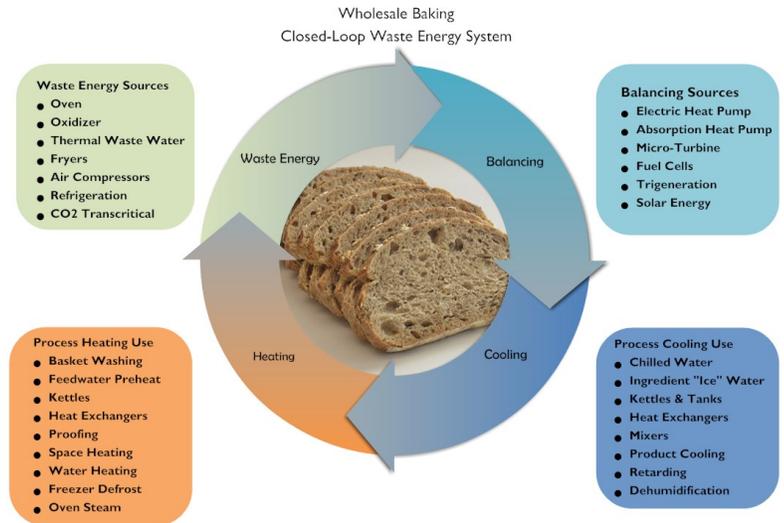
Food Safety and Quality are of utmost concern and designs incorporate elements to allow for proper sanitation as well as a consistent environmental control parameters. Our final product conditioning system was designed on the premise that 95% of the final products exposure is spent on the cooler and by creating a conditioned environment dependable product cooling can be achieved both summer and winter at a fraction of traditional cooling cost. In addition, the enclosure creates a protection zone that is manageable when compared to a plant with filtration to eliminate most atmospheric mold particles and is pressurized to prevent any plant airborne particulates and or insects from entering the enclosure.



Closed-Loop Energy Systems

Sustainability demonstrates good stewardship and in many cases may provides immediate or a quick return on investment with long term savings through reduced energy and operational costs. Closed-Loop Energy Systems can be provided with little or no change in capital and capture “waste” from the process and returning it as input energy to offset what otherwise would be required. In the wholesale baking industry, this is many times done by recovering the waste heat from ovens/oxidizers which is sufficient in most cases to provide enough energy to support a majority of the process requirements. Some typical end uses include proofing, water heating, basket & pan washing, space heating, steam feedwater preheat, and when absorption cooling is used mixer and ice water refrigeration.

Food Production & Environmental Stewardship



Numerous options exist depending on the application but the basis of design is the same to first examine what end uses exist and simply balance with generation. It does not make sense to generate more energy than can be used. Once this is defined, the most cost effective method to harness the energy potential is determined and a utility created that will meet the process demands. System distribution is normally through piping from the generation source to end uses and “peaking” systems are integrated into the design to facilitate cold starts and provide complete backup in the event that the “free” energy source isn’t available. Systems can be monitored locally and remotely to facilitate efficient operation with viewing through a graphic interface with a BTU meter documenting savings.



Sustainability & Cost Saving Benefits

It is not uncommon to see Greenhouse Gas emissions reduced by a 1,000-tons or more per year, and energy savings will vary depending on various factors but in many cases this can exceed \$100,000 in high speed facilities that have both bread and bun lines. In addition maintenance cost are dramatically reduced when compared with traditional steam systems with increased controllability and not having steam and water conditioning requirements. Food Safety in regards to chemical exposure may also a benefit in cases

About Us

Air Management Technologies has delivered energy, thermal process conditioning and environmental solutions for over twenty years. Our written performance guarantee places the responsibility in our hands and the life cycle benefits in yours. Cost conscious decisions are made with the customer in mind and every project is guaranteed to operate as specified.

