

CASE STUDY

A food processing plant in Central California has drastically decreased downtime and maximized efficiency with the installation of a BAC Series 5000 Industrial Grade Modular Cooling Tower featuring the ENDURAFLOW[™] Heat Transfer System.



The Background

A food processor outside of Fresno, California, packages industrial diced, paste, concentrated, crushed, and organic tomato. The food processor's packaging facility is based near the harvesting fields, which gives them the ability to package tomatoes within hours of being picked. This ensures consistently fresh, high quality products for their customers.

The Challenge

Before partnering with BAC, they were using a competitor's film fill towers. While using these towers, they would experience an upset condition in their production, several times per year, where tomato paste would enter their process stream. The presence of tomato paste in the cooling tower water would clog the distribution nozzles and coat the fill, resulting in downtime and loss of product. They would have to shut down their processing line and manually clean out their towers to get production back online.

The Solution

The food processing plant worked with the local BAC Representative from Air Treatment Corporation and the BAC Industrial Sales Team, to develop a solution for a cooling tower that could operate under high particulate water conditions. Due to the presence of tomato paste in the process water supply, conventional film fill tower designs were not applicable. The food processor purchased four 14x24 cells of the Series 5000 Industrial Grade Modular Cooling Tower featuring the ENDURAFLOW[™] Heat Transfer System, which BAC developed specifically for dirty water applications. The Series 5000 incorporates BAC's proprietary splash fill bars, which are designed to withstand high particulate water without damage. The splash fill bar design offers "line of sight" visibility to facilitate inspection of the unit. The nozzles in the hot water basin of the Series 5000 are oversized to prevent clogging in a dirty water environment. Full coverage internal service platforms allow for ease of maintenance, and the permanent magnet fan system increases system reliability by eliminating conventional gear and belt drives. The Series 5000 is the most reliable cooling tower in the industrial market, allowing the food processor to operate with peace of mind.

The Results

Since installing the Series 5000 units, the food processor has not had to shut down production due to an upset condition. This maximizes uptime and decreases the risk of ruined product. We look forward to continuing our relationship and working with them for many years into the future.

Series 5000 Industrial Cooling Tower

KEY FEATURES PROVIDING SUPERIOR RESULTS

ENDURADRIVE[™] Fan System

The only variable speed direct drive solution for modular cooling towers, the ENDURADRIVE[™] Fan System reduces maintenance by 90% while maintaining 100% reliability on transmission components

Gravity Fiberglass Reinforced **Polyester Hot Water Basins** Provide increased reliability and lifespan combined with easy accessibility and serviceability of spray water system

11/1

minnin

TriArmor[®] Corrosion **Protection System** Increases reliability, while extending the life of the unit

Internal Drift Eliminators Designed to be service-friendly for easy removal, reducing maintenance and service time

External Louvers

Require near zero maintenance and allow for easy visual inspection of the ENDURAFLOW™ Heat Transfer System

ENDURAFLOW™ Heat Transfer System Superior low clog performance for dirty water applications, reduces fill

replacement and downtime

BAC Series 5000 Industrial Cooling Tower



lin

WWW.BALTIMOREAIRCOIL.COM

©2017 Baltimore Aircoil Company CS002/1-A



♥ Twitter @CoolingisBAC