

Case in Point: Southeastern Container Cooling Water/Chilled Water Process Improvements

Chances are you've enjoyed a Coke from a bottle produced by Southeastern Container (SEC) since they make the plastic containers for the Coca-Cola bottling community. When questions were raised about production issues and the overall energy consumption at their Bowling Green, Ohio location SEC called Poggemeyer Design Group to figure out what was going on — and they called Dunbar.



The Special Solution

Dunbar provided the testing services as the team took a good hard look at what the chilled water system was doing throughout the day and how it was meeting the needs of the blow molding operations. These monitoring figures were then compared to optimal operational expectations of the system from both the cooling needs and the production output requirements. Initial recommendations were NOT a piping change or an engineering overhaul but rather to raise the operating temperature and reduce the overall water flow to save power, improve operational efficiency and increase quality. More isn't always better and the operations were running at too cold of a temperature with too great a flow.

Team Work

Once the optimal system operating range was identified a “free cooling” system using Northwest Ohio's moderate climate and the cooling tower already in place at the plant became an option. The Poggemeyer Design Group/Dunbar team envisioned a system to enable outside conditions to do the work of the chillers whenever temperatures fell to 45° F or lower. By modifying the piping system, making control valve changes and adding a plate frame heat exchanger SEC now plans and uses “free” chilled water for a significant portion of their operating hours as temperatures allow.



Project Details

Green Energy Optimization

Operating the facility with water cooled by Northwest Ohio's climate saves energy and utilizes natural conditions.

Customer Driven,

Dunbar's Mission is to put in place the solution that works the best for our client, not the one that creates the largest amount of hours for our workforce.

Fair,

Being fair with clients by adjusting operations within their existing system to maximize their current investment is where we start.

and Predictably Excellent

it's time to talk to Dunbar about your facility so you can benefit from our mission, too.

Your Special Contractor