

Tekleen Filters Increase Efficiency at Hoffer Plastics

Hoffer Plastics Corporation in South Elgin, IL is comprised of a 365,000 square foot climate-controlled, self-powered facility. There are eight focused factory operations within the facility to serve the company's primary markets - packaging, commercial industrial, automotive and appliance industries. The company operates on the "Lean manufacturing" principle, maintaining high productivity while fostering a valued-employee atmosphere. The company also focuses on environmental responsibility and the goal of zero waste through conscientious material handling and overall efficient plant management.

Tekleen filters were chosen at Hoffer Plastics because they use less water than other filtration methods, and are completely stainless steel, and not enameled surfaces. They filter the chilled water in the closed loop systems used in plastic processing, and the tower water used to cool hydraulic oil. Prior to the installation of the Tekleen filters, daily walk-throughs were required to observe and check the older high-maintenance bag filters.

There have been several stages of Tekleen filter installations at the Hoffer Plastics facility. The first Tekleen filter was installed in January 2012. Since this successful first test at Hoffer Plastics, the company has been adding Tekleen filters. The most recent additions include Tekleen filter Models ABW8-LP, ABW4-LP and ABW4-XLP. These are 4 and 8 inch filters that operate within the tower and chilled water systems. The tower water filter is rated at 1125 gpm at 70 psi with a 100 micron screen. The chiller filter is rated at 340 gpm at 72 psi with a 50 micron screen.

The Tekleen installation is part of the overall strategy, and has contributed significantly to water savings. As a result of these extensive measures, Hoffer Plastics has received a 2015 Governor's Sustainability Award for significant achievements in energy efficiency, waste reduction, pollution prevention and environmental programming.

Information was provided through the courtesy of Mr. John Lederer, Maintenance Manager for Hoffer Plastics. Facility photos courtesy of Hoffer Plastics.

WHY SELF-CLEANING FILTRATION?

Process water from a plant's cooling tower is often contaminated with airborne dust, pollen, algae, plastic fines, and pipe scale. These contaminants circulate through heat exchangers and chillers and significantly reduce the system's cooling ability. As a result, extruders, molding machines, molds, and compressors can heat up and endanger the quality of the product manufactured as well as the machines.

TEKLEEN® self-cleaning water filters provide the ultimate solution where dirty cooling water is a problem. The filters operate on line pressure alone. Self-cleaning is triggered by a pressure differential and is accomplished in seconds without interrupting the flow. The filters are compact in size and designed to meet a wide variety of industrial applications.



Tekleen Filters at the Hoffer Plastics Corporation facility. South Elgin, IL





North American Pipe, Wichita Falls, TX
Cooling Water: LPF4-LPE, 500 gpm, 25 psi, 50 μ



Vision Extrusion Plastics, Vaughan, ON Canada
Chilled Water: 2x ABW8-P, 750 gpm, 45 psi, 100 μ



Silverline Windows & Doors, Lithis Springs, GA
Cooling Water: ABW6-SP, 1,000 gpm, 70 psi, 100 μ



Plastek Hamlet, NC
Tower Water: LPF12-P, 1,500 gpm, 25 psi, 100 micron



Orbis Plastic Molding Sta Fe, Silao Mexico
Process Wwater: ABW6-LP, 600 gpm, 45 psi, 100 μ



Captive Plastics, Piscataway NJ
Cooling Tower: 2 x ABW12-P, 1,100 gpm, 100 μ