

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.

The Tekleen filter installation at Hoffer Plastics helps reinforce all these values, by contributing to overall efficiency through reduced waste of employee time, materials and water, and by supporting high quality output.

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.

With the self-cleaning Tekleen filters in place, these daily checkups have been eliminated. In addition to this labor and downtime savings, the savings in water has also reduced the need for expensive water-treating chemicals. While precise savings have not been completely documented, the reduction in the need for maintenance downtime is very noticeable, according to plant management. Machinery can function continuously, rather than being constantly checked due to the possibility of contamination of the cooling water that would result in overheating.

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Tekleen filters installed at the Hoffer Plastics Corporation facility in South Elgin, IL



Tekleen Filters Increase Efficiency at Hoffer Plastics, continued

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.

Hoffer Plastics has instituted extensive savings programs to support their commitment to reducing waste and costs. These include electricity saving measures through lighting changes and upgrades to compressed air production, in addition to reduced water usage. They have virtually eliminated waste plastic disposal from their operation. 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.

According to the Awards program, the "Governor's Sustainability Award winners are an elite group of committed leaders reducing environmental impact, contributing to the growth of a more sustainable Illinois economy. By prioritizing sustainability throughout their operations, programs, technology,

products and company culture, they serve as a model within their industry and community."

HISTORY OF THE SUSTAINABILITY PROGRAM AT HOFFER

In 2011, Hoffer Plastics strategically initiated a corporate goal to reduce its water usage. This initiative not only would have an impact on the environment, but would also help reduce the plant's overall energy usage. The goal was to implement a sustainable process which could reduce the water usage by 50% and with potential to reduce all water discharge from the plant. Hoffer Plastics implemented a non-regulated water treatment program to reduce hazardous chemicals in their chilled and tower water systems, reducing 51,000 pounds of hazardous material from their facility. They have also reduced bleed off in this process and increased water efficiency, saving 1.2M gallons of water annually. The Tekleen installation is part of this water savings program.

MEASURING FUTURE RESULTS

New software being installed in the automated production monitoring system at Hoffer Plastics will yield more specific savings data in the future, including the savings from the use of Tekleen filters.

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

Tekleen is located in Los Angeles, CA: www.tekleen.com

WHY SELF-CLEANING WATER FILTRATION?

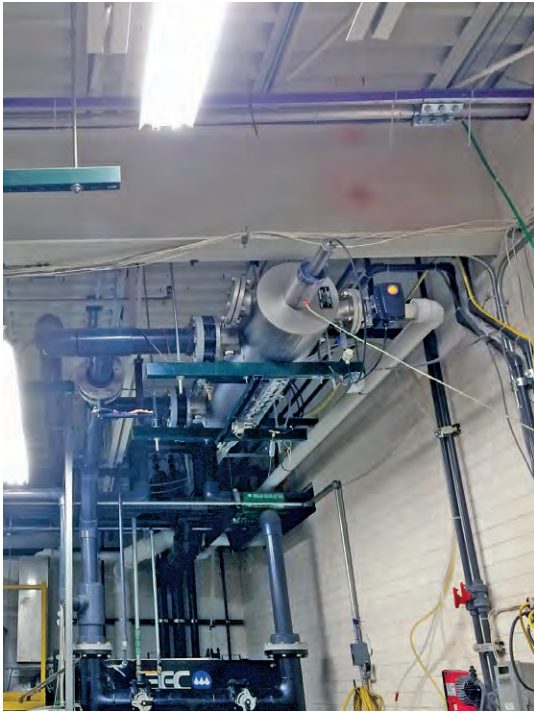
Process water from a plant's cooling tower is often contaminated with airborne dust, pollen, algae, plastic fines, and pipe scale. These contaminants circulate through heat exchangers and chillers and significantly reduce the system's cooling ability. As a result, extruders, molding machines, molds,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

This problem can result in frequent maintenance shutdowns which often cause considerable production losses. It can also result in expensive damage to processing equipment, leading to further downtime.

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 Increase Efficiency at Hoffer Plastics, continued



Views inside and outside the Hoffer Plastics manufacturing facility



Tekleen industrial self-cleaning water filters are suitable for a wide range of applications: HVAC, petrochemical, pulp & paper, drinking water, golf & turf, sugar processing, metal processing, waste water, sea water filtration, greenhouse & nursery, plastics manufacturing, food industry, power generation, car wash water reuse and recycling, and fruit & vegetable irrigation.