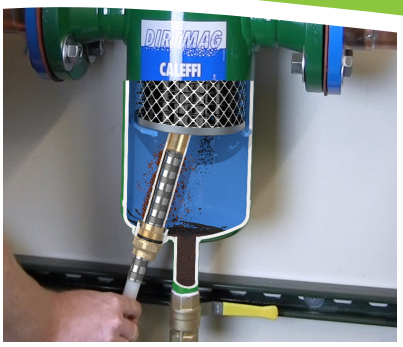
CASE STUDY

CALEFFI Hydronic Solutions


MAGNETIC SEPARATION IS KEY FOR SERVICE CONTRACTOR

PROJECT AT-A-GLANCE

Location:	**High School in Belmont, Michigan**
Contractor:	**Hurst Mechanical**
Lead:	**Alex Haan, Assistant Service Manager**
Product Focus:	**DIRTMAG®**
Challenge:	**Protecting new equipment**

"TO HAVE ECM PUMPS YOU REALLY NEED GOOD WATER AND MAGNETIC FILTERS."

~ALEX HAAN~

Overview:

Alex Haan loves a challenge. He is the Assistant Service Manager at Hurst Mechanical in Belmont, Michigan. A perfect day for him would be a project that has a lot of moving parts and room for system improvement. He got his wish when Hurst Mechanical was awarded a high school maintenance contract. On the upside, the school had new high-efficiency boilers and chillers. On the downside, there were some major water quality issues to address right away.

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MAINTENANCE PLAN PROTECTS EQUIPMENT UPGRADE

For Hurst Mechanical, a maintenance contract is never used as an excuse to limp along ailing equipment until it falls apart. Alex and his team are always looking to make sure they are protecting their customers' investments and utility bills. Alex proudly explains, "We had a commercial project where we were able to upgrade to ECM circulators and move water throughout the building using only 3 Amps of power!" This type of smart problem solving helps keep electric bills to a bare minimum for their customers.

When challenged with a retrofit project, rescuing a system in need, Haan's ideal approach is to first flush and refill the system with the appropriate mixture of glycol and deionized water. Next, he likes to install an ECM circulator and protect it with a magnetic dirt filter. ECM circulators are an excellent way to reduce power consumption, but they need to be protected from magnetite and system debris.

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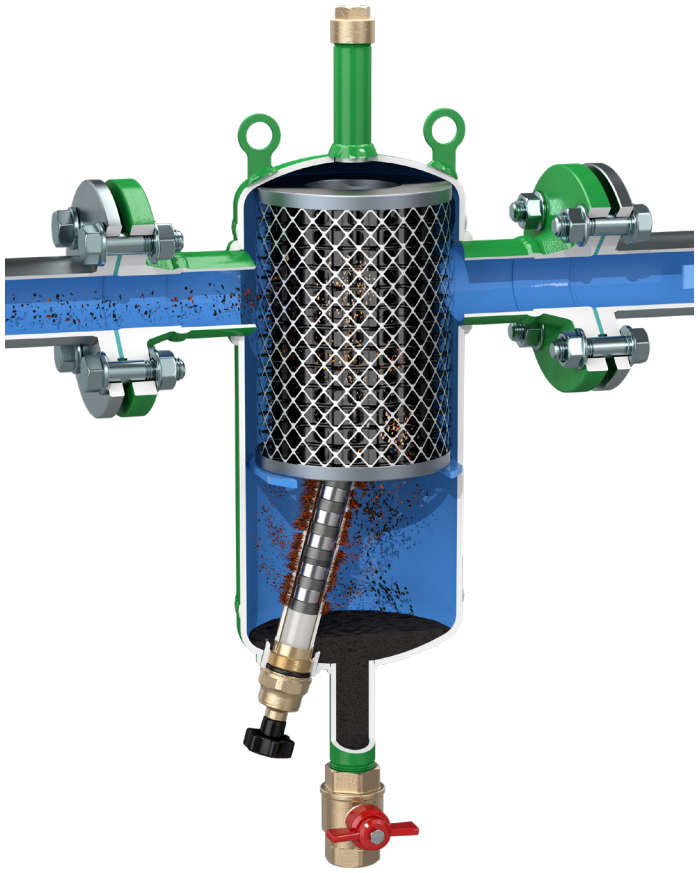
FIXING THE PROBLEM

New boilers and chillers had recently been installed at a high school in Michigan. Hurst was contracted for the maintenance of the system. When Haan first visited the site, he noticed that the side stream filters protecting the boilers were plugged up with system debris that looked like rusty mud. He cleaned out the filters only to witness them starting to plug back up within minutes. He knew that the new expensive equipment was headed for trouble. In years past, lines in the system had been completely drained and refilled with water, so lots of new oxygen was introduced into the system over time. Haan implemented his standard approach of a fluid change, filling it back up with glycol and deionized water

Hurst Mechanical also installed (2) 6" flanged Caleffi DIRTMAGS-- 2-IN-1 dirt and magnetic separators protect both the heating and cooling sides of the system.

This collision media stainer scrubs out the remaining system debris that was left over from the system fluid change. The DIRTMAG also does not plug up since the debris falls down to the bottom of the separator chamber. The magnetic separator component draws the ferrous debris down and out of the fluid stream.



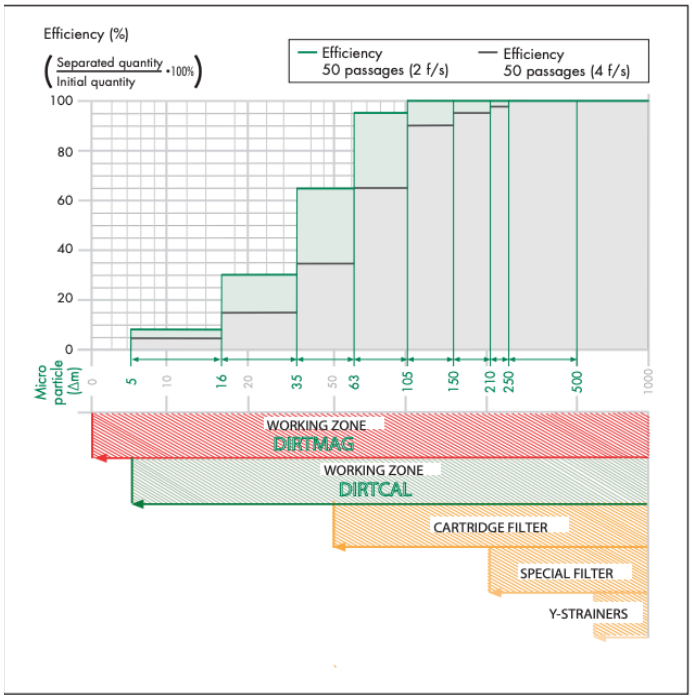
THE BENEFIT FOR THE SCHOOL STAKEHOLDERS

Haan and Hurst Mechanical aren't afraid of a challenge. They know they have done a good job when they go beyond regular maintenance and stay ahead of potential trouble, especially in a school where the district just invested in a major equipment overhaul.

MAGNETIC SEPARATION IS KEY FOR SERVICE CONTRACTOR

The Hurst Mechanical expertise in water quality and dirt separation will help keep this system running consistently so students and staff aren't inconvenienced by clogged mechanical equipment.

Particle separation capacity — dirt separator efficiency



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