



For air filtration that is **“Completely Green”**
We are the Champions!

Our **5-Star Premium** Filters
Score a Knock-Out Punch in
GREEN Performance.



• *energy savings* • *air quality* • *waste reduction* • *environmental impact*

We guarantee that Camfil Farr 5-Star Premium Filters will substantially reduce HVAC-related energy consumption, require less frequent change-outs, and reduce waste and environmental impact.

We're the only air filtration company that guarantees our product performance. Look for the Camfil Farr guarantee logo and Energy Star rating.



Become a Part of Camfil Farr's Energy Award Program

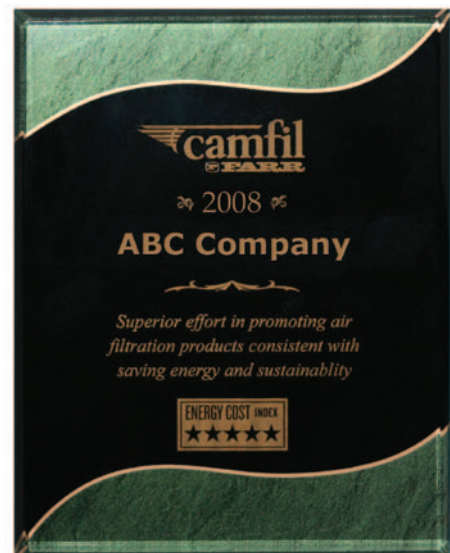
This well-publicized program recognizes 5-Star customers for selecting high performance products that deliver best-possible indoor air quality and meaningful, ongoing savings in energy consumption.

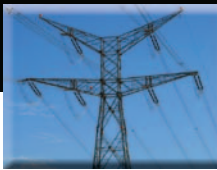
Participation in this prestigious national initiative establishes your company as a supporter of practical green technologies that contribute to a better workplace environment, and a better environment overall.

Make this commitment to a greener tomorrow – and display your plaque proudly in your facility, and marketing materials.



Look for the **5-Star ECI seal** on every product you buy. For air filters, it's your assurance of highest lifetime value for your dollar, and lowest-possible energy costs.





energy savings

The Total Cost of Ownership for using air filters in your HVAC systems involves several elements, including: the filters, installation and removal cost, disposal, and energy.

Of these costs, energy is 60-80% of the total. Buying filters on a unit price basis can save a few dollars up-front, while costing thousands of dollars in increased operating and energy expenses.

Camfil Farr filters can slash HVAC energy costs by 25-50% vs. standard low cost air filters.

Camfil Farr is the world's largest provider and purchaser of air filter media. Our filtration medias are specifically engineered for energy saving performance.

Filters are manufactured using components and processes developed by Camfil Farr engineers, and built at our own advanced machining center.

Years of intensive testing in our laboratories and field installations goes into verifying energy performance for every filter product.

Life Cycle Costing (LCC) software, developed by Camfil Farr in 1992, has helped thousands of customers reduce energy expense by choosing the optimum filter.

LCC calculates total cost of ownership based on real life filter performance, rather than simplistic mathematical models. This allows discussions of filter alternatives based on science, rather than guesswork.

Energy - The Air Filter Impact

- North American businesses spend \$450 billion annually for energy.
- About 60% of that – \$270 billion – is HVAC-related.
- If all these facilities used Camfil Farr energy-saving filters, and energy was reduced by 10%, \$27 billion would be saved every year.
- World energy consumption is projected to increase 40-50% by 2010 (US Dept. of Energy).



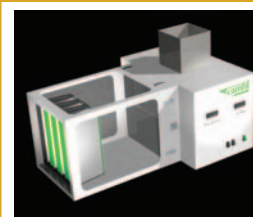
Camfil Farr specialists offer multiple technologies to generate the data, calculations, and comparisons needed to make best-possible filter decisions

Life-Cycle Cost Analysis



Energy modeling software produces objective comparisons of filters from all manufacturers regarding energy and total cost of ownership. Conditions specific to the application, including hours of operation, energy cost, air pollution conditions, fan efficiency, labor cost and other factors form the basis for highly accurate calculation.

CamTester



A field testing device where actual pressure drop and airflow of various products can be compared for real life verification of performance vs. lab testing data and literature claims.



air quality

Our premium filters provide rated efficiency performance throughout their service life in the air handling unit. This is in marked contrast with filter efficiency profiles that decline quickly, and continuously over time.

Because the mission of air filters is to protect people and processes, effective particle removal is essential. Every 5-Star premium "Green" filter uses fine fiber media whose performance comes from the quality, composition and orientation of the fibers.

This contrasts with competitive product using coarse fiber media that is reliant upon a high electrostatic charge. The charge provides high initial efficiency, but typically drops 2-3 MERV rating categories while in service, due to the simple, inevitable physics of electrostatic decay. **Camfil Farr filters deliver rated MERV efficiency from time of installation to time of removal.**

Numerous field tests have been completed using our CamField Lab and In-Situ Testing technology to demonstrate the superior air quality performance and lower energy usage of Camfil Farr filters compared to our competitors' low purchase cost alternatives.



GREEN Considerations	Camfil Farr Challengers	
Highest available air quality per filter category	YES	NO
Product performance guarantees	YES	NO
Lowest annual waste cost per year	YES	NO
16 year proven LCC software	YES	NO
In-Situ, Mobile Media Tester, Camfield Lab, CamTester to field verify real life performance	YES	NO
Energy Star rating program & system	YES	NO
Customer Energy Award program	YES	NO

Healthcare spending in the U.S. exceeds \$2.7 trillion annually. If clean air in your building reduced airborne viruses and bacteria, and cut your health insurance costs by 5%, how much would **you** save while providing your employees the added benefit of a more healthful and productive environment?

SAVER



Configured PDA allows fast and accurate collection of HVAC air filter site survey data and automatic input into LCC for energy savings optimization and quantification.

In-Situ Testing



Efficiency and pressure drop in a customer's air handling units is determined using particle counters, airflow and pressure drop measuring devices, as well as proprietary data recording and reporting software.



waste reduction

According to EPA, Americans generate more than 251 million tons of MSW* annually – the equivalent of 4.6 pounds of waste per person/per day based on 2006 population estimates. Of the various MSW strategies available, source reduction clearly has the greatest long-term potential for lowering America's waste burden.

Source reduction involves altering the design, manufacture, or use of products to reduce the total volume of discarded material. It is often viewed by scientists and officials as more compelling than recycling, since it is the only strategy synonymous with preventing waste, rather than managing it once it's created. **Source reduction is a guiding principle for Camfil Farr Green Filter technology.**

Filters that have a longer service life require less frequent change-out, directly lowering labor cost, disposal cost, and dunnage. Camfil Farr 5-Star premium filters last 50-100% longer than economy products. During a 5-year period, a 24,000 cfm HVAC system using Camfil 5-Star premium filters could reduce the number of filters added to the landfill burden by 56%.

Landfills are a visible reminder of why source reduction should be part of US environmental strategy. They consume up to 3,500 additional acres of land each year and emit significant quantities of methane, an explosive greenhouse gas 20 times more harmful than carbon dioxide. In Canada, landfills generate over 25% of the methane emissions caused by human activity, sending 1.2 million tons of this gas into the

atmosphere each year. Because the global warming effect of methane is 21 times greater than carbon dioxide, this is equal to greenhouse gas emissions from more than six million cars. Clearly, there are compelling arguments for reducing solid waste wherever possible, and for supporting initiatives that make solid waste reduction a factor in buying decisions.

Camfil Farr 5-Star premium filters last longer because the design characteristics (low resistance to airflow, etc.) that produce energy savings, also allow the filter to remain in service longer. In addition, our pleating and media surface area configurations ensure the entire filter pack is fully used in the collection of contaminant, eliminating the risk of premature blinding or failure.

**Municipal Solid Waste*



environmental impact

“Carbon footprint” measures the carbon dioxide emitted from the burning of fossil fuels in vehicles, power plants, industrial processes, etc. CO₂ is the main culprit in global warming, thus its reduction is the driving force for socially conscious and green driven companies.

Everything we do leaves a mark on the environment. Our goal is to lighten your impact, by bringing to market thoughtfully designed products that have less environmental impact and lower the amount of energy consumed while they are in-service. In addition, because they stay in service longer, the number of filters required is less.

Using fewer filters means fewer trucks moving filters from manufacturing plant to end user. Millions fewer gallons of fossil fuel would be burned, and thousands fewer trees destroyed if all commercial and industrial buildings in North America used Camfil Farr 5-Star filters.

Mobile Media Tester



Particle count and efficiency measurements are taken in order to analyze and compare fine fiber vs. coarse charged fiber bag filter products.

Camfield Lab



This comprehensive mobile lab tests 4 pre/final filter combinations simultaneously at any site under local temperature, humidity, and contaminant generation (actual outside air) conditions. The lab measures all relevant performance criteria on a real-time basis, including airflow, efficiency, and pressure drop.

“completely green” 5-star premium filters

30/30

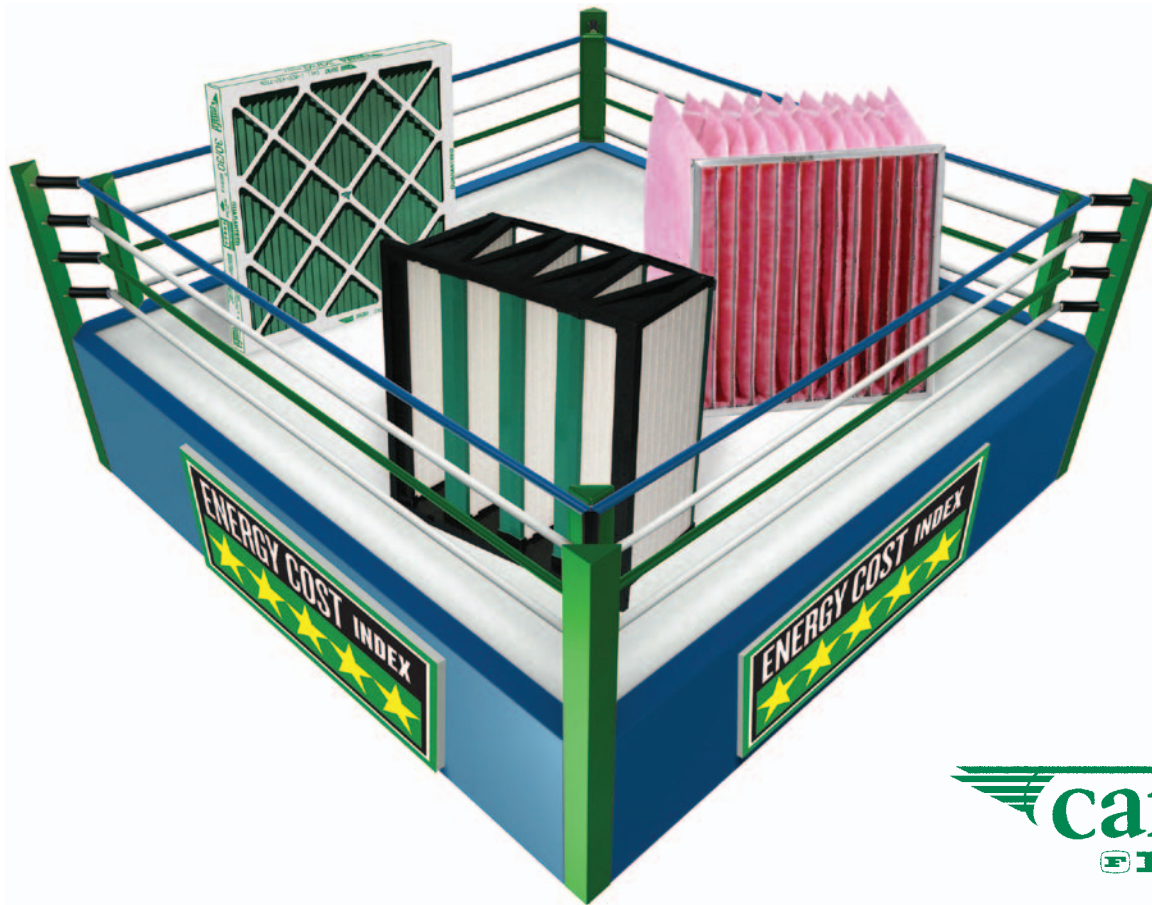
“30/30®” is the first true MERV 8 (ASHRAE 52.2-2007) prefilter. The 30/30 has very low initial resistance, low maintained resistance to airflow, and the lowest average pressure drop of any MERV 8 filter. It has earned five stars on the ECI (Energy Cost Index) – the best-possible performance ranking.

Hi-Flo

Hi-Flo® high-efficiency ASHRAE grade pocket type air filter incorporates high lofted, air laid micro fiber glass media for reliable efficiency. Using CMS (Controlled Media Spacing) technology in the pocket configuration provides lowest energy use and longest service life of any bag filter. MERV 11, 13, 14.

Durafil ES (Energy Saver)

Durafil® ES provides high efficiency performance in a compact, energy-efficient design. Filter uses a wet-laid, microfibre fiber media in a unique pleat-in-pleat V-bank design with up to 200 sq. ft. of media area. The ES uses 20-35% less energy than other V-type products. MERV 11, 13, 14, 16.



“Green” filter design creates a cleaner environment . . .
prioritizes energy efficiency . . . minimizes waste burdens.

Ask for case studies relevant to your industry . . .



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www.green-air-filters.com