

Straight Talk: The real cost of filter replacement!

To get the true cost of an electric portable vacuum collection system you need to look at both first cost and operating cost over time. The first cost is the cost of the unit that you negotiate with the manufacturer plus the shipping cost and any applicable taxes. The operating cost is the filter replacement cost. The first cost is easy to determine but the operating cost is more of a challenge. This article will hopefully give you a better understanding of operating cost (filter replacement cost).

Operating Cost

Operating cost is important because over the life of a unit filter replacement cost can easily exceed the original cost of many electric portable vacuum collection systems. We will look at both 5 and 10 years cost figures. There are two categories of filters; Pre-filters and final HEPA filters.

Pre-filters

There are a wide variety of pre-filters types:

- cleanable electrostatic filters
- cleanable mesh bags
- cleanable drawers
- Disposable 1" & 2" pleated
- Disposable Merv 11 pleated filters
- Disposable pocket filters
- Disposable 40% & 60% cube filters
- Disposable Merv 11 cube filters
- Etc,

These are designed to capture the larger dirt particles leaving the finer smaller particle to the final HEPA filter. Some collectors have two pre-filters and some have one. Some pre-filters are cleanable and some are disposable.

HEPA Filters

To be designated a "HEPA" filter it must have a filter efficiency of 99.97% at 0.3 micron-sized particles. This is important because it is the last filter the dirt laden air goes through before it is returned to the home or building. There are two types of HEPA filters; standard and high capacity. High capacity HEPA filters have more filter media in them so they can hold more dirt and can last longer. HEPA filters also come in several sizes:

- 18" x 24" x 6" standard HEPA filter
- 24" x 24" x 12" standard HEPA filter
- 23.375" x 23.375" x 11.5 high capacity HEPA filter

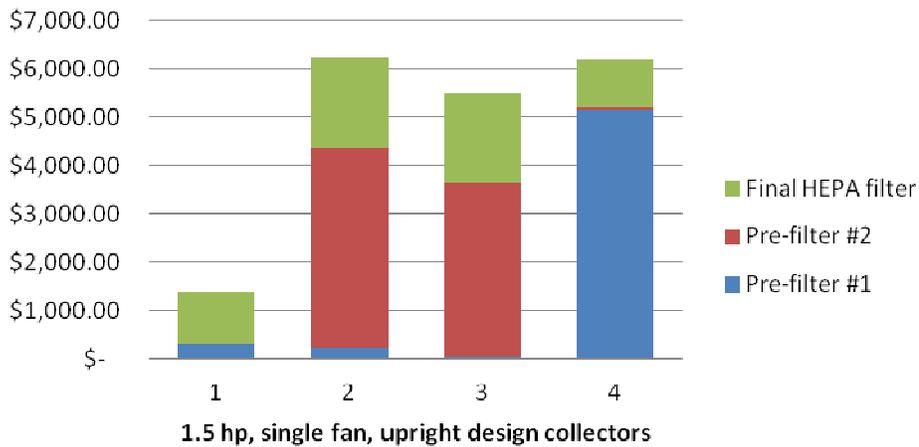
Charts

We do not have a chart for every unit in the marketplace. But we do have charts for some of the typical groupings of electric portable vacuum collection systems. We looked at 10 year filter replacement cost.

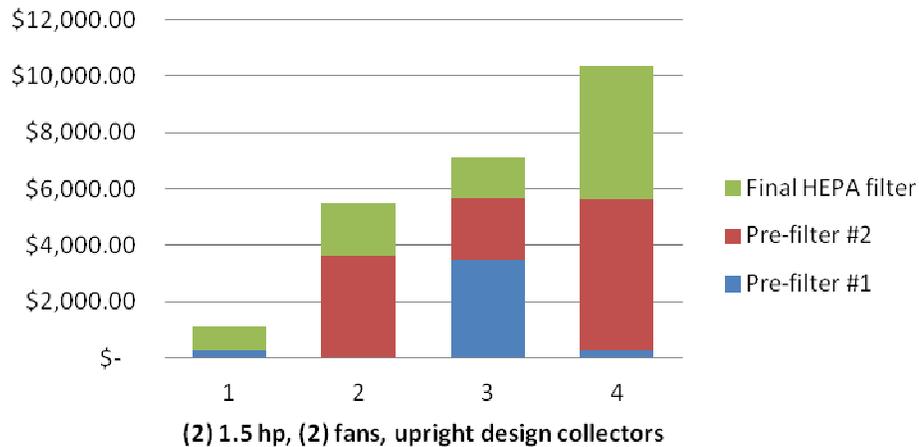
10 year Replacement Filter Cost Charts

- **Chart 1:** 1.5 hp motor, single fan, upright cabinet design
- **Chart 2:** (2) 1.5 hp motors, (2) fans, upright cabinet design
- **Chart 3:** variable frequency drive, single fan, upright cabinet design

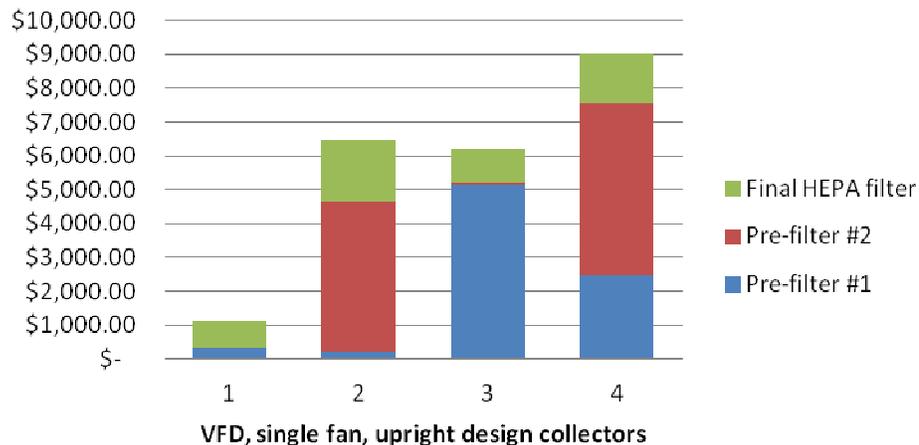
10 Year Filter Replacement Chart 1



10 Year Filter Replacement Chart 2



10 Year Filter Replacement Chart



Summary:

You can see the wide range in filter replacement cost and you can see the substantial costs associated with filter replacement on electric portable vacuum collection systems. This is why it's important to look at both the first cost and the filter replacement cost over time when considering and comparing electric portable vacuum collection systems.

If you have any questions please contact Peter Haugen at phaugen@vacsysint.com, 855-Vac-Systems, or 952-808-1619. For full discussion see our "[How to select an electric portable vacuum collection system guide.](#)"

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