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<https://phenomenex.blog/2019/06/20/gas-management-2/>

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In our previous article, [“Have Gas? Make Sure it's Clean with Zebron™ Gas Management Filters: Part 1”](#) we answered the why and what regarding pure gas.

In this article we are going to cover the “how”, “who”, and the “what else”.

How Does Gas Management Filters Work and How Does the Color Change?

[Zebron™ Gas Management Filters](#) are designed for simplicity, to make them as user friendly as possible. The filters are housed in a bullet proof polycarbonate hardware, and the inlet gas flows from top to bottom as shown in **Figure 1**. For easy access, they can be wall mounted or attached to a bench top.

Figure 1: Gas flow process in Zebron Gas Management Filters

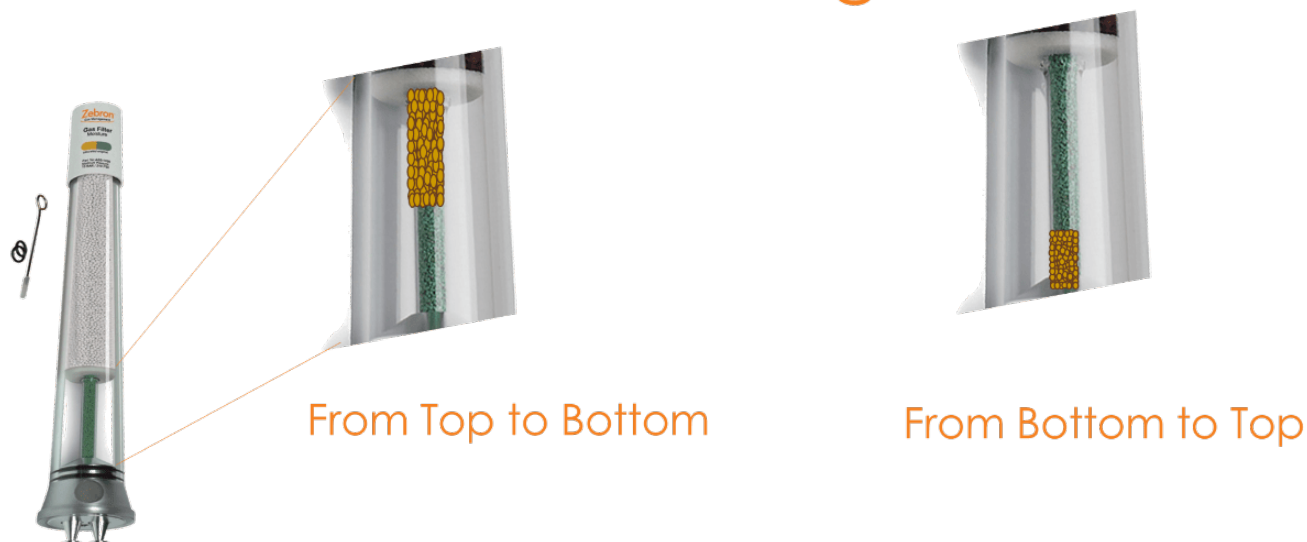


How Does it Work?

Since the gas flow is from top to bottom, the indicator changes color from top to bottom. If the filter cartridges are installed aggressively, a bottom to top color change can occur. This bottom to top color change is due to a reversed flow of gas from the GC instrument into the filter's color indicator. The indicator is very sensitive and changes color abruptly without any transition color. The initial color and saturated color of the indicator are available on the filter label to compare against.

Figure 2: How the indicator color change process works

Indicator Color Change



How to Choose a Filter

It is very easy to choose the correct filter for your GC. The chart found in **Figure 3** guides you through the process of choosing the right filter. The first question that determines the number of filters and connecting unit is the type of detector you use. Based on the detector type and fitting size, you are then able to choose the connecting unit and corresponding filter cartridge.

Figure 3: Filter Guide

How to Choose the Right Filter?



How Long Does It Take to Connect?

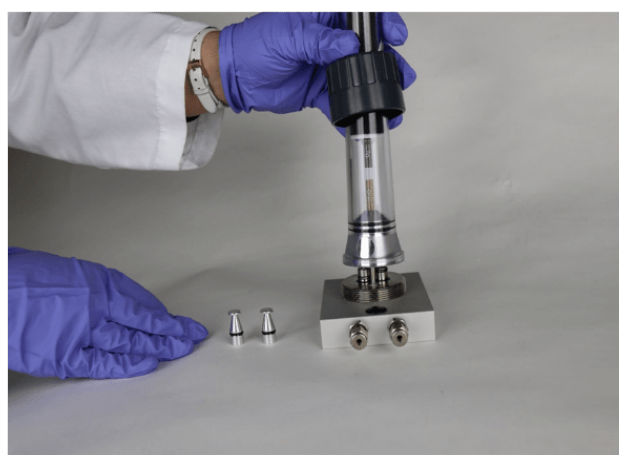
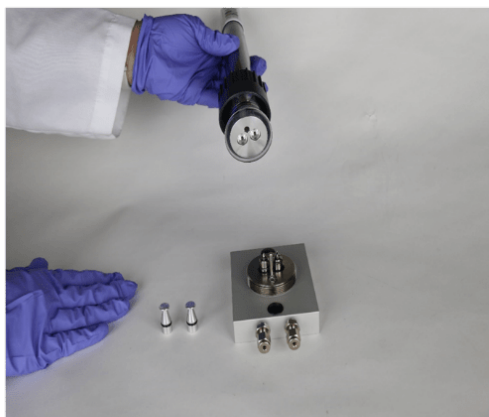
Zebron Gas Management filters are easy to install and easy to replace. With only taking less than 20 seconds to install a filter, the process couldn't be simpler. See Figure 3 to follow just how quick you can connect these filters in less than 20 seconds.

Figure 4: Connecting gas management filter in 20 seconds or less.

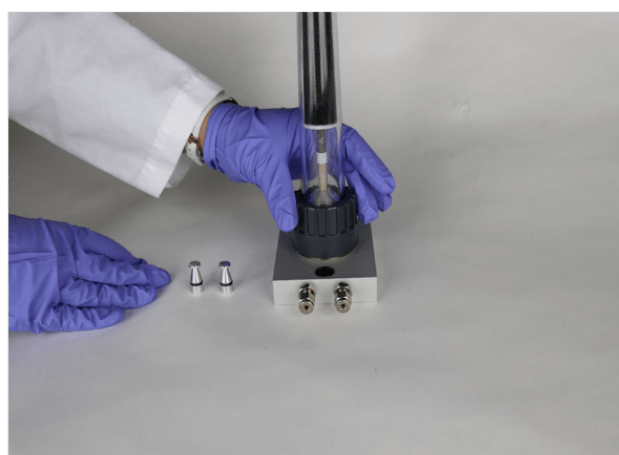
How to Connect in < 20 Seconds?



Step- 1: Remove endplugs from the cartridge style filter



Step- 2 Align cartridge filter with the connecting unit



Step- 3 Turn the screw cap clockwise

Who Benefits from Zebron Gas Management Filters in Their Lab?

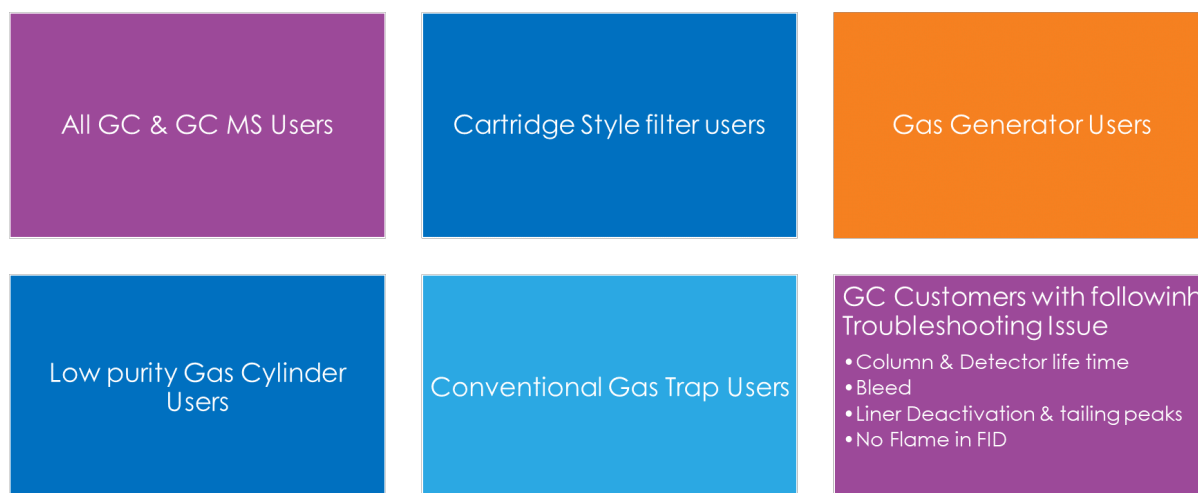
- By default, all GC and GC-MS users need protection from impure gas to extend your

column and instrument life time. For those who are already familiar with cartridge style filters, Zebron Gas Management is a universal fit cartridge for other commercially available baseplates/connecting unit.

- Gas generator users would benefit as they need moisture filters because gas generators tend to have more moisture content in the generated gas.
- Labs that are unable to afford ultra-high pore gas cylinders, can buy a lower grade gas, install Zebron Gas Management and get ultra-pure gas.
- For conventional gas trap users, Zebron Gas Management filter offers the benefit of visual indication of saturation, so that the user can change filters right away before the contaminations enters into the GC column and detector.
- For users that have troubleshooting issues with column and detector lifetime, column bleed, and unlit flame in FID, Zebron Gas Management is the correct remedy and preventive measure to prevent these troubleshooting issue in future.

Figure 5: Those who benefit from gas management

Who Needs Zebron Gas Management



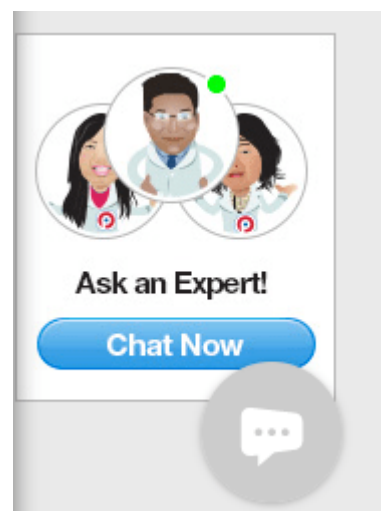
For complete protection of GC column and detector, use Zebron inline trap in combination with gas filters.

Figure 6: Gastrap

Zebron Inline GasTraps



What else?



We have plenty of resources to help you get clean gas supply for your GC instrument.

- [Zebron Gas Management Trifold](#)
- [Zebron Gas Management Filter Inserts](#)
- [Zebron Inline trap Inserts](#)
- [FAQs](#)
- [Live Chat Support](#)

Looking for even more resources? Check out our [Zebron Gas Management webpage!](#)

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Summary



Article Name

Have Gas? Make Sure it's Clean with Zebron™ Gas Management Filters: Part 2

Description

Guest author, Ramkumar Dhandapani, follows his last article by taking a deeper look into why a lab would need gas management filters and how they are used.

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