

HOW CLEAN GAS CAN REDUCE YOUR GC MAINTENANCE COSTS





Gas Clean Filters protect your columns and supplies – extending their life and reducing GC maintenance

Gas Clean Filters greatly reduce the level of impurities and contaminants entering your GC column. This is critical for high temperature analysis and essential for longer column lifetime.

Supply gases can pick up contaminants from any part of the gas line. It doesn't make sense to buy expensive, high purity gases if they are then contaminated as they flow through the gas line to the instrument. A Gas Clean Filter will remove impurities before they impact your analytical performance or reduce the lifetime of GC components.

Agilent Gas Clean Filters change color when they reach absorption capacity, making it easy to see when they need changing. This keeps gas moisture content to less than 0.1 ppm, preventing damage to columns and extending the life of supplies and the instrument itself.

GC MAINTENANCE SAVINGS CALCULATION



Use this interactive worksheet to calculate how much you could save on GC maintenance by extending the life of your columns and supplies.

Parameter		Details	Enter values here.	
A	Labor cost per hour	What are the hourly wages for your GC analytical chemist?	» <input type="text"/>	\$ per hr
B	Column change frequency	How often do you change the column per GC per year?	» <input type="text"/>	Instances per year
C	Column replacement time	How long does it take to replace a column and then condition the system, adjust the retention time windows, and run a system check standard?	» <input type="text"/>	minutes
D	Column cost	How much do you pay for a new GC column?	» <input type="text"/>	Avg price (\$) per column
E	Total cost of column replacement per year $(D \times B + (A \times B \times C / 60))$			\$
F	Supply component change frequency	How many times do you change your inlet liners, gold seals and septa per month?	» <input type="text"/>	changes per month
G	Supply component maintenance time	How long does it take to change an inlet liner, gold seal, septa (including time required for cooling oven)?	» <input type="text"/>	minutes
H	Supply component cost	How much do you pay for a new liner, seals, and septum?	» <input type="text"/>	\$
I	Total cost of liner/gold seal/septa replacement per year $(H \times (F \times 12)) + (A \times (F \times 12)) \times (G/60)$			\$
<p>Rows J-M are relevant only for GC-MS. Enter 0 in each field if you are not using a GC-MS</p>				
J	Filament change frequency	How many MS filaments do you change per year?	» <input type="text"/>	MS filaments per year
K	Filament change maintenance time	How long does it take to change filaments (including MS pump down)?	» <input type="text"/>	minutes
L	Filament cost	How much do you pay for a new MS filament?	» <input type="text"/>	Avg price (\$) per filament
M	Total cost of filament replacement per year $(L \times J + (A \times K/60) \times J)$			\$
N	Number of GCs	How many GCs do you have in your lab?	» <input type="text"/>	GCs
O	Impact of Gas Clean Filters	Gas Clean Filters can prolong the life of columns & supplies. Enter a value between 10-30% to see what impact increasing their life will have on your bottom line.	» <input type="text"/>	%
P	Cost savings per year likely due to Gas Clean Filters $(E + I + M) \times N \times O/100$			\$

To enter the values, open this PDF in the Adobe Acrobat App.

AGILENT GAS CLEAN FILTERS



Gas contaminants can not only jeopardize your analytical sensitivity and accuracy, they can cause installation delays and premature instrument failure. Purifying your gases is one of the most important steps you can take to ensure optimal system performance.

Agilent manufactures Gas Clean Filters in a variety of sizes and configurations to remove oxygen, moisture, and hydrocarbons.

They can be used with any manufacturer's GC or GC/MS.

The filters deliver:

- Increased GC/MS sensitivity
- Higher data accuracy and less maintenance
- Protection of your instrument and column

Tool-free filter cartridge replacement

The Agilent Gas Clean Filters are positioned in a visible location behind the GC – where it's easy to see when they need changing.

They are designed so that they can be replaced in minutes without tools and without turning off the gas supply. Simply unscrew the base, lift the filter out and then snap a new one in place before re-tightening the base.



Online selection tool

Select the best Gas Clean filter for your GC or GC/MS application with our [online selection tool](#)



Ensure peak performance throughout your GC flow path

Agilent GC and GC/MS supplies are brought to you by the same people who engineered our GC and GC/MS instruments, so you can count on outstanding results and support.

Agilent J&W GC columns deliver the lowest bleed levels, the best inertness, and the tightest column-to-column reproducibility.

Agilent supplies work seamlessly with a variety of instrument makes and models from Bruker, PerkinElmer, Shimadzu, Thermo Scientific, and more.

To order now, visit www.agilent.com/chem/gasclean

Or call **1-800-227-9770** (in U.S. and Canada)

To find your local Agilent Representative or Agilent Authorized Distributor, visit www.agilent.com/chem/contactus

CrossLab

CrossLab is an Agilent capability that integrates services, consumables and lab-wide resource management to help laboratories improve efficiency, optimize operations, increase instrument uptime, develop user skill and more.

Agilent CrossLab supports Agilent and select non-Agilent instruments and provides consultative support for workflow enablement, lab analytics, compliance, inventory management and asset management, including relocation services.

Learn more about CrossLab at www.agilent.com/crosslab

This information is subject to change without notice.

© Agilent Technologies, Inc. 2018
Published in the USA, September 19, 2018
5994-0191EN

