





### A revolution in gas purifying of GC and GC/MS gases

Unique «POINT-OF-USE» and «SEMI IN-LINE» glass/metal, diffusionproof Super-Clean Gas Filters, purify the delicate carrier and burner gases for your GC and GC/MS system for Hydrocarbons, Oxygen (colour indicated) and Moisture (colour indicated) to better-as 6.0 gas (99,9999%) quality, independent of the original gas quality.

### Analytical advantages of SGT Super-Clean Gas Filters

- Longer lifetime of analytical columns, avoids bleeding, espec. important for MS and ECD.
- Better sensitivity, decreases baseline noise, eliminates spikes.
- Filter-change during analysis within seconds, system stays online.

### Purifier Cartridge Capacity

Type of Purifier	Outlet Gas Quality	Usable for	Indicator Color Change	Capacity		CO <sub>2</sub>
				H <sub>2</sub> O(gr)	O <sub>2</sub> Hydrocarbons	
<b>Moisture</b>	> 6.0	Inert carrier gas, air hydrogen	Brown to white	7.2		
<b>Oxygen</b>	> 6.0	Inert carrier gas	Green to grey		150 mL	
<b>Hydrocarbon</b>	> 6.0	Inert carrier gas, air hydrogen	No indicator			12 g (as n-butane)
<b>Carbon Dioxide</b>	> 6.0		No indicator			12g
<b>Combi</b> (moisture/hydrocarbon)	> 6.0	Inert carrier gas, air hydrogen	Brown to white	3.5		6 g (as n-butane)
<b>Triple</b> (moisture/oxygen/hydrocarbon)	> 6.0		Brown to white Green to grey	1.8	75 mL	4 g (as n-butane)



## Spec's on GST Super-Clean Gas Filters

- The specified lifetimes are strongly depending of the quality of the incoming gas.
- Effectivity: <0.1 ppm at a flowrate of 2 liters/minute



One position platform



Quick-Fit System

## Benefits of the "quick-fit" system:

- Filter replacement within seconds.
  - **Eliminates GC downtime.**
- Tool-less filter replacement.
  - **Easy handling**
- Diffusion-proof Baseplate (also during filter replacement).
  - **Eliminates analytical disturbance.**
- Baseplates can be wall-mounted.
  - **Convenient positioning**

## Different Standard Configurations

### GC/MS Carrier Gas Purification System

- Removal of Oxygen, moisture and hydrocarbons for longer column lifetime and cleaner baseline.
- This configuration is excellent for Carrier Gas and ECD, MS applications.

*In this configuration, you need to use: 1-position baseplate + 1 Triple Filter*

**SG-SGT-F0301** Triple Filter (O2/Moisture/Hydrocarbons)  
**SG-SGT-B0010-B8** 1-position baseplate - 1/8" Brass

### GC/MS Carrier Gas Helium Specific Purification System

System for Purifying Helium in GC/MS systems

*In this configuration, you need to use: 1-position baseplate + 1 Triple filter gas specific Helium*

**SG-SGT-F0302** Triple Filter; conditioned with Helium (O2/Moisture/Hydrocarbons)  
**SG-SGT-B0010-B8** 1-position baseplate - 1/8" Brass

## Carbon Dioxide Filter

*Removes carbon dioxide and sulfur from gas streams. To be used in combination with a Moisture Filter*

*In this configuration, you need to use: 2 units of 1-position baseplate + 1 Carbon dioxide filter*

**1 x SG-SGT-B0010-B8** 1-position baseplate 1/8 " Brass  
**1 x SG-SGT-F0105** Carbon dioxide Filter

## Carrier Gas Purification and FID Gases

The full solution for your GC/FID system  
 Purifying all gases used in a FID operated GC

*In this configuration, you need to use: 3 units of 1-position baseplate + 1 triple filter (O2/Moisture/Hydrocarbons) for purifying carrier gas + 2 Combi Filter (Hydr carbons/Moisture) for purifying gases used in a FID.*

**3 x SG-SGT-B0010-B8** 1-position baseplate 1/8 " Brass  
**1 x SG-SGT-F0301** Triple Filter (O2/Moisture/Hydrocarbons)  
**2 x SG-SGT-F0201** Combi Filter (Moisture/Hydrocarbons)

## High Capacity Purifiers for Carrier and FID Gases

Recommended for low quality gases  
 Purifying all gases used in a FID operated GC  
 Use Ultra Capacity Moisture and Oxygen filters for Carrier and 2 Ultra Capacity Hydrocarbon Filter one for Air & one for Hydrogen.

*In this configuration, you need to use: 4 units of 1-position baseplate + 1 Moisture Filter, Standard, Ultra Capacity + 1 Oxygen Filter, Standard, Ultra Capacity + 2 Hydrocarbons Filter, Standard, Ultra Capacity.*

**4 x SG-SGT-B0010-B8** 1-position baseplate 1/8 " Brass  
**1 x SG-SGT-F0101** Moisture Filter, Standard, Ultra Capacity  
**1 x SG-SGT-F0102** Oxygen Filter, Standard, Ultra Capacity  
**2 x SG-SGT-F0103** Hydrocarbons Filter, Standard, Ultra Capacity, pk/1.

## LC-MS Gas Purification System High Flow

Unique 2-Position Super Clean System for purifying the nitrogen gas and zero air utilized in LC/MS instruments.

*In this configuration, you need to use: 1 unit of 2-position baseplate + 1 Set of Hydrocarbons purifiers for nitrogen gas + particle filter*

**1 x SG-SGT-B0021-B4** 2-position baseplate, 1/4" Brass for 2 High Flow Gas Filters  
**1 x SG-SGT-F0720** Hydrocarbons Filter, Standard, Ultra capacity, pk/2  
**1 x SG-SGT-B0060** 0.5 micron Particle Filter 1/4", pk/1





## Original Inline Super -Clean™ Purifier



- High-purity output ensures 99.9999% pure gas
- Click-On fittings for easy, leak-tight cartridge changes; brass or stainless steel, 1/4" or 1/8"
- Helium-Specific Triple Purifier is ideal for GC/MS

The SGT Click-On Inline Super-Clean™ purifiers are the latest in in-line gas filtration. Click-On adaptor connectors allow purifiers to be exchanged without introducing oxygen. Spring-loaded check valves seal when a filter is removed and open only when a new

filter has been locked in place. There is no need for loosening and tightening fittings every time a purifier is changed, and your system will not become contaminated during the process.

The Triple Click-On Purifier is ideal for purifying carrier gas-it contains oxygen, moisture, and hydrocarbon scrubbers in one cartridge.

The Fuel Gas Click-On Purifier is ideal for purifying flame ionization detector (FIC) fuel gases, removing both moisture and hydrocarbons.

The Helium-Specific Triple Click-On Purifier is ideal for purifying helium in GC/MS systems. This Click-On purifier under helium contains oxygen, moisture, and hydrocarbon scrubbers in one cartridge, and is packed and purged.

Click-On purifier replacement depends on the quality of the incoming gas. Use the double connector and install an indicating cartridge after a purifier to indicate when the purifier should be replaced.

## Inline Super-Clean™ Specifications

Lifetime Capacity	Type (years)	Output	Quality	Max Pressure	Max Flow	Estimated Used For
Moisture	>6.0 (99.9999%)	160 psi (11 bar)	25 L/min	Inert Carrier, Helium, Air, H2	21 g H2O	>3
Oxygen	>6.0 (99.9999%)	160 psi (11 bar)	25 L/min	Inert Carrier	450 mL	>3
Hydrocarbon	>6.0 (99.9999%)	160 psi (11 bar)	25 L/min	Inert Carrier, Helium, Air, H2	36 g HCs <sup>3</sup>	>3
Fuel Gas <sup>1</sup>	>6.0 (99.9999%)	160 psi (11 bar)	25 L/min	Inert Carrier, Helium, Air, H2	10 g H2O; 18 g HCs <sup>3</sup>	>2
Triple <sup>2</sup>	>6.0 (99.9999%)	160 psi (11 bar)	25 L/min	Inert Carrier	6 g H2O; 12 g HCs <sup>3</sup> 150ml O <sub>2</sub>	>2

<sup>1</sup> Removes hydrocarbons, moisture

<sup>2</sup> Removes hydrocarbons, moisture, oxygen

<sup>3</sup> As n-butane.

Note: Super-Clean™ Gas Filters are recommended for purifying non-corrosive gases with low concentration of contaminants. The maximum concentration of O<sub>2</sub> in the incoming gas stream for oxygen purifiers is 0.5%.



Cat.No	Description	pK
SG-SGT-CO1005	Click-On Inline Triple Trap (Oxygen/Moisture/Hydrocarbons) Cartridge - Stainless Steel	1 unit
SG-SGT-CO1061	Click-On Inline <b>Indicating</b> Triple He Trap (Oxygen/Moisture/Hydrocarbons) Cartridge-Glass	1 unit
SG-SGT-CO1001	Click-On Inline Moisture Cartridge - Stainless Steel	1 unit
SG-SGT-CO1002	Click-On Inline Oxygen Cartridge - Stainless Steel	1 unit
SG-SGT-CO1003	Click-On Inline Hydrocarbon Cartridge - Stainless Steel	1 unit
SG-SGT-CO1004	Click-On Inline Combi (Oxygen/Moisture) Cartridge - Stainless Steel	1 unit
SG-SGT-CO1007	Click-On Inline Combi (Hydrocarbons/Moisture) Cartridge - Stainless Steel	1 unit

### Click-On Connectors

Cat.No	Description	pK
SG-CO2001	Click-On Connectors 1/4" Brass	2 units
SG-CO2002	Click-On Connectors 1/8" Brass	2 units
SG-CO2010	Click-On Connectors 1/4" SS	2 units
SG-CO2011	Click-On Connectors 1/8" SS	2 units
SG-CO2020	Click-On Double Connectors to connect SS Trap with indicating trap	1 unit

### Click-On Inline Purifier Glass



Cat.No	Description	pK
SG-SGT-CO1041	Click-On Inline Combi Trap (Oxygen/Moisture) Cartridge with indicator - Glass	1 unit
SG-SGT-CO1051	Click-On Inline Triple Trap (Oxygen/Moisture/Hydrocarbons) Cartridge with indicator - Glass	1 unit
SG-SGT-CO1011	Click-On Inline Moisture Cartridge with indicator - Glass	1 unit
SG-SGT-CO1021	Click-On Inline Oxygen Cartridge with indicator - Glass	1 unit
SG-SGT-CO1031	Click-On Inline Hydrocarbon Cartridge with indicator - Glass	1 unit

### SGT Super Big Traps with electronic indicator



- Ideal for Central Purifying Solutions
- Largest Big Trap Available
- High-purity output ensures 99.9999% Pure gas
- Click-On fittings for easy, leaktight cartridge changes
- High Pressure Stainless Steel

### Specifications

<b>Material</b>	Stainless Steel
<b>Length</b>	22 inch
<b>Diameter</b>	2,5 inch
<b>Max. Inlet Pressure</b>	1000 psi
<b>Max. Flow (GC/MS)</b>	8 L/min
<b>Max. Flow (LC/MS)</b>	25 L/min
<b>Pressure Drop *</b>	0,30 psi

Click-On Inline Super-Clean™ Big Traps are inline traps designed with Click-On adaptor connectors which allows inline cartridges to be exchanged without introducing oxygen. Spring loaded check valves seal when a filter is removed and open only when a new filter has been locked in place. There is no need for loosening and tightening fittings every time a trap is changed and your system will not become contaminated during the process



### Virtual Indicator Compatible

Compatible with the Virtual Indicator platform, allows you to monitor the status with the CLIK device.

### Capacity Data

Contaminant		Capacity					
Contaminant	Gas Purify	Triple (Oxy/Moist/Hydr)	Moisture	Oxygen	Hydrocarbons	Combi (Hidr/Moist)	Combi (Oxy/Moist)
Oxygen	< 5 ppm	2.0 L	-	4.5 L	-	-	2,25 L
Hydrocarbon	< 5 ppm	120 g	-	-	360 g	180 g	-
Moisture	< 5 ppm	70 g	210 g	-	-	105 g	105 g

### Replacement cartridges for Big Traps

Cat.No	Description	Gas Type
<b>SG-COBT1008</b>		
	Triple H2 (Oxy/Moist/Hydr) Big Trap	Hydrogen
SG-SGT-COBT1006 *1	Triple He (Oxy/Moist/Hydr) Big Trap	Helium
SG-SGT-COBT1005	Triple (Oxy/Moist/Hydr) Big Trap	Nitrogen
SG-SGT-COBT1001	Moisture Big Trap	(He/Ar/Me)
SG-SGT-COBT1002	Oxygen Big Trap	(He/Ar/Me)
SG-SGT-COBT1003 *2	LC/MS Hydrocarbon Big Trap	(He/Ar/Me)
SG-SGT-COBT1007	Combi (Hidr/Moist) Big Trap	(He/Ar/Me)
SG-SGT-COBT1004	Combi (Oxy/Moist) Big Trap	(He/Ar/Me)

\*1 : recommended for GC/MS \*2 : recommended for LC/MS

### Installation Kits (includes re-usable fittings)

Catalog No	Catalog No. Extension	(Re-usable) Fitting
	<b>-S8</b>	1/8" Stainless Steel
Choose any catalog no from the table on the left	<b>-S4</b>	1/4" Stainless Steel
	<b>-B8</b>	1/8" Brass
	<b>-B4</b>	1/4" Brass

For Example: to order a Triple He Big Trap Installation Kit with 1/8" Stainless Steel Click-On Connectors, the part number would be: SGT-COBT1006-S8