





# 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.

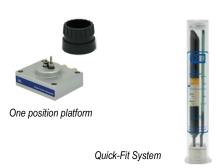
#### **Purifier Cartridge Capacity**

Type of Purifier	Outlet Gas Quality	Usable for	Indicator	Capacity			CO <sub>2</sub>
			Color Change	H <sub>2</sub> 0(gr)	02	Hydrocarbons	
Moisture	> 6.0	Inert carrier gas, air hydrogen	Brown to white	7.2			
Oxygen	> 6.0	Inert carrier gas	Green to grey		150 mL		
Hydrocarbon	> 6.0	Inert carrier gas, air hydrogen	No indicator			12 g (as n-butane)	
Carbon Dioxide	> 6.0		No indicator				12g
Combi (moisture/hydrocarbon)	> 6.0	Inert carrier gas, air hydrogen	Brown to white	3.5		6 g (as n-butane)	
Triple (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



#### 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 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)

1-position baseplate - 1/8" Brass SG-SGT-B0010-B8

#### **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

Carbon dioxide Filter 1 x SG-SGT-F0105

#### **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 (Hydrcarbons/Moisture) for purifying gases used

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 a** d 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

0.5 micron Particle Filter 1/4", pk/1 1 x SG-SGT-B0060





#### 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, ¼" 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

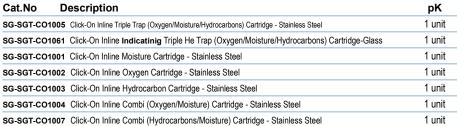
Lifetime Capacity	Type (years)	Output Qualtiy	Max Pressu	ire		used For
Moisture	>6.0 (99.9999%)	160 psi (11 bar)	25 L/min	Inert Carrier, Helium, Air, H2	21 g H20	>3
Oxygen	>6.0 (99.9999%)	160 psi (11 bar)	25 L/min	Inert Carrier	450 mL	>3
Hydrocarbon	>6.0 (99.9999%)	160 psi (11 bar)	25 L/min	Inert Carrier, 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 H20; 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 H20; 12 g HCs <sup>3</sup> 150ml	0, >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 02 in the incoming gas stream for oxygen purifiers is 0.5%.







#### Click-On Connectors



Cat.No	Description	рK
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	рK
SG-SGT-CO1	041 Click-On Inline Combi Trap (Oxygen/Moisture) Cartridge with indicator - Glass	1 unit
SG-SGT-CO1	051 Click-On Inline Triple Trap (Oxygen/Moisture/Hydrocarbons) Cartridge with indicator	Glass1 unit
SG-SGT-CO1	011 Click-On Inline Moisture Cartridge with indicator - Glass	1 unit
SG-SGT-CO1	021 Click-On Inline Oxygen Cartridge with indicator - Glass	1 unit
SG-SGT-CO1	031 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

Click-On Inline Super-CleanTM 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

# **Specifications**

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



#### **Virtual Indicator Compatible**

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

# **Capacity Data**

Contami	nant			Ca	apacity		
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

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Cat.No	Description	Gas Type
SG-COBT1008		
Triple H2 (Oxy/Moist/H	lydr) 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 (Hydr/Moist) Big Trap	(He/Ar/Me)
SG-SGT-COBT1004	Combi (Oxy/Moist) Big Trap	(He/Ar/Me)

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

Catalog No	Catalog No. Extension	(Re-usable) Fitting	
	-\$8	1/8" Stainless Steel	
Choose any catalog no from the table on	-\$4	1/4" Stainless Steel	
the left	-B8	1/8" Brass	
110 1010	-B4	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