Super Clean™ Gas Filters

BIG TRAP INLINE FILTERS

EP-B 04774871.0
U.S. Patent Pending 10/567,949

SGT
SCIENTIFIC GLASS TECHNOLOGY

2015

WWW.SGT-NL.COM

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

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ABOUT CLICK-ON INLINE BIG TRAPS

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.

WHY GAS PURITY IS IMPORTANT

Carrier gas should contain less than 1ppm of oxygen, moisture, or other trace contaminants, to prevent column degradation, increase column lifetime, and decrease stationary phase bleed. The expense of using high-purity gases in combination with carrier gas line purifiers will be offset by longer column lifetime and less GC maintenance.

Contaminants cause ghost peaks to appear during temperature programming and degrade the validity of analytical data. Make-up gas also should be contaminant-free, or baseline fluctuations and excessive detector noise can occur; detector gases should be free of water and hydrocarbons, or excessive baseline noise can result. Gas purifiers remove these contaminants from gas sources, thereby improving system performance.

CLICK-ON INLINE BIG TRAP SYSTEM COMPONENTS

Click-On Connectors

Re-usable In- and outlet adapter connectors which allows inline cartridges to be exchanged without introducing contaminants.

Spring loaded check valves seal when a filter is removed and open only when a new filter has been locked in place.

Click-On Inline Big Trap

The Click-On Big Trap is completely made out of stainless steel and can withstand high pressures.

The seals at each side of the trap will only be punctured when the Click-On connector is locked in place.

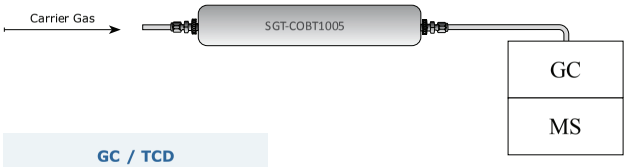
Big Trap Mounting Brackets

Included in every installation kit are the wall mounting clamps to mount a Big trap to a wall or surface.

Electronic Indicator

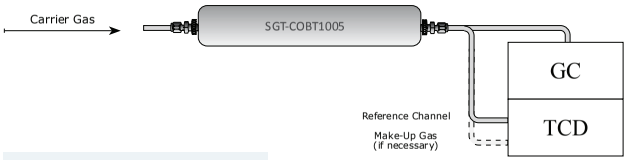
Optional Electronic Maintenance Indicator device warns when scheduled replacement or maintenance is due.

GC / MS (ITD/MSD)



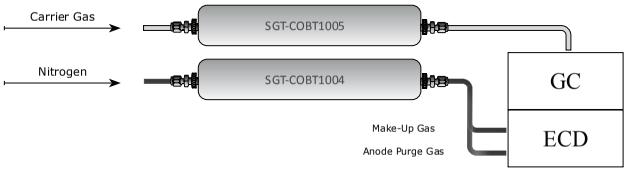
Product	Part No.	Qty
Triple Big Trap	SGT-COBT1005 *	1
Click-On Connector Set	**	1

GC / TCD



Product	Part No.	Qty
Triple Big Trap	SGT-COBT1005 *	1
Click-On Connector Set	**	1

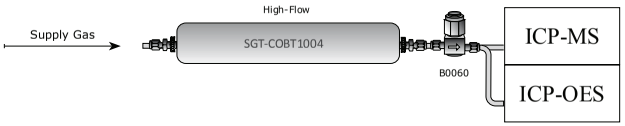
GC / ECD



Product	Part No.	Qty
Triple Big Trap	SGT-COBT1005 *	1
Combi (Oxygen/ Moisture) Big Trap	SGT-COBT1004	1
Click-On Connector Set	**	2

ICP-OES / ICP-MS

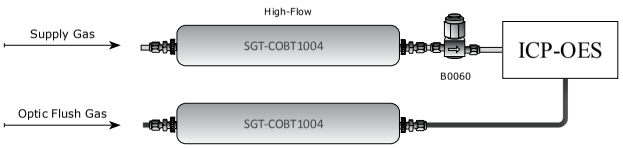
Plasma Gas = Nebulizer Gas



Product	Part No.	Qty
Combi (Oxygen/ Moisture) Big Trap	SGT-COBT1004	1
Particle Filter	B0060	1
Click-On Connector Set	**	1

ICP-OES

Different Optic Flush Gas



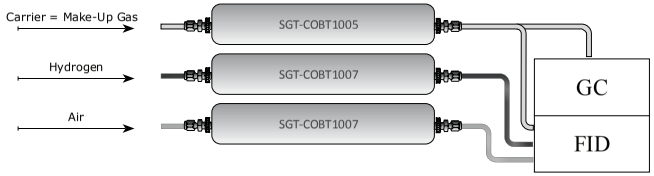
Product	Part No.	Qty
Combi (Oxygen/ Moisture) Big Trap	SGT-COBT1004	2
Particle Filter	B0060	1
Click-On Connector Set	**	2

* SGT-COBT1006 - Helium Specific
* SGT-COBT1008 - Hydrogen Specific

** CO2002 - Click-On Connector Set 1/8 " Brass
** CO2001 - Click-On Connector Set 1/4" Brass
** CO2011 - Click-On Connector Set 1/8" Stainless Steel
** CO2010 - Click-On Connector Set 1/4" Stainless Steel

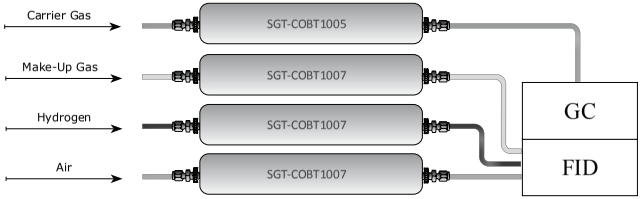
GC / FID

GC/FID Solution 1 (Carrier Gas = Make-Up Gas)



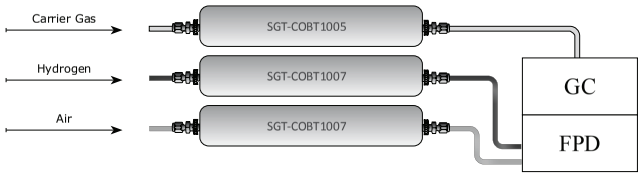
Product	Part No.	Qty
Triple Big Trap	SGT-COBT1005 *	1
Combi (Hydrocarbon/ Moisture) Big Trap	SGT-COBT1007	2
Click-On Connector Set	**	3

GC/FID Solution 2 (Carrier Gas differs from Make-Up Gas)



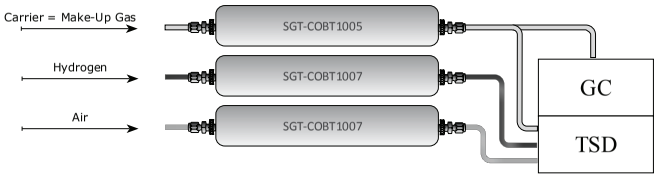
Product	Part No.	Qty
Triple Big Trap	SGT-COBT1005 *	1
Combi (Hydrocarbon/ Moisture) Big Trap	SGT-COBT1007	3
Click-On Connector Set	**	4

GC / (FPD/PFPD)



Product	Part No.	Qty
Triple Big Trap	SGT-COBT1005 *	1
Combi (Hydrocarbon/ Moisture) Big Trap	SGT-COBT1007	2
Click-On Connector Set	**	3

GC / (TSD/TID/NPD/PND)



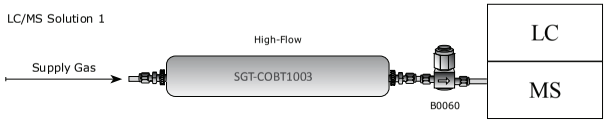
Product	Part No.	Qty
Triple Big Trap	SGT-COBT1005 *	1
Combi (Hydrocarbon/ Moisture) Big Trap	SGT-COBT1007	2
Click-On Connector Set	**	3

* SGT-COBT1006 - Helium Specific
* SGT-COBT1008 - Hydrogen Specific

** CO2002 - Click-On Connector Set 1/8 " Brass
** CO2001 - Click-On Connector Set 1/4" Brass
** CO2011 - Click-On Connector Set 1/8" Stainless Steel
** CO2010 - Click-On Connector Set 1/4" Stainless Steel

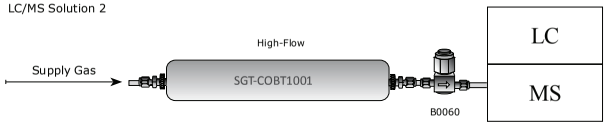
LC/MS

LC/MS Solution 1



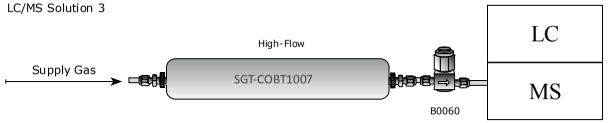
Product	Part No.	Qty
Hydrocarbon Big Trap	SGT-COBT1003	1
Particle Filter	B0060	1
Click-On Connector Set	**	1

LC/MS Solution 2



Product	Part No.	Qty
Moisture Big Trap	SGT-COBT1001	1
Particle Filter	B0060	1
Click-On Connector Set	**	1

LC/MS Solution 3



Product	Part No.	Qty
Combi (Hydrocarbon/ Moisture) Big Trap	SGT-COBT1007	1
Particle Filter	B0060	1
Click-On Connector Set	**	1

TOC Analyzer

Product	Part No.	Qty
Combi (CO_2 / Moisture) Big Trap	SGT-COBT1010	1
Click-On Connector Set	**	1

Zero-Air Generator

Product	Part No.	Qty
Combi (CO_2 / Moisture) Big Trap	SGT-COBT1010	1
Click-On Connector Set	**	1

** CO2002 - Click-On Connector Set 1/8 " Brass
** CO2001 - Click-On Connector Set 1/4" Brass
** CO2011 - Click-On Connector Set 1/8" Stainless Steel
** CO2010 - Click-On Connector Set 1/4" Stainless Steel

INDIVIDUAL TRAPS

Catalog No.	SGT-COBT1001
Specifications	
Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	25 L/min.
Usable For	Inert carrier gas, He, H2, N2, AR, Air
Dimensions	22 inch x Ø 2.5 inch
Weight	3 Kg
Estimated Lifetime	3 - 5 years

MOISTURE BIG TRAP

Moisture in carrier gas lines will prematurely degrade oxygen and hydrocarbon traps and increase detector noise. As a precaution, we highly recommend installing a moisture trap before the hydrocarbon and oxygen traps on all carrier gas lines.

Capacity	
H_2O	210 g

Catalog No.	SGT-COBT1002
Specifications	
Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	25 L/min.
Usable For	Inert carrier gas, He, H2, N2, AR
Dimensions	22 inch x Ø 2.5 inch
Weight	3 Kg
Estimated Lifetime	3 - 5 years

OXYGEN BIG TRAP

Oxygen is column killer. It is present even in UHP gases, as minutes leaks at fittings allow oxygen to influx against the concentration gradient. Because oxygen can enter a gas line at any fitting or during gas bottle exchange, the oxygen trap should be the last connection before the gas line enters the chromatograph.

Capacity	
O_2	4.5 L

Catalog No.	SGT-COBT1003
Specifications	
Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	25 L/min.
Usable For	Inert carrier gas, He, H2, N2, AR, Air
Dimensions	22 inch x Ø 2.5 inch
Weight	3 Kg
Estimated Lifetime	3 - 5 years

HYDROCARBON BIG TRAP

Use a hydrocarbon trap if your gas has a potential source of hydrocarbon contaminants or if you suspect you are observing carrier gas ghost peaks.
Install the hydrocarbon trap after the moisture trap, to prevent moisture from degrading the hydrocarbon-trapping ability of the activated carbon in the hydrocarbon trap.

Capacity	
HC	360 g (as *n*-butane)

Catalog No.	SGT-COBT1009
Specifications	
Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	25 L/min.
Usable For	Inert carrier gas, He, H2, N2, AR, Air
Dimensions	22 inch x Ø 2.5 inch
Weight	3 Kg
Estimated Lifetime	3 - 5 years

CARBON DIOXIDE BIG TRAP

Removes CO_2 from gas streams.
To be used in combination with a Moisture Big trap.

Capacity	
CO_2	450 g

Click-On Big Trap Brochure

Catalog No.	SGT-COBT1007
Specifications	
Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	25 L/min.
Usable For	Inert carrier gas, He, H2, N2, AR, Air
Dimensions	22 inch x Ø 2.5 inch
Weight	3 Kg
Estimated Lifetime	3 - 5 years

COMBI (HYDROCARBON/ MOISTURE) BIG TRAP

The Fuel Gas Inline trap is perfect for purifying flame ionization detector (FID) fuel gases, removing both **moisture** and **hydrocarbons**. Using the Fuel Gas Filter for FID Hydrogen and air will produce a stable baseline, improving overall reproducability and sensitivity.

Capacity	
H_2O	105 g
HC	180 g (as *n*-butane)

Catalog No.	SGT-COBT1004
Specifications	
Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	25 L/min.
Usable For	Inert carrier gas, He, H2, N2, AR
Dimensions	22 inch x Ø 2.5 inch
Weight	3 Kg
Estimated Lifetime	3 - 5 years

COMBI (OXYGEN/MOISTURE) BIG TRAP

The Combi trap is ideal for purifying carrier gas. It contains oxygen and moisture scrubbers in one easy to change economical cartridge.

Capacity	
H_2O	105 g
O_2	2.25 L

Catalog No.	SGT-COBT1010
Specifications	
Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	25 L/min.
Usable For	Inert carrier gas, He, H2, N2, AR, Air
Dimensions	22 inch x Ø 2.5 inch
Weight	3 Kg
Estimated Lifetime	3 - 5 years

COMBI (MOISTURE/CARBON DIOXIDE) BIG TRAP

Removes CO_2 from gas streams. This combination trap also removes moisture.

Capacity	
H_2O	105 g
CO_2	225 g

Catalog No.	SGT-COBT1005 SGT-COBT1006 (Helium specific) SGT-COBT1008 (Hydrogen specific)
Specifications	
Outlet Gas Quality (%)	> 99.9999
Maximum Pressure	11 bar (160 psi)
Maximum Flow	25 L/min.
Usable For	Inert carrier gas, He, H2, N2, AR
Dimensions	22 inch x Ø 2.5 inch
Weight	3 Kg
Estimated Lifetime	3 - 5 years

TRIPLE (OXYGEN/MOISTURE/ HYDROCARBON) BIG TRAP

The Triple trap is ideal for purifying carrier gas. It contains oxygen, moisture and hydrocarbon scrubbers in one easy to change economical cartridge.

Capacity	
H_2O	70 g
O_2	2 L
HC	120 g (as *n*-butane)

CLICK-ON CONNECTORS

Catalog No.	CO2002
Usable for	
1/8” Brass tubing	

1/8” BRASS CLICK-ON CONNECTOR SET

Click-On Connector Set - 1/8” Brass

Catalog No.	CO2011
Usable for	
1/8” Stainless Steel tubing	

1/8” STAINLESS STEEL CLICK-ON CONNECTOR SET

Click-On Connector Set - 1/8” SS

Catalog No.	CO2001
Usable for	
1/4” Brass tubing	

1/4” BRASS CLICK-ON CONNECTOR SET

Click-On Connector Set - 1/4” Brass

Catalog No.	CO2010
Usable for	
1/4” Stainless Steel tubing	

1/4” STAINLESS STEEL CLICK-ON CONNECTOR SET

Click-On Connector Set - 1/4” SS

Catalog No.	CO2020
Usable for	
Big Traps	

DOUBLE CLICK-ON CONNECTOR

A Double Connector to connect two Click-On Traps together

CLICK-ON BIG TRAP ACCESSORIES

Catalog No.	SGT-E0030
Usable for	
Big Traps	

ELECTRONIC INDICATOR

Electronic Maintenance Indicator for use with Click-On Inline Big Trap. Includes Electronic Indicator Device, Battery, USB Cable and Mounting clip.

Catalog No.	CO3001
Usable for	
All click-on connectors	

O-RING REPLACEMENT SET

A set of 10 + 10 Replacement O-rings for Click-On Inline Connectors.

Catalog No.	CO3003
Usable for	
Big Traps	

WALL MOUNT BRACKET SET

Two wall mount brackets suitable for mounting a Click-On Big Trap.

Catalog No.	B0060
Usable for	
High flow applications	

PARTICLE FILTER

Particulate filter for high flow applications.

Catalog No.	B0065
Usable for	
Particle Filter	

PARTICLE FILTER REPLACEMENT CUPS

0.5 Micron Particle Filter Replacement Cups for use with Particle Filter.

Installation Kits

Part No. *	Description	qty.
SGT-COBT1001-S4	Click-On Inline Moisture Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1002-S4	Click-On Inline Oxygen Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1003-S4	Click-On Inline Hydrocarbon Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1009-S4	Click-On Inline Co2 Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1004-S4	Click-On Inline Combi (Oxygen/Moisture) Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1007-S4	Click-On Inline Combi (Hydrocarbon/Moisture) Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1010-S4	Click-On Inline Combi (Co2/Moisture) Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1005-S4	Click-On Inline Triple (Oxygen/Moisture/Hydrocarbon) Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1006-S4	Click-On Inline Triple (Oxygen/Moisture/Hydrocarbon) He Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.
SGT-COBT1008-S4	Click-On Inline Triple (Oxygen/Moisture/Hydrocarbon) H2 Big Trap Kit Includes 1 Trap, 2 Connectors and 2 Wall-mount brackets	ea.

Replacement Traps

Part No.	Description	qty.
SGT-COBT1001	Click-On Inline Moisture Big Trap Moisture Replacement Trap	ea
SGT-COBT1002	Click-On Inline Oxygen Big Trap Oxygen Replacement Trap	ea
SGT-COBT1003	Click-On Inline Hydrocarbon Big Trap Hydrocarbon Replacement Trap	ea
SGT-COBT1009	Click-On Inline Carbon dioxide Big Trap Carbon dioxide Replacement Trap	ea
SGT-COBT1004	Click-On Inline Combi (Oxygen/Moisture) Big Trap Combi Oxygen/moisture Replacement Trap	ea
SGT-COBT1007	Click-On Inline Combi (Hydrocarbon/Moisture) Big Trap Combi Hydrocarbon/Moisture Replacement Trap	ea
SGT-COBT1010	Click-On Inline Combi (Carbon dioxide/Moisture) Big Trap Combi Carbon dioxide/Moisture Replacement Trap	ea
SGT-COBT1005	Click-On Inline Triple (Oxygen/Moisture/Hydrocarbon) Big Trap Kit Triple Oxygen/Moisture/Hydrocarbon Replacement Trap	ea
SGT-COBT1006	Click-On Inline Triple (Oxygen/Moisture/Hydrocarbon) He Big Trap Kit Triple Oxygen/Moisture/Hydrocarbon Replacement Trap (Conditioned with Helium)	ea
SGT-COBT1008	Click-On Inline Triple (Oxygen/Moisture/Hydrocarbon) H2 Big Trap Kit Triple Oxygen/Moisture/Hydrocarbon Replacement Trap (Conditioned with Hydrogen)	ea

* Standard fittings are 1/4" Stainless Steel. All Kits are available in 1/4" to 1/8" Brass and Stainless steel fittings.
To order, replace Part No. suffix into '-B4' for 1/4" Brass, '-B8' for 1/8" Brass and '-S8' for 1/8" Stainless steel fittings.

Connector Sets

Part No.	Description	qty.
CO2001	Click-On Connector Set 1/4" Brass A set of 2 Click-On Inline Trap Connectors	ea.
CO2002	Click-On Connector Set 1/8" Brass A set of 2 Click-On Inline Trap Connectors	ea.
CO2010	Click-On Connector Set 1/4" Stainless Steel A set of 2 Click-On Inline Trap Connectors	ea.
CO2011	Click-On Connector Set 1/8" Stainless Steel A set of 2 Click-On Inline Trap Connectors	ea.
CO2020	Click-On Double Connector Set A Double Connector to connect two Click-On Inline Traps together	ea.
CO3001	Replacement O-ring Set for Click-On Connectors A set of 10 + 10 Replacement O-rings for Click-On Inline Trap Connectors	20/pk.

Accessories

CO3003	Big Trap Wall-mounting Bracket Set Contains two Wall mount brackets suitable for mounting a genuine Click-On Inline Big Trap	2/pk.
B0060	Particle Filter 0.5 Micron Particle Filter recommended to be used in combination with a Big Trap when using high flow applications such as LC/MS	ea.
B0065	0.5 Micron Particle Filter Cup Replacement Pack Contains twelve 0.5 Micron Particle Filter Replacement Cups for use with Particle Filter	12/pk.
SGT-E0030	Electronic Maintenance Indicator Kit for Click-On Big Trap For use with Click-On Inline Big Trap. Includes Electronic Indicator Device, Battery, USB Cable and Mounting clip.	ea.

SCIENTIFIC GLASS TECHNOLOGY

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