



A  TRAJAN Brand

Simplify Your  
GC Connections



### SilTite® GC Connections

- Easy to install and leak-free
- Superb operational stability
- Low dead volume
- Chemically inert

[www.sge.com](http://www.sge.com)

# GC Connections

## Simplify Your GC Connections

### The Importance of GC Connections

Column connections in the GC have traditionally suffered from unreliability, leaks, excessive dead volumes and lack of inertness, leading to poor chromatography results and instrument down time.

SGE Analytical Science SilTite® GC Connections are designed to minimize installation time and provide ongoing, robust connections throughout the life of the GC column.

Using SilTite GC Connections means less time on maintenance, and more time to focus on your analysis!

### Enhanced Chromatography Features

- **Easy to install and leak-free.**

SGE GC Connections are designed with FingerTite fittings that are easy to set up and can be tightened using finger force to achieve a perfect, reliable seal, even for the most sensitive MS systems – no wrenches required!

- **Superb operational stability.**

All SGE GC Connections are manufactured from high grade stainless steel, and have minimal thermal mass, ensuring there is minimal thermal lag during use. The use of stainless steel also means there is no practical limit to their maximum temperature, the only limitation is the temperature rating of the GC column.

- **Low dead volume.**

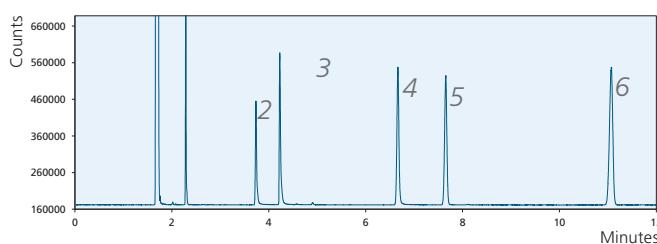
SilTite FingerTite and SilFlow FingerTite ferrules used in SGE GC Connections result in low dead volume fittings giving you optimal peak shapes.

- **Chemically inert.**

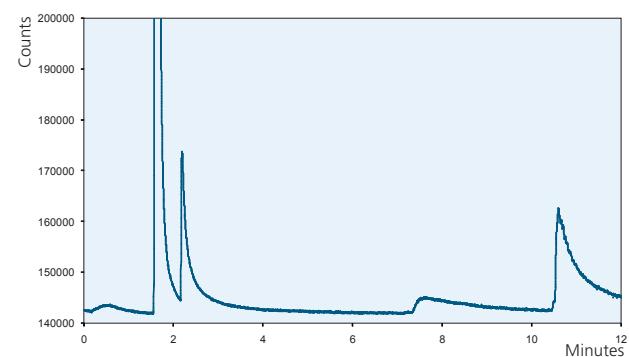
Enabled by SGE surface chemistry expertise, each metal surface is treated to ensure optimized chromatography.

Column: BPX5 30 m x 0.25 mm ID x 0.25 µm (P/N 054101)  
Column Temperature: 140 °C  
FID Temperature: 380 °C

Injector Temperature: 240 °C  
Sample: 1 ng on-column of (1) n-Decane (2) 4-chlorophenol  
(3) n-Decylamine (4) Undecanol (5) Bi phenyl (6) Pentadecane



a) Column only.



b) Column with metal connector without special deactivation.

Figures a and b: Impact of non-deactivated metal surfaces on chromatography: Lost peaks and poor resolution.

## SilTite Metal Ferrules

Designed for connecting fused silica GC columns and tubing to mass spectrometer interfaces and injectors.



SilTite metal ferrules provide a continuous leak-free connection without the need to re-tighten the nut after a few temperature cycles. SilTite ferrules make Graphite/Vespel® ferrules obsolete for use in GC-MS connections. Their performance and cost effectiveness also makes them ideal for connecting GC columns to injectors and atmospheric detectors.

## SilTite FingerTite Ferrules

Designed for each injector and detector, simplify your GC column installation.

A ferrule system for gas chromatography systems delivering an easy, leak-free installation for capillary columns without the use of any tools.

If you are running a capillary column equipped gas chromatography system, SilTite FingerTite will simplify your column installation process giving you less hassle and more time for chromatography.



	100 % Graphite	Graphite Vespel®	SilTite FingerTite
Mechanical strength	Soft	Hard	Hard
Temperature limit	450 °C	350 °C	No Practical Limit
Grip strength on column	Soft	Moderate	Strong
Doesn't need retightening after installation	✓	X	✓
Ideal for GC-MS applications (minimal porosity)	X	✓	✓
No tools required for installation and removal	X	X	✓
Permanent positioning of ferrule	X	X / ✓	✓
No deterioration	X	X	✓
Cannot break the capillary column with over-tightening	X	X	✓
No column creep	X	X	✓
Chemically inert	X	X	✓

## SilTite µ-Union

Designed to connect columns without the complications of conventional connectors.

Allows for tubing to be connected without concern of leakage from temperature cycling or fear of getting pieces of the ferrule stuck inside the tubing. Low thermal mass: 9 mm in length and mass < 0.5 g.

Available in kits to connect a range of columns from 0.1 mm ID through to 0.53 mm ID.

The SilTite µ-Union comes fitted standard when you order an SGE GC Capillary column with integrated guard (5 m). Just add SGXX to the end of the column part number where XX is the column ID e.g. 054101SG32 for a 0.32 mm ID guard on column part number 054101.



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## Simplify Your GC Connections

SGE Analytical Science (SGE) is a world renowned brand for components and consumables used in scientific analysis.

Primarily in the field of scientific glass engineering for liquid handling and separation science, since its beginnings in 1960, SGE has become the global market leader in niche areas such as autosampler syringes and GC inlet liners.

Completing the transition into Trajan after acquisition in 2013, SGE products make up a solid foundation of Trajan's portfolio and will continue to be created and supported by Trajan customer service and distribution networks worldwide.

For more information visit [www.sge.com](http://www.sge.com) or contact [techsupport@sge.com](mailto:techsupport@sge.com).



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