

Swagelok® Brass & Stainless Steel Fitting Kits

Save more than 40% by purchasing a new Restek Swagelok® Fittings Kit, compared to prices for the individual parts!



- Includes the most common assortment of 1/8" and 1/4" brass or stainless steel fittings.
- Parts list makes reordering easy.
- Parts come in sturdy tool box for easy and convenient storage.



40%
savings

**Swagelok Brass Fitting Kit Includes:**

Swagelok #	Description, qty included in kit
B-202-1	1/8" brass nut (20)
B-402-1	1/4" brass nut (20)
B-203-1	1/8" brass front ferrule (20)
B-403-1	1/4" brass front ferrule (20)
B-204-1	1/8" brass back ferrule (20)
B-404-1	1/4" brass back ferrule (20)
B-200-C	1/8" brass cap (6)
B-400-C	1/4" brass cap (6)
B-200-P	1/8" brass plug (6)
B-400-P	1/4" brass plug (6)
B-200-6	1/8" brass union (2)
B-400-6	1/4" brass union (2)
B-400-6-2	1/8" to 1/8" brass reducing union (2)
B-200-3	1/8" brass tee (2)
B-400-3	1/4" brass tee (2)
B-400-R-2	1/8" to 1/4" brass tube end reducer (2)
B-200-R-4	1/4" to 1/8" brass tube end reducer (2)
MS-IG-200	1/8" inspection gauge (1)
MS-IG-400	1/4" inspection gauge (1)

Swagelok Stainless Steel Fitting Kit Includes:

Swagelok #	Description, qty included in kit
SS-202-1	1/8" SS nut (20)
SS-402-1	1/4" SS nut (20)
SS-203-1	1/8" SS front ferrule (20)
SS-403-1	1/4" SS front ferrule (20)
SS-204-1	1/8" SS back ferrule (20)
SS-404-1	1/4" SS back ferrule (20)
SS-200-C	1/8" SS cap (6)
SS-400-C	1/4" SS cap (6)
SS-200-P	1/8" SS plug (6)
SS-400-P	1/4" SS plug (6)
SS-200-6	1/8" SS union (2)
SS-400-6	1/4" SS union (2)
SS-400-6-2	1/8" to 1/8" SS reducing union (2)
SS-200-3	1/8" SS tee (2)
SS-400-3	1/4" SS tee (2)
SS-400-R-2	1/8" to 1/4" SS tube end reducer (2)
SS-200-R-4	1/4" to 1/8" SS tube end reducer (2)
MS-IG-200	1/8" inspection gauge (1)
MS-IG-400	1/4" inspection gauge (1)

Description	qty.	cat.#	price
Swagelok Brass Fitting Kit	kit	23141	

Description	qty.	cat.#	price
Swagelok Stainless Steel Fitting Kit	kit	23197	

**Restek's Learning Network**

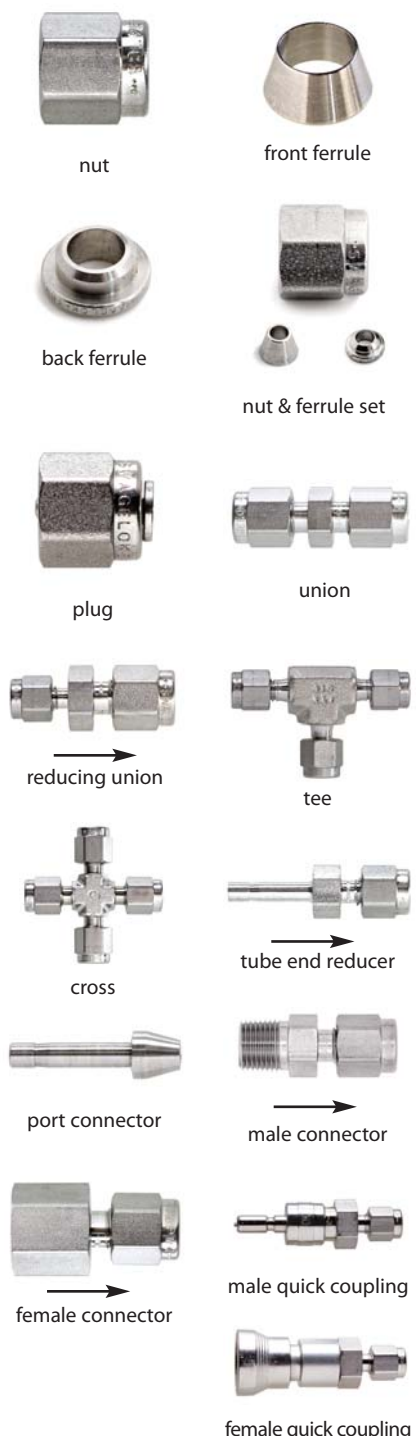
Sign up for our widely acclaimed seminars today!

Visit www.restek.com/seminars



Swagelok® Fittings

Restek is pleased to offer one of the premier lines of fittings available for chromatographers in the market today. We can supply the entire line of Swagelok® fittings. If you don't see the exact product you're looking for, please call us for a quote.



Fitting Type	Size	Swagelok #	qty.	Brass		316 Grade Stainless Steel	
				cat.#	price	qty.	cat.#
Nut	1/16"	102-1	20-pk.	23100		5-pk.	23150
	1/8"	202-1	40-pk.	23101		10-pk.	23151
	1/4"	402-1	40-pk.	23102		10-pk.	23152
Front Ferrule	1/16"	103-1	20-pk.	23103		10-pk.	23153
	1/8"	203-1	40-pk.	23104		20-pk.	23154
	1/4"	403-1	40-pk.	23105		20-pk.	23155
Back Ferrule	1/16"	104-1	20-pk.	23106		10-pk.	23156
	1/8"	204-1	40-pk.	23107		20-pk.	23157
	1/4"	404-1	40-pk.	23108		20-pk.	23158
Nut & Ferrule Set	1/16"	—	10-pk.	23109		2-pk.	23159
	1/8"	—	20-pk.	23110		5-pk.	23160
	1/4"	—	20-pk.	23111		5-pk.	23161
Plug	1/16"	100-P	5-pk.	23112		2-pk.	23162
	1/8"	200-P	10-pk.	23113		4-pk.	23163
	1/4"	400-P	10-pk.	23114		4-pk.	23164
Union	1/16"	100-6	3-pk.	23115		ea.	23165
	1/8"	200-6	5-pk.	23116		2-pk.	23166
	1/4"	400-6	5-pk.	23117		2-pk.	23167
Reducing Union	1/8" to 1/16"	200-6-1	5-pk.	23118		ea.	23168
	1/4" to 1/16"	400-6-1	5-pk.	23119		2-pk.	23169
	1/4" to 1/8"	400-6-2	5-pk.	23120		2-pk.	23170
Tee	1/16"	100-3	2-pk.	23121		ea.	23171
	1/8"	200-3	2-pk.	23122		ea.	23172
	1/4"	400-3	2-pk.	23123		ea.	23173
Cross	1/8"	200-4	2-pk.	23124		ea.	23174
	1/4"	400-4	2-pk.	23125		ea.	23175
Tube End Reducer	1/8" to 1/16"	100-R-2	5-pk.	23126		2-pk.	23176
	1/4" to 1/16"	100-R-4	5-pk.	23127		2-pk.	23177
	1/8" to 1/4"	400-R-2	5-pk.	23128		2-pk.	23178
	1/4" to 1/8"	200-R-4	5-pk.	23129		2-pk.	23179
Port Connector	1/8"	201-PC	5-pk.	23130		2-pk.	23180
	1/4"	401-PC	10-pk.	23131		2-pk.	23181
	1/8" to 1/4"	401-PC-2	5-pk.	23132		2-pk.	23182
Male Connector	1/8" to 1/8" NPT	200-1-2	10-pk.	23133		2-pk.	23183
	1/4" to 1/4" NPT	400-1-4	10-pk.	23134		2-pk.	23184
	1/16" to 1/8" NPT	100-1-2	5-pk.	23135		2-pk.	23185
	1/8" to 1/4" NPT	200-1-4	10-pk.	23136		2-pk.	23186
	1/4" to 1/8" NPT	400-1-2	10-pk.	23137		2-pk.	23187
Female Connector	1/8" to 1/8" NPT	200-7-2	5-pk.	23138		2-pk.	23188
	1/4" to 1/4" NPT	400-7-4	5-pk.	23139		2-pk.	23189
	1/4" to 1/8" NPT	400-7-2	5-pk.	23140		2-pk.	23190
Male & Female Quick Couplings	1/8" male*	QC4D-200	—	—	—	ea.	23191
	1/8" male	QC4S-200	—	—	—	ea.	23192
	1/8" female*	QC4B-200	—	—	—	ea.	23193
	1/4" male*	QC4D-400	—	—	—	ea.	23194
	1/4" male	QC4S-400	—	—	—	ea.	23195
	1/4" female*	QC4B-400	—	—	—	ea.	23196

*Includes self-sealing shut-off valve.

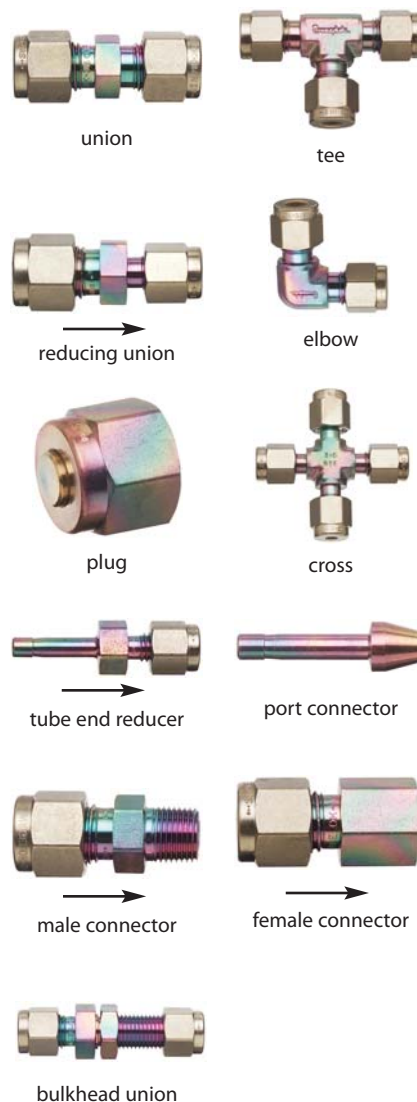
also available

Restek also carries specialized tools for Swagelok® fittings. See page 249.

Siltek®/Sulfinert® and Silcosteel®-CR Treated Swagelok® Fittings

- Full line of treated 1/16", 1/8", and 1/4" fittings.
- Silcosteel®-CR treatment enhances corrosion resistance by 10x, or more.
- Custom treatment available for any Swagelok® fitting, or other system parts not listed here (call for details).
- Description of custom Restek coatings listed below.

Fitting Type	Size	Swagelok #	Siltek/Sulfinert Treated			Silcosteel-CR Treated		
			qty.	cat.#	price	qty.	cat.#	price
Union	1/16"	SS-100-6	ea.	22540		ea.	22575	
	1/8"	SS-200-6	ea.	22541		ea.	22576	
	1/4"	SS-400-6	ea.	22542		ea.	22577	
	3/8"	SS-600-6	ea.	22909		ea.	22904	
Tee	1/16"	SS-100-3	ea.	22543		ea.	22578	
	1/8"	SS-200-3	ea.	22544		ea.	22579	
	1/4"	SS-400-3	ea.	22545		ea.	22580	
	3/8"	SS-600-3	ea.	22910		ea.	22905	
Reducing Union	1/8" to 1/16"	SS-200-6-1	ea.	22546		ea.	22581	
	1/4" to 1/16"	SS-400-6-1	ea.	22547		ea.	22582	
	1/4" to 1/8"	SS-400-6-2	ea.	22548		ea.	22583	
	3/8" to 1/4"	SS-600-6-4	ea.	22911		ea.	22906	
Elbow	1/8"	SS-200-9	ea.	22549		ea.	22584	
	1/4"	SS-400-9	ea.	22550		ea.	22585	
Plug	1/8"	SS-200-P	ea.	22573		ea.	22620	
	1/4"	SS-400-P	ea.	22574		ea.	22597	
Cross	1/8"	SS-200-4	ea.	22551		ea.	22586	
	1/4"	SS-400-4	ea.	22552		ea.	22587	
Tube End Reducer	1/8" tube to 1/16"	SS-100-R-2	ea.	22553		ea.	22588	
	1/4" tube to 1/16"	SS-100-R-4	ea.	22554		ea.	22589	
	1/8" tube to 1/4"	SS-400-R-2	ea.	22555		ea.	22590	
	1/4" tube to 1/8"	SS-200-R-4	ea.	22556		ea.	22591	
Port Connector	1/8"	SS-201-PC	ea.	22557		ea.	22592	
	1/4"	SS-401-PC	ea.	22558		ea.	22593	
	1/8" tube to 1/4"	SS-401-PC-2	ea.	22559		ea.	22594	
Male Connector	1/8" to 1/8" NPT	SS-200-1-2	ea.	22561		ea.	22595	
	1/4" to 1/4" NPT	SS-400-1-4	ea.	22562		ea.	22596	
	1/16" to 1/8" NPT	SS-100-1-2	ea.	22563		ea.	22610	
	1/8" to 1/4" NPT	SS-200-1-4	ea.	22564		ea.	22611	
	1/4" to 1/8" NPT	SS-400-1-2	ea.	22565		ea.	22612	
	3/8" to 3/8" NPT	SS-600-1-6	ea.	22912		ea.	22907	
Female Connector	1/8" to 1/8" NPT	SS-200-7-2	ea.	22566		ea.	22613	
	1/4" to 1/4" NPT	SS-400-7-4	ea.	22567		ea.	22614	
	1/4" to 1/8" NPT	SS-400-7-2	ea.	22568		ea.	22615	
	1/8" to 1/4" NPT	SS-200-7-4	ea.	22569		ea.	22616	
Bulkhead Union	1/8"	SS-200-61	ea.	22570		ea.	22617	
	1/4"	SS-400-61	ea.	22571		ea.	22618	



Custom Restek Coatings

- **Siltek®**—The ultimate passivation of treated surfaces, from glass to high nickel alloys of steel; ideal for sulfurs, automotive exhaust testing, or stack gas sampling.
- **Sulfinert®**—A required treatment for metal components when analyzing for parts-per-billion levels of organo-sulfur compounds.
- **Silcosteel®-CR**—A corrosion resistant layer that increases the lifetime of system components in acidic environments containing hydrochloric acid, nitric acid, or seawater.

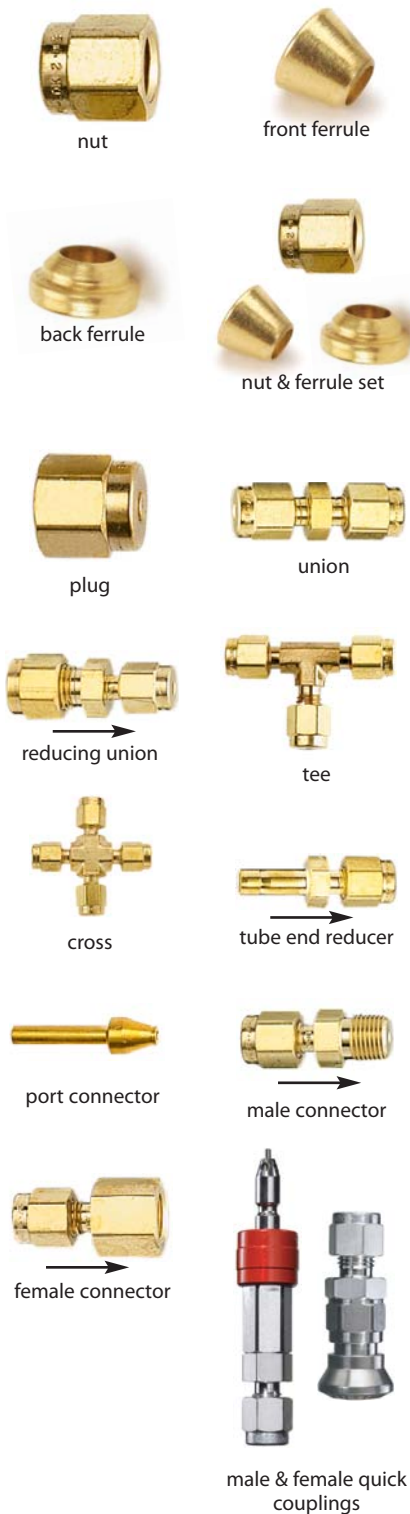
For more information on our custom coatings, see page 242.



Tube & Pipe Fittings

Parker Fittings

Parker's (A-Lok) two-piece ferrules and NPT fittings are ideal for installing new equipment, modifying existing instrumentation, or replacing worn connections. Restek offers both brass and stainless steel fittings. If there is a particular Parker fitting that you are looking for and it is not listed here, please contact us to inquire about availability.



Fitting Type	Size	Parker #	qty.	Brass		316 Grade Stainless Steel	
				cat.#	price	qty.	cat.#
Nut	1/16"	1 Nu 1	20-pk.	21800		5-pk.	21900
	1/8"	2 Nu 2	40-pk.	21801		10-pk.	21901
	1/4"	4 Nu 4	40-pk.	21802		10-pk.	21902
Front Ferrule	1/16"	1 FF 1	20-pk.	21803		10-pk.	21903
	1/8"	2 FF 2	40-pk.	21804		20-pk.	21904
	1/4"	4 FF 4	40-pk.	21805		20-pk.	21905
Back Ferrule	1/16"	1 BF 1	20-pk.	21806		10-pk.	21906
	1/8"	2 BF 2	40-pk.	21807		20-pk.	21907
	1/4"	4 BF 4	40-pk.	21808		20-pk.	21908
Nut & Ferrule Set	1/16"	—	10-pk.	21809		2-pk.	21909
	1/8"	—	20-pk.	21810		5-pk.	21910
	1/4"	—	20-pk.	21811		5-pk.	21911
Plug	1/16"	1 BLP 1	5-pk.	21815		2-pk.	21915
	1/8"	2 BLP 2	10-pk.	21816		4-pk.	21916
	1/4"	4 BLP 4	10-pk.	21817		4-pk.	21917
Union	1/16"	1 SC 1	3-pk.	21818		ea.	21918
	1/8"	2 SC 2	5-pk.	21819		2-pk.	21919
	1/4"	4 SC 4	5-pk.	21820		2-pk.	21920
Reducing Union	1/8" to 1/16"	2 RU 1	5-pk.	21823		ea.	21923
	1/4" to 1/16"	4 RU 1	5-pk.	21824		2-pk.	21924
	1/4" to 1/8"	4 RU 2	5-pk.	21825		2-pk.	21925
Tee	1/16"	1 ET 1	2-pk.	21826		ea.	21926
	1/8"	2 ET 2	2-pk.	21827		ea.	21927
	1/4"	4 ET 4	2-pk.	21828		ea.	21928
Cross	1/8"	2 ECR 2	2-pk.	21829		ea.	21929
	1/4"	4 ECR 4	2-pk.	21830		ea.	21930
Tube End Reducer	1/8" tube to 1/16"	2 TUR 1	5-pk.	21831		2-pk.	21931
	1/4" tube to 1/16"	4 TUR 1	5-pk.	21832		2-pk.	21932
	1/8" tube to 1/4"	2 TUR 4	5-pk.	21833		2-pk.	21933
	1/4" tube to 1/8"	4 TUR 2	5-pk.	21834		2-pk.	21934
Port Connector	1/8"	2 PC 2	5-pk.	21835		2-pk.	21935
	1/4"	4 PC 4	10-pk.	21836		2-pk.	21936
	1/8" tube to 1/4"	2 PC 4	5-pk.	21837		2-pk.	21937
Male Connector	1/8" to 1/8" NPT	2 MSC 2N	10-pk.	21841		2-pk.	21941
	1/4" to 1/4" NPT	4 MSC 4N	10-pk.	21842		2-pk.	21942
	1/16" to 1/8" NPT	1 MSC 2N	5-pk.	21843		2-pk.	21943
	1/8" to 1/4" NPT	2 MSC 4N	10-pk.	21844		2-pk.	21944
Female Connector	1/4" to 1/8" NPT	4 MSC 2N	10-pk.	21845		2-pk.	21945
	1/8" to 1/8" NPT	2 FSC 2N	5-pk.	21846		2-pk.	21946
	1/4" to 1/4" NPT	4 FSC 4N	5-pk.	21847		2-pk.	21947
	1/4" to 1/8" NPT	4 FSC 2N	5-pk.	21848		2-pk.	21948
Male & Female Quick Couplings	1/8" male*	2A-Q4VN	—	—	—	ea.	21957
	1/8" male	2A-Q4P	—	—	—	ea.	21958
	1/8" female*	2A-Q4CN	—	—	—	ea.	21959
	1/4" male*	4A-Q4VN	—	—	—	ea.	21960
	1/4" male	4A-Q4P	—	—	—	ea.	21961
	1/4" female*	4A-Q4CN	—	—	—	ea.	21962

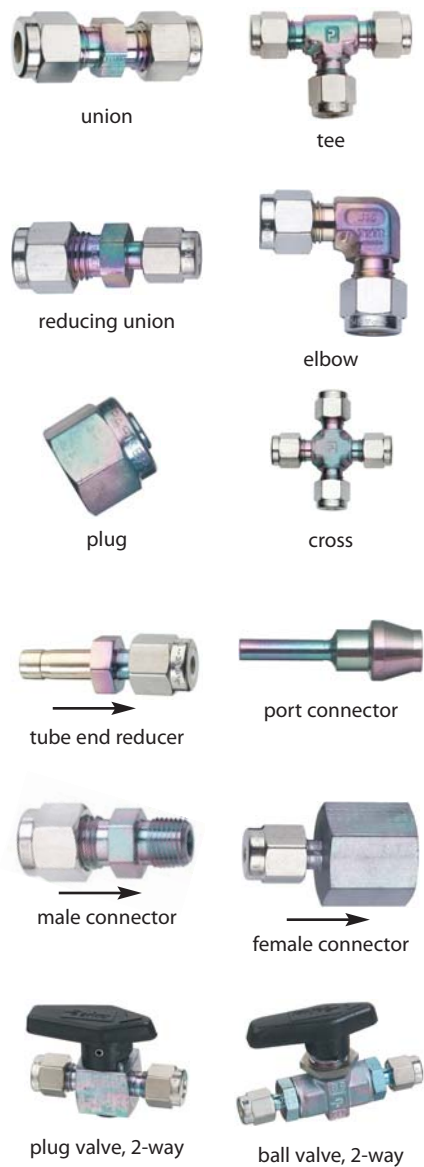
*Includes self-sealing shut-off valve.

Siltek®/Sulfinert® Treated and Silcosteel®-CR Treated Parker Fittings

A broad line of 1/16", 1/8" and 1/4" fittings are available with Siltek®/Sulfinert® or Silcosteel®-CR treatment. Because of expanding applications for these coatings, we have received many requests for a broader product offering. If you do not see everything you need, contact us for information on custom coating services.

Fitting Type	Size	Parker #	Siltek/Sulfinert Treated			Silcosteel-CR Treated		
			qty.	cat.#	price	qty.	cat.#	price
Union	1/16"	1 SC 1	ea.	22520		ea.	22863	
	1/8"	2 SC 2	ea.	22521		ea.	22864	
	1/4"	4 SC 4	ea.	22522		ea.	22865	
Tee	1/16"	1 ET 1	ea.	22526		ea.	22866	
	1/8"	2 ET 2	ea.	22527		ea.	22867	
	1/4"	4 ET 4	ea.	22528		ea.	22868	
Reducing Union	1/8" to 1/16"	2 RU 1	ea.	22523		ea.	22869	
	1/4" to 1/16"	4 RU 1	ea.	22524		ea.	22870	
	1/4" to 1/8"	4 RU 2	ea.	22525		ea.	22871	
Elbow	1/16"	1 EE 1	—	—	—	ea.	22874	
	1/8"	1 EE 2	ea.	22530		ea.	22875	
	1/4"	1 EE 4	ea.	22531		ea.	22876	
Plug	1/16"	1 BLP 1	ea.	21539		ea.	22877	
	1/8"	2 BLP 2	ea.	21540		ea.	22878	
	1/4"	4 BLP 4	ea.	21541		ea.	22879	
Cross	1/8"	2 ECR 2	ea.	21542		ea.	22872	
	1/4"	4 ECR 4	ea.	21543		ea.	22873	
Tube End Reducer	1/8" tube to 1/16"	2 TUR 1	ea.	21544		ea.	22880	
	1/4" tube to 1/16"	4 TUR 1	ea.	21545		ea.	22881	
	1/8" tube to 1/4"	2 TUR 4	ea.	21546		ea.	22882	
	1/4" tube to 1/8"	4 TUR 2	ea.	21547		ea.	22883	
Port Connector	1/8"	2 PC 2	ea.	21548		ea.	22884	
	1/4"	4 PC 4	ea.	21549		ea.	22885	
	1/8" tube to 1/4"	2 PC 4	ea.	21550		ea.	22886	
Male Connector	1/8" to 1/8" NPT	2 MSC 2N	ea.	21551		ea.	22887	
	1/4" to 1/4" NPT	4 MSC 4N	ea.	21552		ea.	22888	
	1/16" to 1/8" NPT	1 MSC 2N	ea.	21553		ea.	22889	
	1/8" to 1/4" NPT	2 MSC 4N	ea.	21554		ea.	22890	
	1/4" to 1/8" NPT	4 MSC 2N	ea.	21555		ea.	22891	
Female Connector	1/8" to 1/8" NPT	2 FSC 2N	ea.	21556		ea.	22892	
	1/4" to 1/4" NPT	4 FSC 4N	ea.	21557		ea.	22893	
	1/4" to 1/8" NPT	4 FSC 2N	ea.	21558		ea.	22894	
	1/8" to 1/4" NPT	2 FSC 4N	ea.	21559		ea.	22895	
Plug Valve, 2-Way	1/8"	2A PR4 VT SS	ea.	21586		—	—	
	1/4"	4A PR4 VT SS	ea.	21587		—	—	
Ball Valve, 2-Way	1/8"	2A B2LJ2 SSP	ea.	21588		—	—	
	1/4"	4A B2LJ2 SSP	ea.	21589		—	—	

Please note: Nuts and ferrules are not treated unless requested (custom parts). Nuts and ferrules normally are not in contact with sample pathway, and thus do not require coating.



Siltek®/Sulfinert® Treated Valco® Fittings

Fitting Type	Size	Siltek/Sulfinert Treated		
		qty.	cat.#	price
Valco Zero Dead Volume Tee	1/16"	ea.	22534	
	1/8"	ea.	22535	
Valco Zero Dead Volume Union	1/16"	ea.	22532	
	1/8"	ea.	22533	





Tubing and Available Coatings

Restek sets the standard in tubing for analytical and process applications. Complete your system with precleaned or treated tubing and treated fittings and valves for an inert, corrosion-resistant pathway.

Available tubing coatings include:

- **Siltek®**—The ultimate passivation of treated surfaces, from glass to high nickel alloys of steel; ideal for sulfurs, automotive exhaust testing or stack gas sampling.
- **Silcosteel®-CR**—A corrosion resistant layer that increases the lifetime of system components in acidic environments containing hydrochloric acid, nitric acid, or seawater.
- **Sulfinert®**—A required treatment for metal components when analyzing for parts-per-billion levels of organo-sulfur compounds.

Frequently Asked Questions

1. Can treated tubing be bent?

Treated tubing can be bent into curves with a bend radius greater than 1 inch for 1/16-inch OD tubing, 2 inches for 1/8-inch OD tubing, or 4 inches for 1/4-inch OD tubing. The treatment layer will remain intact as long as the tubing isn't stretched dramatically. If tight bends are necessary, use a treated elbow union or bend untreated tubing and send it to Restek for custom treatment.

2. Can compression fittings be used without crushing the treatment layer?

Yes. The layer is thin and permeates the surface. It compresses with minimal damage.

3. Is welding possible after Restek treatment?

Yes. The coating does not interfere with the welding of two coated components. The coating is lost at the weld and in the heat affected zones approximately 2 to 5mm on either side of the weld.

4. Is any additional chemical deactivation necessary?

A Sulfinert® or Silcosteel® layer leaves few exposed active sites, so there usually is no need for additional treatment. Chemical deactivation is useful in chromatographic applications in which water will be vaporized on the Silcosteel® treated surface, but is not necessary for Sulfinert® treated surfaces. Parts used in high-temperature applications (>400°C) cannot be chemically deactivated.

5. What are the temperature constraints of Restek surface treatments?

On stainless steel, a Silcosteel® layer is stable to 600°C. Parts treated with a secondary polymeric layer are limited to temperatures of 400°C in inert atmospheres and 250°C when oxygen is present, the temperature maximums for the polymer. Temperatures above 600°C can be used under certain conditions—please contact us for information.

6. Why use Sulfinert® or Silcosteel® treatment instead of Teflon® coating?

Three reasons: 1) Sulfinert® and Silcosteel® layers are nonpolymeric, so they do not exhibit the problems associated with gas permeability. 2) Teflon® coating often flakes off the surface, while the Sulfinert® or Silcosteel® layer is tightly integrated into the substrate lattice. 3) Teflon® coating is limited to 280°C, while Silcosteel® treated stainless steel tubing and fittings can be used to 600°C.

7. Why use Siltek®/Sulfinert® treated tubing for transfer lines?

Siltek®/Sulfinert® treated stainless steel tubing offers all of the advantages of glass or fused silica tubing for the transfer of active compounds (e.g., sulfurs), but is far more durable and flexible.

8. Is treated tubing similar to glass-lined tubing (GLT)?

No. Sulfinert® or Silcosteel® treated tubing is flexible and can be bent without heating. Also, the Sulfinert® or Silcosteel® layer is highly inert, unlike impure glass.

9. How can I clean the surface of a treated part after use?

Most often, a mild organic solvent (methylene chloride, methanol, hexane) or water is sufficient. Mild sonication may assist and accelerate the process. Do not use caustic, abrasive, or high pH (pH>8) cleaners, as they will damage or dissolve the layer. Steam cleaning in the presence of oxygen or air could create surface activity, and also should be avoided.

10. What materials should I avoid using with Silcosteel® treated parts?

The Silcosteel® coating is silicon-based and is prone to attack by hydrofluoric acid or by basic compounds. The surface should not be exposed to media with pH>8.

11. Siltek® and Sulfinert®: What's the Difference?

Siltek® is the name for our patented deposition process. When we developed the Siltek® process, the application that showed the greatest benefit, among many we investigated, was the storage and transfer of low ppb level active sulfur compounds, such as hydrogen sulfide and mercaptans. Because there was (and continues to be) demand for a reliable surface treatment for this application, we use the name Sulfinert® to describe Siltek® treated products created specifically for this purpose.

Instrument-Grade Welded and Drawn 304 Grade Stainless Steel Tubing

Clean tubing is critical to ensure the delivery of pure gas to your instrument. Restek's stainless steel tubing is specially cleaned for inertness by using the procedure for processing our Silcosteel® and Siltek®-treated products, because scrupulously clean parts are a prerequisite for a quality coating. This ensures you are getting a quality tubing for your chromatography system.

Tubing Dimensions		Length (per-foot pricing on 26 feet or more)					
ID (in.)	OD (in.)	25 Feet		26–100 Feet		> 100 Feet*	
		cat.#	price	cat.#	price	cat.#	price
0.01"	1/16"	21500		21501	/ft.	21502	/ft.
0.02"	1/16"	21503		21504	/ft.	21505	/ft.
0.03"	1/16"	21506		21507	/ft.	21508	/ft.
0.04"	1/16"	21509		21510	/ft.	21511	/ft.
0.085"	1/8"	21512		21513	/ft.	21514	/ft.
0.21"	1/4"	21515		21516	/ft.	21517	/ft.

*The availability of long lengths (continuous lengths up to 500 feet) is subject to inventory constraints. Please inquire before ordering.



ordering note

Required length in meters x 3.2808 = length in feet.

Precleaned Copper Tubing

- Adheres to ASTM B-280.
- Pre-cleaned and ready to use.
- Use for plumbing GC systems.

ID	OD	Wall	qty.	cat.#	price
0.065"	1/8"	0.030"	50 ft.	21590	
0.190"	1/4"	0.030"	50 ft.	21592	

An extra charge is applied for cutting and/or straightening stainless steel and/or copper tubing, calculated from the total number of pieces produced for each line item:

# of Pieces	Added Charge
5 to 15	enquire
16 to 30	enquire
31 to 75	enquire
76 to 99	enquire
100 to 200	enquire



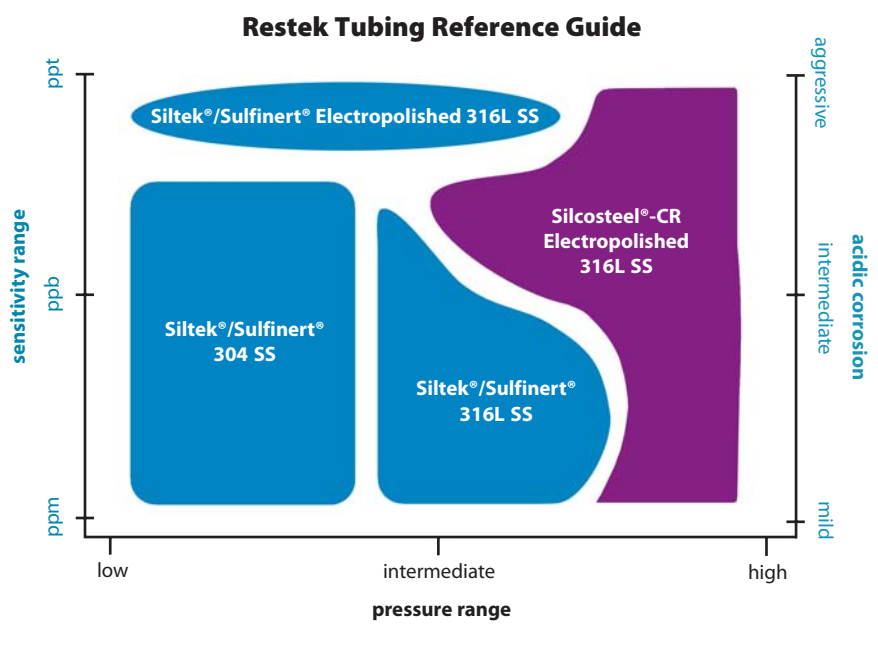
Plumbing a GC

It is essential to use clean chromatographic-grade tubing to plumb a GC. Standard-grade tubing contains residual hydrocarbon contaminants from the drawing process. These contaminants migrate into the carrier gas stream, elevating background noise and causing down time.

frequently asked question

Which treated tubing should I use?

This chart will help you determine the tubing best suited to your application with respect to pressure, sensitivity of your analysis, and acidic environment exposure. For more frequently asked questions on treated tubing, see previous page.



Tubing

did you know?

A smoother internal surface is less adsorptive.



Top: electropolished finish, surface roughness average number: 10-15.

Bottom: conventional finish, surface roughness average number: approx. 23-27.

An extra charge is applied for cutting Siltek®/Sulfinert® or Silcosteel®-CR tubing. The charge is calculated from the total number of pieces produced for each line item:

# of Pieces	Added Charge
5 to 15	enquire
16 to 30	enquire
31 to 75	enquire
76 to 99	enquire
100 to 200	enquire

Minimum Bend Radius for Coated Tubing

OD	Min. Bend Radius
≤ 1/16"	1" (2.5cm)
1/8"	2" (5.1cm)
1/4"	4" (10.2cm)
3/8"	6" (15.2cm)

did you know?

Other lengths and diameters of treated tubing are available on a custom basis.

Call for availability of lengths greater than 1,000ft.

ordering note

Required length in meters x 3.2808 = length in feet.

Treated Seamless Electropolished 316L Grade Stainless Steel Tubing

Our highest performing tubing. Recommended for:

- demanding/corrosive environments.
- high temperatures.
- ultimate inertness.

Siltek®/Sulfinert® Treated Coiled Electropolished 316L Grade Stainless Steel Tubing

OD	ID	Wall Thickness	cat.#	Price-per-foot			
				5-24 ft.	25-99 ft.	100-299 ft.	>300 ft.
1/8" (3.18mm)	0.085" (2.16mm)	0.020"	22538	/ft. /ft.	/ft. /ft.		
1/4" (6.35mm)	0.180" (4.57mm)	0.035"	22539	/ft. /ft.	/ft. /ft.		

Silcosteel®-CR Treated Coiled Electropolished 316L Grade Stainless Steel Tubing

OD	ID	Wall Thickness	cat.#	Price-per-foot			
				5-24 ft.	25-99 ft.	100-299 ft.	>300 ft.
1/8" (3.18mm)	0.085" (2.16mm)	0.020"	22536	/ft. /ft.	/ft. /ft.		
1/4" (6.35mm)	0.180" (4.57mm)	0.035"	22537	/ft. /ft.	/ft. /ft.		

1/8" OD: 5 ft. to 100 ft. in one continuous coil; 1/4" OD: 5 ft. to 300 ft. in one continuous coil. Longer lengths will be more than one coil.

Treated Welded/Drawn 304 Grade Stainless Steel Tubing

Our most popular grade of tubing. Recommended for:

- chromatography applications.
- gas delivery systems.
- lower pressures.
- inert applications.

Siltek®/Sulfinert® Treated Coiled 304 Grade Stainless Steel Tubing

OD	ID	Wall Thickness	cat.#	Price-per-foot			
				5-24 ft.	25-199 ft.	200-399 ft.	>400 ft.
0.022" (0.56mm)	0.011" (0.28mm)		22500	/ft. /ft.	/ft. /ft.		
0.029" (0.74mm)	0.021" (0.53mm)		22501	/ft. /ft.	/ft. /ft.		
1/16" (1.59mm)	0.010" (0.25mm)		22502	/ft. /ft.	/ft. /ft.		
1/16" (1.59mm)	0.020" (0.51mm)		22503	/ft. /ft.	/ft. /ft.		
1/16" (1.59mm)	0.030" (0.76mm)		22504	/ft. /ft.	/ft. /ft.		
1/16" (1.59mm)	0.040" (1.02mm)		22505	/ft. /ft.	/ft. /ft.		
1/8" (3.18mm)	0.085" (2.16mm)	0.020"	22506	/ft. /ft.	/ft. /ft.		
1/4" (6.35mm)	0.210" (5.33mm)	0.020"	22507	/ft. /ft.	/ft. /ft.		

Treated Seamless 316L Grade Stainless Steel Tubing

High durability tubing. Recommended for:

- inert applications.
- high temperatures.
- high pressures.
- corrosive environments.

Siltek®/Sulfinert® Treated Coiled 316L Grade Stainless Steel Tubing

OD	ID	Wall Thickness	cat.#	Price-per-foot			
				5-24 ft.	25-199 ft.	200-399 ft.	>400 ft.
1/8" (3.18mm)	0.055" (1.40mm)	0.035"	22508	/ft. /ft.	/ft. /ft.		
1/4" (6.35mm)	0.180" (4.57mm)	0.035"	22509	/ft. /ft.	/ft. /ft.		
3/8" (9.52mm)	0.277" (7.04mm)	0.049"	22914	/ft. /ft.	/ft. /ft.		

Silcosteel®-CR Treated Coiled 316L Grade Stainless Steel Tubing

OD	ID	Wall Thickness	cat.#	Price-per-foot			
				5-24 ft.	25-199 ft.	200-399 ft.	>400 ft.
1/8" (3.18mm)	0.055" (1.40mm)	0.035"	22896	/ft. /ft.	/ft. /ft.		
1/4" (6.35mm)	0.180" (4.57mm)	0.035"	22897	/ft. /ft.	/ft. /ft.		
3/8" (9.52mm)	0.277" (7.04mm)	0.049"	22915	/ft. /ft.	/ft. /ft.		

Treated Hydroguard™ Deactivated Stainless Steel Tubing

Hydroguard™ deactivation creates a high-density surface that is not readily attacked by aggressive hydrolysis. Recommended for:

- plumbing purge and trap systems.
- headspace systems.

Silcosteel® Treated Hydroguard™ Deactivated 304 Grade Stainless Steel Tubing

OD	ID	Wall Thickness	cat.#	Price-per-foot			
				5-24 ft.	25-199 ft.	200-399 ft.	>400 ft.
1/16" (1.59mm)	0.010" (0.25mm)		22497	/ft. /ft.	/ft. /ft.	/ft. /ft.	
1/8" (1.59mm)	0.020" (0.51mm)		22496	/ft. /ft.	/ft. /ft.	/ft. /ft.	
3/16" (1.59mm)	0.030" (0.76mm)		22495	/ft. /ft.	/ft. /ft.	/ft. /ft.	
1/4" (1.59mm)	0.040" (1.02mm)		22494	/ft. /ft.	/ft. /ft.	/ft. /ft.	
1/2" (3.18mm)	0.085" (2.16mm)	0.020"	22493	/ft. /ft.	/ft. /ft.	/ft. /ft.	
3/4" (6.35mm)	0.210" (5.33mm)	0.020"	22492	/ft. /ft.	/ft. /ft.	/ft. /ft.	

Silcosteel® Treated Hydroguard™ Deactivated Seamless 316L Grade Stainless Steel Tubing

OD	ID	Wall Thickness	cat.#	Price-per-foot			
				5-24 ft.	25-199 ft.	200-399 ft.	>400 ft.
1/8" (3.18mm)	0.055" (1.40mm)	0.035"	22491	/ft. /ft.	/ft. /ft.	/ft. /ft.	
1/4" (6.35mm)	0.180" (4.57mm)	0.035"	22490	/ft. /ft.	/ft. /ft.	/ft. /ft.	

Silcosteel® Treated Hydroguard™ Deactivated Electropolished 316L Grade Stainless Steel Tubing

OD	ID	Wall Thickness	cat.#	Price-per-foot			
				5-24 ft.	25-99 ft.	100-299 ft.	>300 ft.
1/8" (3.18mm)	0.085" (2.16mm)	0.020"	22489	/ft. /ft.	/ft. /ft.	/ft. /ft.	
1/4" (6.35mm)	0.180" (4.57mm)	0.035"	22488	/ft. /ft.	/ft. /ft.	/ft. /ft.	

recommended for
purge & trap



An extra charge is applied for cutting Siltek®/Sulfinert®, or Silcosteel®-CR tubing. The charge is calculated from the total number of pieces produced for each line item:

# of Pieces	Added Charge
5 to 15	enquire
16 to 30	enquire
31 to 75	enquire
76 to 99	enquire
100 to 200	enquire

Treated Straight, 6-Foot Length Stainless Steel Tubing**Silcosteel®-CR Treated Straight Seamless 316L Grade Stainless Steel Tubing**

- Individual 6-foot pieces.

In response to customer requests, we offer 6-foot straight lengths of 1/8-, 1/4, and 3/8-inch Silcosteel®-CR treated tubing. This tubing can be cut to your exact requirements using a standard tubing cutter.

6 foot Length (± 1/2")

OD	ID	Wall Thickness	qty.	cat.#	price
1/8" (3.18mm)	0.055" (1.40mm)	0.035"	ea.	22898	
1/4" (6.35mm)	0.180" (4.57mm)	0.035"	ea.	22899	
3/8" (9.52mm)	0.277" (7.04mm)	0.049"	ea.	22900	

Siltek®/Sulfinert® Treated Straight Seamless 316L Grade Stainless Steel Tubing

- Individual 6-foot pieces.

In response to customer requests, we offer 6-foot straight lengths of 1/8-, 1/4, and 3/8-inch Siltek®/Sulfinert® treated tubing. This tubing can be cut to your exact requirements using a standard tubing cutter.

6 foot Length (± 1/2")

OD	ID	Wall Thickness	qty.	cat.#	price
1/8" (3.18mm)	0.055" (1.40mm)	0.035"	ea.	22901	
1/4" (6.35mm)	0.180" (4.57mm)	0.035"	ea.	22902	
3/8" (9.52mm)	0.277" (7.04mm)	0.049"	ea.	22903	

ordering note

Required length in meters x 3.2808 = length in feet.

did you know?

Other lengths and diameters of treated tubing are available on a custom basis.

Call for availability of lengths greater than 1,000ft.