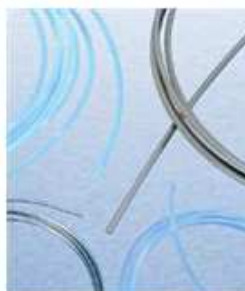




Metal Tubing

Metal tubing in custom lengths

Metal tubing is electrolytically cut and deburred, and steam cleaned. Polymeric tubing is square-cut and ready to use. Specify the length required, in inches or feet. For pricing of custom tubing, the length is rounded up to the next foot. For example, a 5" piece is charged as one foot; an 18" piece as two feet. For metal tubing, there is a cutting/cleaning charge for each length.



Conversion charts Volume/length chart

Tubing ID	µl/cm	µl/in
.005"	0.13	0.32
.010"	0.51	1.29
.015"	1.14	2.90
.020"	2.03	5.15
.025"	3.17	8.04
.030"	4.56	11.58
.040"	8.11	20.59
.060"	18.24	46.33
.070"	24.83	63.06
.085"	36.61	92.99

316 Stainless tubing

Tubing OD	Tubing ID	Product No.
1/32"	.005"	TSS.505
	.007"	TSS.507
	.010"	TSS.510
	.020"	TSS.520
1/16"	.005"	TSS105
	.010"	TSS110
	.015"	TSS115
	.020"	TSS120
	.026"	TSS126
	.030"	TSS130
	.040"	TSS140
1/8"	.030"	TSS230
	.040"	TSS240
	.060"	TSS260
	.070"	TSS267
	.085"	TSS285

Nickel 200 tubing

Tubing OD	Tubing ID	Product No.
1/32"	.007"	TNI.507
	.010"	TNI.510
	.020"	TNI.520
1/16"	.005"	TNI105
	.010"	TNI110
	.020"	TNI120
	.030"	TNI130
	.040"	TNI140
1/8"	.085"	TNI285

Titanium

Titanium tubing is typically available with a maximum length of 6 feet

Tubing OD	Tubing ID	Product No.
1/16"	.012"	TTI112
	.020"	TTI120
	.030"	TTI131

Hastelloy C tubing

Tubing OD	Tubing ID	Product No.
1/16"	.030"	THC130
1/8"	.070"	THC270

Inconel 600

Tubing OD	Tubing ID	Product No.
1/8"	.061"	TINO261
	.082"	TINO282

Electroformed nickel tubing

Tubing OD	Tubing ID	Product No.
360 µm	.001"	TEFNI.101
1/32"	.002"	TEFNI.502
	.004"	TEFNI.504
	.005"	TEFNI.505
	.010"	TEFNI.510
	.0126"	TEFNI.512
	.015"	TEFNI.515
	.020"	TEFNI.520
1/16"	.020"	TEFNI120
	.030"	TEFNI130
	.040"	TEFNI140

Specialized Tubing

- Nickel-clad fused silica
- Nickel-clad polyimide-coated fused silica
- Nickel-clad PEEK®

Nickel-clad fused silica

- Inert, flexible transfer lines
- Improved heat transfer

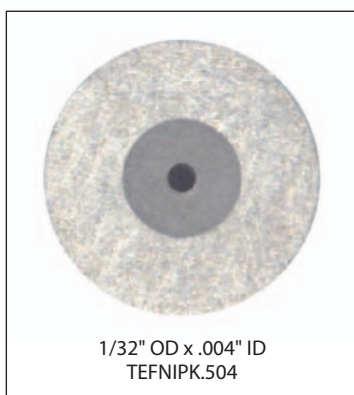
We take polyimide-coated fused silica (FS) and remove the polyimide layer. Then we electrochemically plate the FS with pure nickel. The resulting nickel-plated FS tube provides superior heat transfer to the FS lining, permitting use as a flexible transfer line with the best qualities of silica-lined stainless but with improved heat transfer and a shorter bend radius. The 1/32" OD tubing is available in IDs from .002" to .010". For high pressure applications, we recommend using our 1/32" 316SS ferrules.



Nickel-clad PEEK

- Permits use of PEEK tubing at 40,000 psi
- Direct connection with metal ferrules

Since we can manufacture virtually any size PEEK tubing from 360 micron OD/.002" ID on up, the possibilities are endless. In any size, the mechanical properties of nickel combined with the chemical properties of PEEK produce enhanced performance with robust metal ferrule connections. We currently offer 1/32" OD tubing with ID from .002" to .010", and 1/16" OD tubing from .0025" to .030".

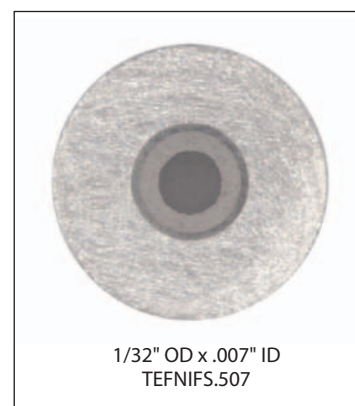
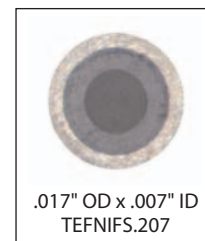


Nickel-clad polyimide-coated fused silica

- Improved heat transfer for FS columns
- Permits resistive heating of columns and transfer lines
- Allows direct connection using metal ferrules
- Rated up to 20,000 psi (dependent on size and plating thickness)

Any polyimide-coated FS can be electroplated with pure nickel, resulting in a ruggedized traditional FS column (or transfer line with deactivated FS), which can be resistively heated, if desired. Best of all, it permits use of metal ferrules for improved leak-tight connections – perfect for temperature program applications.

1/32" OD tubing is available in IDs from .002" to .010". A thin-wall, low mass version optimized for resistive heat applications is available with OD of .017" (48 VDC) or .019" (24 VDC). We offer several options for tubing connections. Contact our tech support to discuss your application.



Tubing

New Nickel-clad fused silica tubing

- Inert, flexible transfer lines
- Improved heat transfer

We take polyimide-coated fused silica (FS) and remove the polyimide layer. Then we electrochemically plate the FS with pure nickel. The resulting nickel-plated FS tube provides superior heat transfer to the FS lining, permitting use as a flexible transfer line with the best qualities of silica-lined stainless but with improved heat transfer and a shorter bend radius. The 1/32" OD tubing is available in IDs from .002" to .010".

For high pressure applications, we recommend using our 1/32" 316SS ferrules.



.017" OD x .007" ID
TEFNIS.207

New Nickel-clad polyimide-coated fused silica tubing

- Improved heat transfer for FS columns
- Permits resistive heating of columns and transfer lines
- Allows direct connection using metal ferrules
- Rated up to 20,000 psi (dependent on size and plating thickness)

We start out with any polyimide-coated FS and then simply electroplate it with pure nickel. This results in a ruggedized traditional FS column (or transfer line with deactivated FS) which can be resistively heated, if desired. Best of all, it permits use of metal ferrules for improved leak-tight connections – perfect for temperature program applications. High pressure capability is an added bonus.

1/32" OD tubing is available in IDs from .002" to .010". A thin-wall, low mass version optimized for resistive heat applications is available with OD of .017" (48 VDC) or .019" (24 VDC). We offer several options for tubing connections. Contact our tech support to discuss your application.



.017" OD x .007" ID
TEFNIS.207



1/32" OD x .007" ID
TEFNIS.507