Metal (MXT®) Columns Overview

What is an MXT® column?

MXT® columns are made from stainless steel tubing that has had the internal surface treated with our exclusive Siltek® surface treatment. The Siltek® layer makes the surface as inert as deactivated fused silica. The unique Siltek® process enables us to offer MXT® columns in a wide range of internal diameters, including 0.18mm, 0.25mm, 0.32mm, and 0.53mm. Because the Siltek® layer permeates the stainless steel surface, rather than simply coating it, the layer is exceptionally flexible, so the tubing can be coiled to very small diameters. The coil diameter for 0.53mm ID columns is 2.5 inches, and the coil diameter for 0.25mm ID columns is 1.5 inches.

The unique properties of the Siltek® treated surface enable us to treat the tubing with a wide variety of polymer phases. The many choices of MXT® columns include:

• MXT®-1

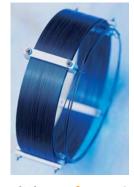
• MXT®-20

- MXT®-35
- MXT®-1701
- MXT®-624

Guard tubing

- MXT®-5
- MXT®-50
- MXT®-200MXT®-WAX
- MXT®-Biodiesel TG

- MXT®-1HT Sim Dist • MXT®-2887
- MXT®-65
 MXT®-65TG
 MXT®-1301
- MXT®-502.2
- MXT®-Volatiles



did you **know**?

MXT® columns are ideal for high-temperature gas chromatography.

Compare MXT® columns and fused silica columns:

- Metal tubing allows MXT® columns to be used to higher temperatures (430°C) than fused silica columns (standard rating is 360°C). This is because the polyimide resin that encases the fused silica becomes brittle over time at high temperatures. MXT® columns do not become brittle over time.
- Inertness of MXT® columns and fused silica columns is similar, due to the unique properties of the Siltek® surface treatment in MXT® columns.
- Coating efficiency (plates/meter) of MXT® columns is equivalent to that of fused silica.
- MXT® columns will not break under stress, and they can be coiled to small diameters.

MXT® columns are your best choice for:

- Situations in which the potential for column breakage is high:
 - field instruments
 - process GC
 - GCs with small ovens, such as portable instruments, requiring tightly coiled columns.
- High temperature chromatography. Siltek® deactivated stainless steel tubing can withstand temperatures exceeding 430°C; the only limitation to oven temperature is the polymer itself.

Custom MXT® columns

We have the capability to supply 0.18, 0.25, 0.28, 0.32, and 0.53mm ID columns with the phases listed above in many different configurations. If you do not see the column you need listed in the following pages, call us or your Restek representative, and we will be happy to help.

