



What Shape  
is Your String  
In?

John Gugel, MRT

# What Shape is Your String In?

Normally when we ask this question it is regarding the “playing” shape, i.e. how is the string bed stiffness, how is the notching, how long has it been in the racquet and some others.

However, this time the question is “what is the shape of your string?”

For many years tennis racquet string has been round. The round shape is fairly easy to manufacture, using many materials, including multi-filament constructions. Round strings present a uniform shape that reacts similarly regardless of installation procedure. Round strings typically provide uniform tensions because there is no “sides” to create additional friction during installation.

The last ten (10) years have seen the increase of polyester, or combinations called co-poly’s, as a tennis racquet string material. Along with this material came a new, for tennis racquet string, manufacturing process which is essentially extruding a molten material in a nice long continuous strand.

This process can produce a lot of string in a very short time! This processing technique can produce very inexpensively to be sure. It also allows for shapes! Almost any shape! All it takes is a “die” of the shape you want as the last thing the string sees before it gets to the cooling tanks or “embossing” wheels.

Make no mistake, however, these strings can be very technical in design and material formulations. So, if you pay over \$40.00 for a new string job using one of these strings don’t be surprised.

Back to shapes...

# What Shape is Your String In?

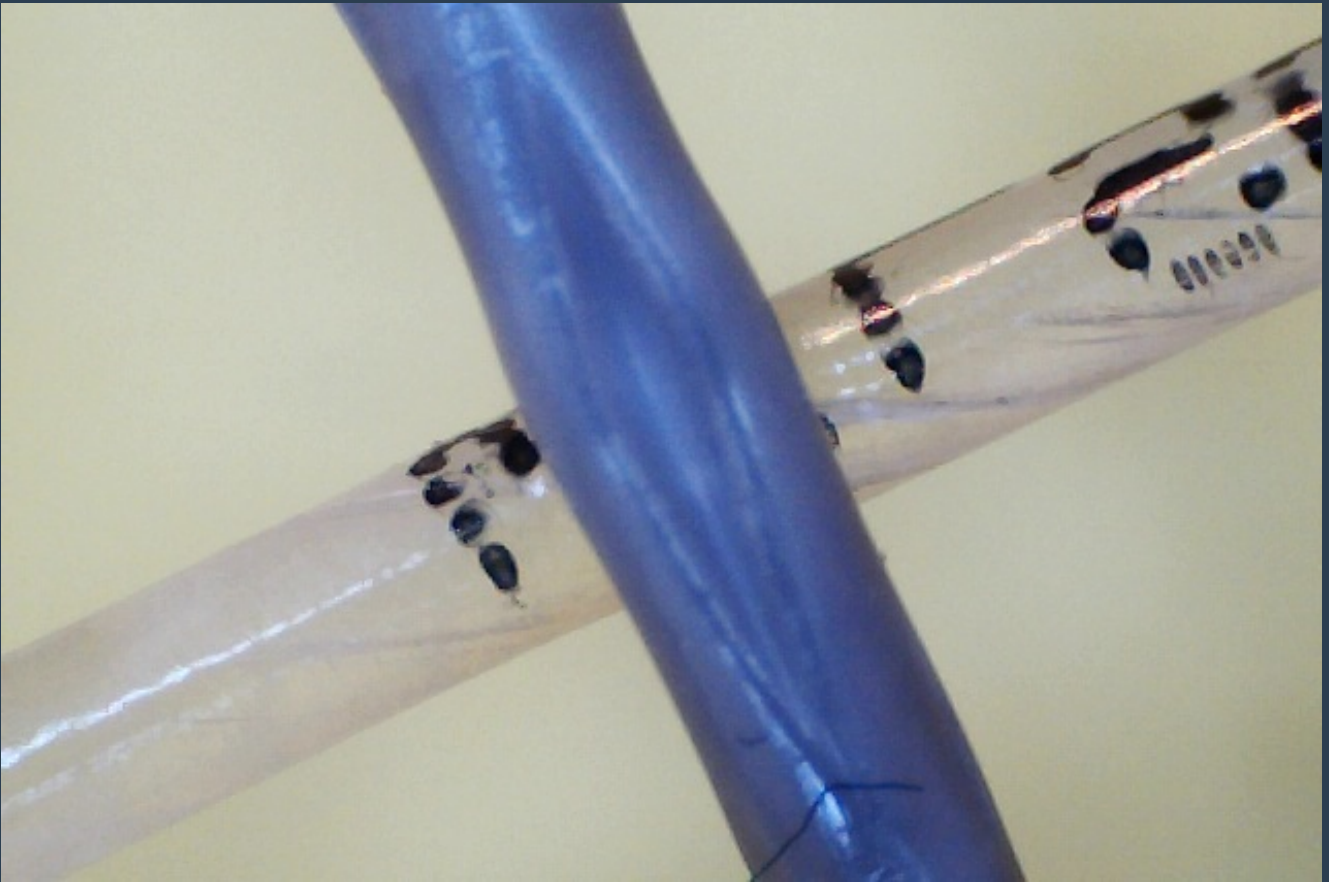
It is common to see three, four, five, six, seven, and even eight sided strings all over the place. Some of these strings present challenges in terms of installation and, therefore, performance because not only are they shaped they are “twisted”. Twisting a string creates huge variations in tension unless installed in a controlled way.

A couple of weeks ago a client presented me with a reel of string that is intended to be similar to the very popular Luxilon ALU Power Rough. The string is silver, (the image below shows it sort of blue) low elongation, textured string, mostly typical of polyesters. The unusual property is that the shape of this string is oval!

It should be noted here that Gosen, a major string manufacturer, has made oval shaped strings for years.

In addition to being oval the string is very aggressively “textured”, actually embossed, which, I believe contributes to the oval shape. Heres why. When the string is finishing the processing it is passed through an embossing wheel that creates small indentations in the string. When this happens the string will flatten out, or become oval. This process can also contribute to elongation.

# What Shape is Your String In?



If the manufacturer wanted the string to be perfectly round it would subject the string to a pulling process but this is not what I see in this string, which does not yet have a name.

Initial play tests show significant durability when paired with natural gut. Control seems to be better than average. When finished the strings seem to be laying flat against the corresponding cross string which could contribute to string movement.

So...what shape is your string in?