## STRING TYPES

**Natural Gut:** Still widely appreciated as the premier material for tennis strings due to its excellent tension maintenance and overall feel, it is the most expensive and is often less durable than today's synthetic materials so not usually the first choice for most club players.

*Multifilament:* This nylon based construction comes a fairly close second to natural gut but is more economical and resilient, while remaining comfortable on the arm and featuring a good balance of feel and power.

**Synthetic Gut:** A nylon solid core with wrap/s providing all round performance and playability at a lower price and can be a good choice for occasional players or those who prefer a slightly crisper or firmer feel.

**Polyester:** These monofilament strings are the most durable but produce a stiffer string bed which works well for hard hitters with long swings who use a lot of topspin, though increased impact shock and tension loss can be an issue.

**Hybrid:** As used by the majority of top professionals, the aim here is to achieve the best of both worlds by combining the durability and/or spin potential of a polyester main string with the relative comfort and feel of a natural gut, multifilament or synthetic gut cross (or vice versa!).

## STRING GAUGE

Racquet strings vary in diameter (gauge) from about 0.6mm (for badminton) up to 1.35mm (for tennis) and beyond. For tennis the range is generally from 1.15mm (18 gauge) as thinner strings break too frequently, up to 1.35mm (15 gauge) as thicker strings tend to lack feel. The vast majority of tennis players settle on 16 or 17 gauge for all round playability depending on their style of play, favoured string type and choice of racquet. Given the same type of string at equal tensions in the same racquet, the main differences can be summarised like this:

Thinner strings

- Are more elastic and therefore more comfortable and powerful, producing a greater "trampoline" effect
- Give greater access to spin as a thinner string can bite into the ball surface more
- Feel more lively
- Suffer more from tension loss
- Are less durable

Thicker strings

- Are less comfortable and less powerful
- Generate less spin
- Can feel a little "dead" in comparison
- Maintain tension better
- Are more durable

These are of course generalisations, but can be useful as a guide.

# STRING TENSION

It is generally accepted (though some tests and studies have shown this to be not as clear cut as previously thought) that higher tensions allow for greater control of the ball while lower tensions produce more power. Higher tensions will tend to transmit more shock through to the arm however while lower tensions will be a little kinder. Most racquets nowadays have a recommended tension range printed somewhere on the frame (e.g. 55-62lbs). In any given frame polyester strings, due to their additional stiffness, are commonly strung 5% to 10% lower than a nylon synthetic gut.

Tension choice is also dependent on the racquet frame – larger heads are normally strung tighter as the longer strings produce more power, while higher density string patterns (e.g. 18 mains x 20 crosses) result in a stiffer string bed so usually benefit from lower tensions.

# **TENSION LOSS/BREAKAGE**

All racquet strings gradually lose tension from the moment the racquet is strung and even while they are not being used. Players unconsciously adjust to the decreasing tension and diminishing elasticity of their string over weeks or months of use, and many leave it until the string breaks before having the racquet restrung. It is advisable to check for wear on a regular basis – slide the middle of a centre cross string along the main strings a few millimetres (mind you don't catch a fingernail!) and check for grooves in the main strings. It is the friction between the mains and crosses as they move on impact with the ball (particularly when spin is imparted) that causes this wear and it can also be clearly seen on multifilament strings as a "furriness" around the crossovers where the very fine individual filaments are starting to break and unravel. With synthetic gut in particular you may also notice a creaking sound appear as the strings move across each other when they are losing their elasticity. All strings will still be playable with some wear, but once they get close to halfway through it really is time to book a restring before one snaps during a point and lets you down!

# TIME TO RESTRING?

Assuming that most club players might play for around 60 to 90 minutes in a session, the rule of thumb is to restring at least as many times a year as you play in a week. Whilst the very occasional player might not break a string for years, the poor string will have been constantly losing tension and eventually be in a very sorry, lifeless condition so really once a year should ideally be the minimum to aim for - and two years the absolute limit!

Play once a week – restring once a year.

Play twice a week – restring every six months.

Play three times a week – restring every four months.

Those with a very powerful game and who use a lot of spin should restring more often still to maintain playability and control and avoid breakages during play, even when using the most durable polyester strings.

#### John Currie 07745 625716







