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Suppliers of your Requirements for Violins, Violas, Cellos and Double Basses

### Choosing the right strings for your instrument

Strings are made from basically three different core materials: gut, synthetic (nylon-type) fibre, and steel.

Each has advantages - and disadvantages.

For centuries strings were made from unwound gut (sheep intestines). Later, gut was wound with metal, such as silver, which increased the density and decreased breakage. Gut has a warm, rich, "colourful" tone that players seek.

Steel core strings provide powerful, direct, and transparent timbre. Relatively inexpensive with fast response and quick break-in period, these strings are long lasting. Soloists often prefer this option as well as any musician seeking clean clear precision.

Synthetic fibre String companies have experimented with different materials trying to replicate the warm tone of gut while providing the player with the obvious advantages of tuning stability.

Manufactured with a variety of metal windings, synthetic strings are reliable, long lasting and offer a robust, complex tone in an easy to play string. As the string is stiffer the response is superior to gut. Suited to violinists and violist these strings are the correct choice for the beginner, advancing student and professional player.

### Pro and cons of different materials

The type of material used to manufacture strings influences the sound of the string as well as its diameter. When designed to be strung at the same tension, silver and tungsten result in thinner strings, aluminium and nylon in thicker ones.

Strings wound with silver have a warm and powerful tone colour, which is preferable for the lower strings in the set.

Tungsten is used in the form of round wire built in under the flat wound surface of a low string. Apart from its positive influence on sound, tungsten allows a thinner low string, something which considerably eases fingering and string response.

Aluminium winding lends brightness to the string, so to achieve a good compromise between the right sound and the right diameter, this material is used predominantly for the upper strings of a set.

Most string players change their strings about every six months. Although the string may still appear to be in good shape, over months of playing, strings gradually lose their brilliance and responsiveness. Investing in new strings every six to eight months means that your instrument will consistently produce its best sound.

### Putting on your new string

Only change one string at a time!

After the old string is removed insert the thin silk-wound end into the peg hole avoid crossing the other strings.

Wind the string several times around the peg toward the peg knob (starting from the middle and winding towards your hand).

Insert the ball or knot end into the tailpiece or tuner. Make sure it catches in the hole of the tailpiece or prongs of the tuner.

Thread the string over the notches in the bridge and nut and tighten to the correct pitch.

Do not over tune!

## Tips:

- Wipe the string with a cloth before you put it on the instrument.
- Avoid pulling the string. (This can stretch the core material.)
- Play the strings immediately after tuning to correct pitch.
- Always change the entire set so you don't mix old with new strings.
- Look to see that the bridge is standing straight and is in the correct position.
- Make sure your bow is well rosined.

## Extending the life of the String

- Do not over tune.
- Wipe the strings clean after use.
- Rosin and perspiration build up will result in early deterioration of the winding.
- If a cloth cannot remove build up dampen a cotton ball with alcohol, turn instrument upside down (do not allow liquid to touch the varnish!!!), and clean strings.
- Apply graphite (pencil lead) to the notches of the nut and bridge. This acts as a lubricant so the strings will slide easily helping to eliminate damage to the winding.
- Slightly lower the pitch of synthetic core strings when travelling in an aircraft. Low humidity causes the material to shrink - this will result in raising the pitch and the string may break.

## Your String's Break-in time

Break-in time can be decreased by running the entire length of the string through your thumb and forefinger (slightly bending the string) several times. Each time you pull the string through your fingers turn the string. This will increase its suppleness.

Change the strings if;

The winding frays or it feels loose under your fingers.

The string no longer rings and sounds dull or woolly.

Wolf tones increase.

Fifths are no longer true.

## Corrosion

Environmental factors and usage can lead to changes in the quality and colour of the string's surface, for example:

Silver and silver-plated copper tend to react chemically with traces of sulphur in the air, resulting in a brownish discoloration of the string.

Bringing aluminium into contact with other metals under humid conditions (whether caused by air humidity or perspiration) will cause an aluminium wound string to corrode.

High humidity and condensation can tarnish various metals. This normally happens when the instrument is not stored under proper conditions and is subject to variations in temperature, high humidity, maritime climates or air pollution. Unfortunately it is not possible to manufacture strings which are safeguarded from these influences without sacrificing their tonal and playing qualities.

## Qualities of the most popular strings

### **All-Metal or Steel-Core Strings**

All-metal strings, often called steel core, have a simple, bright, and well-focused sound. Their advantage is very quick response, a stable pitch and volume. The down-side of the all-metal string is a thin or edgy quality to the sound with few overtones and no real complexity. Country, folk and jazz musicians often prefer steel strings for their volume and pure, direct sound.

**Thomastik - Spirocore.** Spirocore strings with a spiral steel core. A bright sounding string with some edge. The sound is full and homogenous, balanced and voluminous. They are especially popular with cellists who need a great deal of brilliance. The cello G and C tungsten are high-tension strings with a big sound. The silver G and C have less of an edge to their sound. Spirocore is also much favoured by jazz bassists because of its suitability for amplified pickup tone. Thomastik-Infeld has tackled notorious cello problems such as wolf notes and muting difficulties with Spirocore C and G strings in wound tungsten and silver wound. Spirocore's hi-tech core makes for effortless fingering, responsive bowing, stable tuning and a very long string life. With Spirocore the steel string's technical possibilities have been developed to their maximum.

**Thomastik - Superflexible.** Superflexible strings with a braided steel core. This string is an advance over conventional solid strings, lying midway in the path of evolution from the solid core to the advanced spiral core type. Dark, warm tone, recommended by Zeta for their electric violins. They can sound a bit dull on some instruments.

**Thomastik - Precision.** Precision steel strings with a solid core. Robust, inexpensive solid core steel strings.

With their solid core, these steel strings are strident in tone and feel, lending the sound brilliance and enhancing the player's confidence on the instrument. Precision strings are ideal for students, ensemble players and folk musicians. This standard model has remained popular to this day, not only because of its price range but its long playing life.

**Pirastro - Chromcor.** A bright string, excellent for inexpensive student instruments, especially of small size. Steel string, medium gauge only, bright sound, big tonal volume, easy response, immediately tuned. Available for small instruments: 3/4 - 1/2; 1/4 - 1/8; 1/16 - 1/32.

**Pirastro - Chromcor Plus.** Available for cello in A and D and viola A. These strings have a more sophisticated sound than the regular Chromcor.

**Pirastro - Permanent.** A high quality string for viola and cello with a clear, powerful sound. Available only as an A string for viola. Warm sound, especially good when matched with gut strings. The A is especially good to match with gut strings.

**Pirastro - Piranito.** Steel string, medium gauge only. Attractive steel string, brilliant sound, easy to play. Available for small instruments: 3/4 - 1/2; 1/4 - 1/8; 1/16 - 1/32.

**Pirastro - Flexocor.** High quality string for viola, cello and bass with a warm sound. The A string is also good to match with gut strings. Flexocor bass strings are popular with classical players.

**D'Addario - Helicore.** Multi-Strand twisted steel core strings are superb for advanced and professional players. The small string diameter provides quick bow response. Through special manufacturing techniques, Helicore strings have a warm, clear sound with excellent pitch stability and longevity. This string has a warm sound, unusual for a steel core string. Cellists and violists especially like the G and C strings. Violinists who play electric instruments have taken to these strings. Helicore bass strings are available as Orchestra, Hybrid and Pizzicato. The Hybrid is for players who want both a good bowing response and a good pizzicato response. The Pizzicato is for the player who plays primarily or solely without a bow. The Orchestra is for players who want to primarily play with a bow.

**D'Addario - Prelude.** A solid steel core string that is excellent for students and amateur players. A durable string that is not affected by temperature and humidity changes. Prelude strings are bright, without the shrill sound of traditional steel strings, and are easy to bow. Suitable for beginner Students.

**Jargar.** These strings have been popular for many decades, especially with cellists. The G and C strings are also available with silver winding for a brighter, more brilliant sound. Jargars have a warm sound when compared to most other all-metal strings.

**Larsen.** These premium priced strings were introduced only a few years ago and have become popular with cellists for their pure, clear sound. The Larsen Solo Edition strings have a brighter, more brilliant sound. Available as A and D Steel and G and C Tungsten for cello as well as sets for both violin and viola. Larsen Strings Launch the New Cello C & G. With its new cello G and C medium wire core strings, Larsen Strings have developed this string to emulate the musical qualities of the classic gut string. With a unique wire core at their heart, the new strings offer many of the qualities that soloists, orchestral players and chamber musicians require: Great strength and volume. Deep, beautiful sonority with a distinct clarity. A clear attack and an immediate response.

## Synthetic-Core Strings

Synthetic-core strings, usually made from a type of nylon called perlon, have a rich, full quality and an easy, quick response.

Although not as complex or subtle as gut-core strings, the synthetic-core brands still share many of the tonal qualities as gut strings. In addition, synthetic-core strings do not need to be tuned as often as gut-core, and stabilize after a day or two of stretching on the instrument.

**Thomastik - Dominant.** The original synthetic core string, made with Perlon. Dominant strings are bright and responsive and are by far the most popular. When new, Dominant strings have a metallic edge, which fades after a few days of playing.

Comparable in sound to gut, without gut's disadvantages. These strings have a highly flexible, multi-strand nylon core and cater for artists who feel uncomfortable with steel strings. The resounding success of Dominant strings owes a lot to its similarity in tone and response to gut strings, without gut's attendant drawbacks.

The sound of the Dominant string is full and mellow, yet rich in overtones. Its radiance, its ability to project sound without being metallic, comes to the fore both in arco and pizzicato. Other advantages are Dominant's effortless response to intricate fingering and its tuning stability even under extreme atmospheric conditions. But Dominant's beauty of tone is not as long lasting as that of a steel string, a price the discerning musician will be prepared to pay for this quality of sound. Dominant strings should be changed at appropriate intervals to ensure continuity of tone colour.

**Thomastik - Infeld Red and Blue.** The Infeld Red has a darker, warmer tone and the Infeld Blue is more brilliant in sound. They are designed so that you can mix and match them on your violin to get the balance you need. The tension is the same for either set. The Blue set has a brilliant sound like the Dominant but with more character. They break-in quicker and don't have a metallic edginess when new. The Infeld Reds are warmer and darker in tone but not dramatically so. The difference is subtler than the difference between Pirastro's Obligato and Evah Pirazzi. The Infeld Violin system affords the player a list of advantages: relatively insensitive to excess humidity, strings settle in quickly, stabilising early on in the string's life for concert use, low overall tension on the instrument produces an open, transparent sound, very responsive to different playing techniques, lending itself to various interpretative approaches, large and full sound, making the string sets suitable for soloists and chamber music players, good purity of open fifths, even when strings are older, excellent response in all positions.

**Thomastik - Vision and Vision Titanium.** Wound on an advanced synthetic core, these strings create a rich, brilliant, complex sound and are easy to play. They take just 2-4 hours to settle in and offer high tuning stability. They are designed for advanced players in orchestral and chamber group settings. VISION TITANIUM has a pure focused tone, and is the choice for soloists. The ball ends are made of Titanal. The string surface is highly polished. Features volume, stability, quick break-in, response, reduces wolf tones.

Note: The ball on the E string is removable to convert it to a loop if you want to use this string with a loop-type string adjuster. Fine tuned to meet the needs of orchestra players, a warm focussed gut sound, well balanced which helps widen the colour range.

**D'Addario - Pro-Arte.** Nylon core strings, which are exceptional strings for serious students and amateur players. The Pro-Arté strings have a warm sound, are less sensitive to humidity and temperature changes, and break-in quickly. Step-up string from Prelude, suitable for the advancing students.

**D'Addario - Zyex.** Zyex is a new generation of synthetic material. Created to be stable for drastic climatic conditions and settles in very fast, within a matter of hours. Zyex has a warm sound. They have a brilliant, very focused sound, but without a great deal of complexity. They are very stable in pitch.

**Pirastro - Evah Pirazzi.** The advantage of this new core material over nylon, carbon and steel is that it offers a wider range of sounds. Intensive, powerful sound - excellent for soloists. Exceptional playability, and good response at any dynamic level. They resonate beautifully and have a silvery, sweet, noble and full tone. The sound is complex, rich with overtones based on a brilliant core sound. Wide dynamic range. Complex tone based on a focused warm core sound which has great playability, excellent response and stability. These can be used in any environment no matter the degree of humidity or changes in temperature. They take longer to settle in than other synthetic strings, four to five days.

**Pirastro - Violino.** The Violino is a warm sounding string and it has the lowest tension. The sound can be described as smooth, very warm with a lot of colour to them to allow the nuances of the music to be interpreted well. Both on the strings and off the strings strokes can be performed readily. The strings are well balanced and very stable. They are very easy to play, have a soft and gentle touch and a fast response. The Violino has a warm, full tone that seems to work well with new student instruments, especially those of European origin, with a bright, hard tone. These strings seem to take away some of the edge.

**Pirastro - Tonica.** These strings have many excellent qualities. Brilliant like the Dominants, Tonica strings have a fuller sound with more overtones and less edginess. The break-in time is very short and is reported to have a long life.

**Pirastro - Aricore.** This was Pirastro's first synthetic string. The sound is warm and mellow like the Eudoxa. The D, G and C are popular with a number of cellists who require a darker sound.

**Pirastro - Synoxa.** Very similar to the Dominant strings in brilliance. The cello G and C silver work well with a steel A and D like Jargar and Larsen.

**Corelli - Crystal.** These strings are excellent for instruments with a very bright sound. They have a warm, full sound that can reduce the harshness of many bright instruments.

**Corelli - Alliance.** These premium priced strings have a kevlar core. Their sound has more brilliance than the Corelli Crystal along with a richness and complexity. Alliance strings also seem to have a longer life than most other synthetic strings.

### **Gut Strings**

Gut-core strings have the greatest richness and subtlety. Most often used by professional classical musicians, a gut string produces a warm sound, full of complexity with rich overtones. Gut strings are, however, prone to weather effects, these strings take longer to stretch and, during this period, require tuning more frequently. They don't last as long as the metal or synthetic strings and are more expensive. Gut-strings are usually not used by beginners or intermediate players.

**Pirastro - Olive.** These premium strings have a brilliant sound with rich complex overtones and a relatively fast response. Brilliant sound with big tonal volume and high ability of modulation. Quickly tuned, brilliant warm sound, rich in overtones, easy response. The Olive E is gold plated and has an unusually pure, clear and brilliant sound.

**Pirastro - Eudoxa.** One of the most popular of strings before the introduction of synthetic core strings, the Eudoxa has a warm, mellow sound with a slower response than the Olive or synthetic core strings. Great on some older instruments but can be a bit dull on others. Excellent warm sound which offers a high ability of modulation, quickly tuned, bright powerful sound, easy response.

**Pirastro - Gold Label.** An economy gut string with a sound mid way between the other Pirastro gut strings. Available only in medium gauges. The violin E string is popular for its brilliance.

### **A Final Note about Strings**

All of the E strings for violin and most of the favoured A strings for viola and cello are all-metal. Otherwise, on violin and viola the synthetic-core strings are by far the most popular. Fiddle and folk players often prefer the added volume of the all metal strings. For cello, a greater variety of both type and brand are commonly used. Metal Top A & D and synthetic bottom G & C combinations are popular although many cellists find they want the added brilliance or clarity from using all metal strings. There are many players, however, that prefer the gut string sound for its colourful and complex qualities.

If you would like any help deciding which strings to try next, please feel free to [get in touch](#), and we will be happy to offer advice and assistance.

This is one of a series of Instruction sheets prepared by JPB Music to help players gain a better understanding. We write these to assist, but if you are still unsure, please either phone for more advice, or ask your teacher for help.

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