

This lesson is designed to give you all of the basic information that you need to know about different types of acoustic and electric guitar strings. We will talk about string gauges, types of acoustic strings, types of electric strings, coated vs. non-coated strings, nylon strings, flatwound vs. roundwound, what strings are made of, differences in tone and much more.

Hopefully you will use this lesson to educate yourself about the different kinds of strings out there and maybe even use some of the different types of strings that you learn about to experiment with your own personal guitar tone.

String Gauges

Overview - The Gauge of a string is simply the thickness of that string. This is usually measured in thousandths of an inch. Typically a set of strings will be named after the thickness of the 1st or thinnest string in the set. You may hear some say that they use "10's". That just means that they are using a set of strings where the 1st string is .010 of an inch thick.

Acoustic String Gauges - Acoustic guitar strings usually come in sets anywhere from .010 - .013. The most common gauge is considered to be light or .012 gauge. Anything lighter than .012 is considered to be a custom-light or an extra-light. Typically, the heaviest acoustic strings that you will see will be medium or .013 gauge.

Acoustic String Gauge Pros & Cons - Thicker gauge strings sound fuller and louder but they are harder to play. This is great if you like a really thick tone or need a lot of volume out of your acoustic guitar. Using a thinner gauge of strings will make your guitar easier to play but you will sacrifice some tone and volume.

Electric String Gauges - Electric guitar string gauges usually range from .008 - .013. You can find sets thicker than .013 but they are usually flatwound sets or for baritone guitars. Typically you will find .009 or .010 gauge strings on most electric guitars. Jazz guitars will typically have thicker flatwound sets on them.

Electric String Gauge Pros & Cons - Thicker gauge strings sound fuller but they are a bit harder to play, just like on the acoustic. If you are more concerned with having a fat tone than you are with playability you might want to use thicker strings on your electric. Thicker gauge electric strings are also great if you down tune your guitar. Using a thinner gauge of strings will make it easier to play your guitar but you will sacrifice some tone and the strings will be a bit looser feeling.

Acoustic Strings: Bronze vs. Phosphor Bronze

Bronze

Bronze acoustic guitar strings are typically pretty bright when compared to phosphor bronze strings. They are also more golden in color while phosphor bronze strings have a bit of a red or copper tint to them. Bronze is made of 90% copper and 10% tin. Typically, bronze guitar strings will be 80% copper and 20% tin. Bronze is softer than steel but it still resists corrosion pretty well, especially around salt-water or humid climates.

- **Common Brands** - D'Addario, Martin, Ernie Ball, Elixir, Cleartone, John Pearse, GHS, Dean Markley, DR, Fender, Black Diamond.
- **History and Usage** - Discovered around the 4th millennium B.C. Used for tools, tiles, boat fittings and Cymbals.
- **Alloys** - Typically 90% Copper and 10% Tin.
- **Sound** - A bit brighter than Phosphor Bronze strings.
- **Cost** - Non-Coated \$5 - \$10. Coated \$10 - \$20.

Phosphor Bronze

Phosphor Bronze acoustic guitar strings are a bit warmer and airy than regular bronze strings. A lot of players think that this makes them better for finger picking. They also have a bit more of a red or copper color to them as well. Phosphor bronze is like regular bronze but it has a small amount of phosphor added to it. This helps to keep the metal from oxidizing or corroding as quickly.

- **Common Brands** - D'Addario, Martin, Ernie Ball, Elixir, Cleartone, John Pearse, GHS, Dean Markley, DR, Fender, Black Diamond.
- **Other Uses** - Ship propellers, springs, bolts.
- **Alloys** - Typically 90% Copper, 10% Tin and a small amount of Phosphor.
- **Sound** - A bit warmer and robust than regular Bronze strings.
- **Cost** - Non-Coated \$5 - \$10. Coated \$10 - \$20.

Electric Strings: Nickel Plated, Pure Nickel & Stainless Steel

Nickel-Plated

Nickel-plated strings are probably the most common type of electric guitar string in use today. The winding on the thicker strings is made of nickel-plated steel. The

steel that the string is made of is great for the magnets in the pickups to “pick up” while the nickel-plating helps to balance out the bright sound of the steel. The nickel also helps to keep the string smooth and protects it from corrosion. Nickel is a bit softer than steel so nickel or nickel-plated strings won’t wear your frets out as quickly as stainless steel strings will.

- **Common Brands** - D’Addario, Dunlop, Ernie Ball, Elixir, Cleartone, GHS, Dean Markley, DR, Fender, Gibson, Rotosound.
- **Alloys** - Steel strings with nickel-plating on the winding of the wound strings.
- **Sound** - Bright but balanced. The nickel plating mellows out the sound of the steel a bit for a bright but balanced tone.
- **Cost** - Non-Coated \$5 - \$10. Coated \$10 - \$18.

Pure Nickel

Pure nickel strings are more mellow and warmer sounding than stainless steel or nickel-plated strings. If you are in to blues, jazz or classic rock you might really like the thicker sound of pure nickel strings. Nickel is pretty good at resisting corrosion and is a great metal for the magnets in the pickups to “pick up”.

Common Brands - D’Addario, DR, Ernie Ball, Fender, Gibson, GHS, Thomastik.

Alloys - Pure Nickel

Sound - Warmer and more mellow than Steel or Nickel Plated strings.

Cost - \$5 - \$20 More expensive sets are usually flatwound strings.

Stainless Steel

Stainless steel strings are the brightest and sharpest sounding of all electric guitar strings. They also last a long time and stay bright due to stainless steels inherent ability to resist corrosion. Stainless steel does feel quite a bit different than other electric strings. Some players say that it feels a little dryer or just not as slick as nickel or nickel-plated strings. Stainless steel is a pretty hard metal so it can wear your frets out quicker than nickel strings but if you want a brighter sound it is the way to go.

- **Common Brands** - D’Addario, Dean Markley, DR, Dunlop, Ernie Ball, Fender, GHS, Rotosound.
- **Alloys** - Steel with chromium and Nickel.
- **Sound** - A bit brighter than nickel-plated strings and quite a bit brighter than pure Nickel strings. Pretty sharp sounding.
- **Cost** - \$5 - \$15

Coated vs. Non-Coated

Coated Strings

Coated strings are treated with some kind of webbing or “coating” that prevents the string from oxidizing, corroding and getting dirty. This will help the string to sound new and bright for a longer period of time. Coated strings are quite a bit more expensive than non-coated strings, about twice as much, but if you hate changing your guitar strings they are worth the extra money. I find that coated strings generally stay bright and fresh about three times longer than non-coated strings. Coated strings are a great option if you have a corrosive body chemistry, play a lot or live in a place with high humidity.

- **Common Brands** - D’Addario, Cleartone, Dean Markley, DR, Elixir, Ernie Ball, GHS, Rotosound, Sevilla.
- **Coating** - Polymer webbing or molecular treated strings.
- **Cost** - Electric \$8 - \$13 Acoustic \$10 - 18

Non-Coated Strings

Non-coated strings are quite a bit less expensive than coated strings but they lose their brightness much more quickly.

- **Common Brands** - D’Addario, Black Diamond, Dean Markley, DR, Dunlop, Ernie Ball, Fender, Gibson, GHS, John Pearse, Martin, Rotosound, Thomastik.
- **Cost** - \$5 - \$10

Nylon Strings

Tension

Nylon string sets are measured by tension instead of thousandths of inches like metal string sets. There are generally three levels of tension for nylon strings: Normal, Hard and Extra Hard. Normal tension strings are quite easy to play on but they can get quite floppy if you are playing louder or faster kinds of music.

Hard tension nylon strings tend to hold up to louder or faster types of music better but the added tension can be harder on your fingers. Extra-hard tension is generally for very fast or loud music. They are considerably tighter feeling than a set of normal tension nylon strings. A lot of very fast players use extra-hard tension strings.

Ball vs. Tie End Nylon Strings

There are two basic ways that a nylon string can attach to the bridge of a nylon string guitar, ball end and tie end. Typically when you see a nylon string guitar it will have a tie end string on it. Tie end strings require a bit more work when changing strings but they are much more popular.

Ball end nylon strings have a plastic or metal bead or ball on the end that lets you avoid the tying process when changing strings on your nylon string guitar. These types of strings are a bit harder to find and not nearly as popular.

Roundwound vs. Flatwound

Roundwound Strings

Roundwound strings are what most people think of when they picture a typical guitar string. If a string is roundwound that simply means that the winding on the thicker three or four strings is round. It is kind of like winding a straightened out paper clip around another straightened out paper clip. Roundwound strings are brighter than flatwound strings.

Flatwound Strings

Flatwound strings are warmer and quite a bit more mellow than roundwound strings. That is why flatwounds are generally used for jazz some kinds of blues music.

The winding on the strings is not round but flat. That is what makes the sound so mellow. Think of it as taking some wide ribbon and wrapping it around the cardboard roll of some used up wrapping paper. Flatwound strings generally last much longer than roundwound strings because there are fewer crevices in which dirt and grime can get trapped.

How to Tell When You Should Change Your Strings

There are generally three ways to tell if you should change your strings, how they sound, how they feel and how they look. Arguably, the most important of these is how your strings sound. If they sound good to you, there is probably no need to change them. If they sound thuddy, muddy, dull or flat it is probably a good idea to go ahead and change them.

Now let's talk about how your strings feel. If they feel slick and clean you are good to go. If your strings feel really dry, dirty or rusty it is definitely time to change them. You don't want to get tetanus right!

Take a look at your guitar strings. Are they shiny and glossy looking or do they look dull, tarnished and like someone just ate off of your fretboard. If the latter is the case you know what to do . . . give them a change.

How Often Should You Change Your Strings

How often you should change your guitar strings depends upon quite a few things. How much you play, where you live, your body chemistry and how well you take care of your strings all can all be a factor in how long your strings will last.

Some players change their strings every week or after every show while others go months without a string change. How much you play has a lot to do with how often you should change your strings. If you play tons you will probably change you strings every week or two. Just remember to keep an eye out for the things we discussed in the “How to Tell When You Should Change Your Guitar Strings” section and act accordingly.

How to Make Your Guitar Strings Last Longer

There are a couple of things that you can do to make your strings last longer. First of all, wash your hands every time before picking up your guitar to play. This will keep the dirt and oils that are on your hands from getting on your strings and causing corrosion.

The second thing you can do is wipe your strings down with a polish cloth or rag after you play. While you have your polish cloth out you may as well polish your guitar up too. These two simple things can really cut down on your monthly string bill.