



## Guitar String Construction

**Hex Core** - The hex core wire is typically a high carbon steel alloy that is six sided in cross section. The six individual points firmly grip every turn of the winding wire. This insures a longer lasting string by keeping the core from slipping in the winding and causing a "dead" string. Today, unless the string package reads differently, you can assume that it's a hex core.

**Round Core** - In the past, round core strings were all that a guitarist could buy. Now, the options for round core are limited, but most manufacturers have at least one set in their product line up. Most often, it is paired with a pure nickel wrap to produce vintage strings.

A round core string provides more physical contact between the core wire and the winding. This enhances the sound of the string through greater sustain. Some players insist round cores break more often. This is probably due to the fact that round wound strings are more flexible. This means a softer feel and easier bends.

**Round Wound** - Of course, as the name implies, the winding itself is a round wire. Round wound is the most common shape, producing the brightest and clearest sound on acoustic, electric, or bass.

**Half Round** - Half round strings begin as round wounds and then follow one of two paths. The round winding is either crushed with rollers to a semi-flat surface (also known as roller wound or burnished) or it can be precision ground and polished. Either way, the flatter, smoother surface of the half round produces less finger noise. The trade off is a loss of brightness. Half rounds are both harder on your frets and fingers.

**Flat Wound** - Flat wounds are made with a flat ribbon winding which produces a completely smooth outer wrap. This provides for effortless sliding and practically eliminates finger noise. They produce a flat, dark sound. Tension-wise, flat wound strings are stiffer and, thus, more difficult to bend. They can be wrapped in steel or nylon tape winding.

**Elliptical Wound** - This is unique to Dean Markley Helix strings and the website states the following:

Dean Markley Helix HD Nickel Plated Steel Elliptical Wound Electric Guitar Strings offer a full, bright, and resonant tone with an ultra quiet, ultra smooth feel due to the Hyper-Elliptical Winding process which produces more wraps and mass compared to other manufacturers' strings of the same gauge.

The elliptical shape of the wrap wire (8% pure nickel-plated steel, wrapped over tinned mandolin hex-core) supplies maximum mass for the each string gauge while maintaining optimal string vibrancy, which also gives the string a longer life! The tighter windings also minimize corrosion.