

There are several ways wire is gauged:

AWG- American Wire Gauge

SWG- Standard Wire Gauge sometimes referred as the British Imperial Standard

IEC 60228- International Electrotechnical Commission

If you live in the USA, the wire you'll see online or in stores is most likely labeled in AWG. This gauge system is very different from the SWG and you should be sure to ask at what standard the wire is gauged. If you live in European countries, the wire will most likely be calibrated in SWG. About the only commonality is the lower the wire number, the larger the diameter of the wire. The higher the number, the smaller the diameter of the wire. This will now bring in the IEC 60228. This I believe will be the most convenient way to describe the wires since we can look at the diameter of the wire in millimeters. I will add a chart to help cross reference the most popular wires we use in the construction of headpieces for dance.

The next thing you need to keep in mind when ordering wire is the hardness or softness of the wire. Once again, there are many different ways to categorize the wire:

Hard

$\frac{3}{4}$  Hard

$\frac{1}{2}$  Hard

Soft

Dead Soft

You'll also see terms like Heavy Weight, Medium Weight and Light Weight. So, the wire shopping is a confusing one that often ends up as a trial by purchasing error.

Next will be what is the metal used:

Copper

Stainless Steel

Sterling Silver

Sterling Silver-filled

Gold-filled

I should mention there are different wire shapes like:

Round

$\frac{1}{2}$  Round

Square

Cable- multiple strands of wire slightly twisted together

Next up is Millinery Wire that can be wrapped in either Rayon or Cotton.

## Gauge Sizes

AWG	SWG	IEC 60228
16	18	1.3mm
18	19	1.0mm
20	21	0.78mm
22	23	0.6mm
24	25	0.5mm
26	27	0.4mm
28	30	0.3mm

Now we'll discuss which wire gauges can be used in each situation.

16-18 gauge (1.3mm-1.0mm) wires are thick and will require good tools. The wire in a medium or heavy weight holds its shape well. If you want to make wings or the base for a headpiece, this is a good wire to start with. Do not purchase this in an aluminum metal. It will not hold its shape.

18-21 gauge (1.0mm-0.78mm) wires are still fairly thick. It is a little more hand malleable and great with tools. It is a great start for headpieces and smaller size wings. Can be used on a jig.

20-23 gauge (0.78mm-0.6mm) wires are great for starting the bead type headpieces. Most beads are able to be threaded onto these wires. The wires can be shaped by hand or by jig.

24-30 gauges (0.5mm-0.3mm) are great wrap wires. It really depends on how you want the wires to show. Is the wire a design feature or do you want to use finer wire so it isn't as visible on the headpiece? Wrap wires are very fine and fragile. They will kink and break if stressed too hard.