

January 2008 Featured Products

Gold Filled

Basic Principles of Gold Filled Products:

The basic principle of Gold Filled products has remained unchanged since it was first discovered more than two centuries ago; fuse a layer of 10 karat gold or better to a strong supporting metal via heat and pressure. The gold must weigh at least 1/20th of the total metal weight. Although the basic principle has remained unchanged, manufacturing methods have not.

Hydraulic presses, rolling mills, wire and tubing drawing machines and scientifically controlled furnaces have aided in the production of fine products on an economical basis. Today, depending on the manufacturers' requirements, a wide variety of supporting metals such as nickel, bronze and silver are used.

Gold Filled jewelry has the beauty of its actual karat gold plus unusual resistance to wear... all at a reasonable price.

How it is made:

- **Sheet** – A layer of karat gold of proper thickness is fused to a suitable supporting metal. This fusion is accomplished under very exacting controls of heat, time and pressure so that the bond between gold and supporting metal is flawless.

The gold can be fused to both the top and the bottom of the supporting metal creating a double plating. The gold weight must be at least 1/40th on the top and also on the bottom for a minimum gold weight of 1/20th of the total metal weight.

Once the gold and supporting metal are fused into a single piece, it is fed through specifically designed precision rolling mills, where under tons of pressure it is rolled repeatedly until it is reduced to required thickness. Throughout this precision rolling of the Gold Filled sheet the karat gold layer maintains its proportionate thickness to the supporting metal. The gold has been densified so that it is hard and durable.

- **Wire** – Gold Filled wire is made by first inserting a core of supporting metal into a karat gold cylinder and then fused together into a single round rod.

The round rod is drawn repeatedly through powerful wire reducing mills, thus creating a long wire. The finishing process consists of drawing the wire through accurately cut diamond dies which reduces it to a desired diameter.

Special shapes and fancy designs may be given to the Gold Filled wire by the additional process of feeding the wire through hardened-steel shaping and patterned rolls.

- **Tubing** – The process starts with a flat disc of Gold Filled sheet. This disc is first formed into a cup shape. Then, by further shaping and cupping in specially designed draw-presses and by drawing over hardened steel arbors through a series of dies on horizontal drawing machines, a long, seamless, strong, precision-drawn Gold Filled tube is produced. In this cupping and drawing process the layer of gold remains evenly distributed because of the thoroughness of the original fusing and the extreme care exercised in the subsequent rolling and drawing. The precision dies used and the evenly controlled power of the drawing machines produce Gold Filled tubing with a uniformly hard, durable gold surface.

*Stern-Leach offers a wide variety of Gold Filled options. For a complete listing of available products and colors please contact one of our Customer Service Representatives ----
1-800-247-2754.*