

Defining White Gold

It hasn't been done. But it should be, says a WGC technical expert

As you sell more and more white gold, you may find curious consumers asking how the white color is achieved. Isn't gold naturally, well, golden?

Gold is yellow in its natural state, though the hue varies according to the alloy used by the manufacturer or refiner. With more copper, yellow gold becomes red or rose. Other alloys hint at green and other colors.

But as Christopher W. Corti, director of international technology for the World Gold Council in London, notes, white gold is a different species altogether. Turning gold white can also occasionally make it:

- ◆ Prone to wear, because of a rhodium plating often needed to make the metal look truly white.
- ◆ A source of skin allergies in some people, usually because of the addition of a nickel alloy.

The U.S. has few standards from which you can develop consistent answers to some of the concerns you may hear about white gold, especially concerning rhodium plating and nickel content.

A joint WGC/Manufacturing Jewelers & Suppliers of America White Gold Task Force is looking into the technical and economic issues that the widespread use of white gold has created, including a growing concern about potential anti-nickel laws similar to those already in effect in Europe. The task force is gathering information on the range of white golds to help create a clearer definition of "the boundary of white," says Corti.

What Is It?

Much of what sells as white gold in the finer jewelry market in the U.S. is actually a very pale gold plated with rhodium. This is perfectly legitimate in many



White or yellow gold? The alloy is the reason. Earrings by The Design Gold Group, Hollywood, FL; (954) 424-2884, info@designgoldgroup.com.

Beaucraft[®]
Providence, RI
1-800-227-2905
beausterl@aol.com

Call for a catalog • Territories Available

countries, even in those that hallmark their gold. (Yellow gold plated in this manner is not legal.) But Corti says the consumer is left with the impression he or she is buying unplated "white gold." Should the industry begin to disclose the variety of plated vs. non-plated white golds? At this time, no U.S. regulations or standards require disclosure that white gold is often plated or that the plating has to be a certain thickness.

Only a moderate amount of white gold is plated. Most lower priced white gold jewelry is made with nickel, based on gold-nickel-silver-zinc alloys. Corti says such alloying – while popular, well-priced and free of plating wear issues – can degrade in color over time. Plus, there are concerns about nickel dermatitis (allergy).

On the higher end of the price spectrum is palladium white gold. This is gold made with palladium-zinc-silver alloys that result in a strong white color. These alloys are harder to cast and are more expensive because of the high cost of palladium, a platinum-group metal. The cost, says Corti, forces many companies to use less palladium and add copper, which eventually can degrade the color.

Nickel Phobia

The most urgent issue for most jewelers is the nickel allergy issue, though in the long run the definition of white gold is the most important, says Corti. He says the industry believes nickel allergy legislation is likely in the U.S. But regardless of any laws, the public is already increasingly aware that nickel in jewelry is a cause of skin reactions. "The image of the industry and gold jewelry is involved in this issue," says

High Quality Jewelry Repairs



"Our LaserStar Workstation has proven to be an incredible tool with great potential in our shop. It has provided an increase in production that can't be matched by anything else!"



- Tim Fuller
JA Certified Master Jeweler
Stadheim Jeweler
Mason City, IA USA

MADE IN USA

Crafford - LaserStar® Technologies

One Industrial Court, P.O. Box 15155, Riverside, Rhode Island 02915 USA
Tel: 401-438-1500 · Fax: 401-434-7260 · Email: sales@crafford.com
www.crafford.com · www.laserstar.net

A New Breakthrough In Display Lighting... Metal-Halide



White Lightning™
The Purest, Whitest Light
We've Ever Created!

Perfect for Diamonds and other fine jewels!
You'll Wonder Where The Yellow Went
With The Purest, Whitest Light Ever!

Now available
for track and
recessed in lower
wattages to provide
superior lighting for
retail stores.

Especially designed for
- high ceilings!

- 4 times more light than halogen!
- 5 Year Warranty
- 4100 Color K

EconoLite

Seeing is believing! Our new Metal-Halide lights are whiter and brighter than any Halogen.
Econo-Lite Products, Inc. 316 Princeton Avenue, Jersey City, NJ 07305
800-345-9652 201-434-6853 FAX 201-432-6143

add-A-Pearl™

*The Natural choice
for your
Cultured customers.*



Natural and
cultured
Add-A-Pearls

*W*e've made selling pearls easy with our famous system, including the traditional Add-A-Pearl programs. We help drive sales in your store with educational materials, showcase displays and gift packaging. Join the Add-A-Pearl profit network today!

Call

800.621.8333



Cultured pearl earrings

- Black or white pearls
- With or without diamonds



Friendship pendants

- With or without diamonds



Cultured pearl earrings display

- 4 mm to 7.5 mm

add-A-Pearl™

www.addapearl.com

Juergens & Andersen Co. • 55 East Washington, Suite 845, Chicago, IL 60602

PRECIOUS METALS METALSMITHING

Corti, who spoke at a seminar during the MISA Expo earlier this year. "My view is that we need a voluntary code of practice that promotes nickel-free products. Just labeling jewelry product with a health warning is not sufficient."

In the U.S., the American Assay & Gemological Office, the New York City office of the Birmingham Assay Office, offers nickel-certificate testing as part of its "Anchor-Cert" for the growing number of companies that want a third-party guarantee attached to their antiallergenic jewelry. Retailers also increasingly seek this protection, if only to enhance customer relations. But legally there is little required beyond the product label.

Muddying the nickel test issue is increasing evidence the European directive mandating the tests is, as Corti says, "not built on firm foundations." The tests, he says, are based on an artificial laboratory test for nickel release and are then subject to an arbitrary adjustment factor. "We need to come up with an improved test procedure," he says.

Defining White Gold

The methods used to create white gold have specific problems. Corti suggests specifying white gold in some repeatable and quantifiable way. He suggests there could be two grades of white gold: one premium grade that needs no plating and a standard grade that does need rhodium plating.

He qualifies the premium grade idea with a potential marketing angle. Like yellow gold's well-accepted varying colors (rose gold or pink gold, for example), various alloys produce different hues of unplated white gold, from steely colors to the warmer white of a palladium-based white gold. "Instead of just selling jewelry as white gold, why not an apple white or rose white or ice white gold?"

More and more nickel-free white gold compositions exist on the market, he says. Most are palladium-free or low in that costly additive. Many are based on manganese, iron or chromium. Corti feels these are still hard to work and a few still require plating. About the promise of these and other alternatives, Corti says: "We shall have to wait and see."

- ◆ Dr. Christopher Corti, World Gold Council, London; (44-20) 7930 5171, www.gold.org.
- ◆ The World Gold Council, New York City; (212) 317-3824.
- ◆ MJSA, Providence, RI; (401) 274-3840.
- ◆ American Assay & Gemological Office, New York City; (800) 917-7558.

— by Michael Thompson