

White Gold / Platinum Group Metals

By: Peter Roberts

Sometimes this is called white gold. Platinum is not just one metal, however - which (to me at least) still strikes me as strange. We are talking alloys, however, so maybe its no more strange than the alloys we have of gold. Be aware that when you talk platinum you may be a number of different combined metals.

The metal(s) are collectively denser, rarer, and hence more expensive, than gold itself. What makes it popular for setting gemstones is that it holds them more securely in a setting, and its rich white colour can be used to full effect in showing off gems (there is no potential minor clash of colours like with gold, in other words)

The European standard marking of Platinum is PT950, or 950, whilst in the USA (to be different I guess!) its PL or PLAT.

So what are these various metals that we all call platinum?

Osmium (Os)

Osmium/platinum alloy is usually used for standard weights - so I guess you won't see it much on rings. It is a bluish-white colour, and quite brittle.

Iridium (Ir)

The alloy, usually about 10% iridium with 90% platinum, is a very hard, white and brittle metal (which is an interesting contrast to Gold which is extremely soft) and is much harder than pure platinum.

Palladium (Pd) (or White Gold)

Now we are onto something. This is relatively rare and soft, with a white silvery colour. It is alloyed for jewelry, with gold, and commonly called white gold.

Rhodium (Rh)

This is a white silvery colour, used to plate agent platinum and white gold to create a white, durable, hard coating.

Ruthenium (Ru)

Its claim to fame is being highly resistant to wear and can be found in jewelry. It is a grayish-white colour.