



Precious Metals West / Fine Gold

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PT-H

Plumb Platinum Solders

PT-H



PT-M

PT-E

PT-E 1300 C.
PT-M 1400 C.
PT-H 1550 C.

PT-E

PT-M



Understanding Plumb Platinum Solders

Remember how much better plumb gold solders are when compared to those low karat "repair" solders? Well, now you have the same advantage available to you in platinum solders. Did you know that most 1500 and even 1600 or 1700 platinum solders contain 25% platinum or less? Some have none at all. I'll bet you would not use 6kt solder in gold! Why use a low platinum solder when you can have plumb solder at a safe working temperature? Keep those customers happy with plumb!

How to use the Plumb Platinum Solders

This solder requires no flux. We found this solder must not be used like one uses gold solder. By that I mean that this solder is fairly viscous, unlike gold easy flow solders. The new platinum solder stays close to the joint.

All reports of discoloration have been related to heating the solder before the joint is soldered. Do not heat this solder into a ball for use with a solder pick. Place the clipped solder in or on the assembly joint. With sizing there is no problem as long as you have enough tension in the joint to hold the slice of solder. One important advantage to the new solder is the superior color match at the lower flows. This allows one to melt the solder all the way through a shank without fear of melting the ring shank itself.

PT-E is 90% Pt, and 10% alloy, and flows in the 1300C range-Our "easy flow" solder. As the name implies this is our "easy flow" solder that is "plumb" (same content as the intended jewelry) to all the 90%Pt/10% Ir or Ru or whatever. Its color is closest to 90/10 of course.

PT-M is 92.5% platinum. The way to increase the flow temperature was to increase the platinum. This material flows in the 1400C range. This is our "medium flow" solder. Its color works with any kind of platinum jewelry, but is only truly "plumb" to 90/10 jewelry.

PT-H is 95% platinum. The highest flow among the new solders, it flows at 1500C or a bit less. We call it the "hard flow" solder, despite the fact that its flow temperature is hundreds below the flow of ordinary casting platinum. It is "plumb" or better to all platinum jewelry. An ironic twist to this formula.... It may be a bit whiter than 90/10 jewelry. In certain items this can be an issue.

Easy, Medium, and Hard is one way to look at the solders. Another is to simply go by the Pt content and match whatever you are working on. That is ideal for color, and works fine when you only need one flow to do a repair. This solder is the closest color match simply due to matching the platinum content. . Scientific testing may show that our flow temps are a bit off. The tests we find most valuable are those performed by jewelers at their benches. After all, those are reality based. Scientific tests have huge value, but can be misleading to apply at the bench. Many theoretical advances in metallurgy have not worked as well as indicated by the tests.

The physical strength of this solder is very high. Like any solder the strength depends on the quality of the surfaces and the technique used by the jeweler. One will notice the solder sheets themselves are quite hard and springy. That is because they get so work hardened during manufacture. The solder will not "polish out" leaving a seam. In rare instances, like when the newly soldered joint cools very slowly, some "ridging" can be found. All of the flows indicated are determined by comparison melts, not scientific analysis. However, time and again real world testing has proved the validity of new products.

Plumb solder works well on all common platinum alloys. That includes Iridium, ruthenium, palladium, cobalt and copper. A possible exception may be the new lower flow temperature platinum's such as Hoover & Strongs heat treatable platinum. By the way just like plumb platinum solder, that is a trademark product. Due to the low melt of these casting and fabricating metals, the usual spread between the host platinum and our solder is reduced.

By the way, I want to point out that all high temp solders have a potential problem with some platinum alloys-Simply based on the relatively low melt temperature.