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# Common Mistakes Jewelers Make When Soldering

1. **Assuming 14 = 14K.** "No K is a no know". Karat laws do not govern items marked without a "K" (14YS vs. 14KYS). So if a solder is not stamped with a "K" the number is no indication of the true gold content.
2. **Thinking lower karat = lower temperature.** Lower karat does not equate to lower temperature. If a lower temperature solder is needed compare the flow points.
3. **Not stress relieving platinum.** When soldering gold to platinum the platinum must be stress relieved first. Stress in the platinum could crack the solder joint when cooling.
4. **Using cadmium solder on platinum.** When using gold solder on platinum make sure it is cadmium free. Cadmium can make platinum brittle.
5. **Using a word, not a flow point.** Soft, medium, and hard are ambiguous terms and differ greatly from solder to solder and supplier to supplier. So compare temperatures not terms.
6. **Overheating the solder.** Excessive heating can cause porosity. Solder will not flow onto a piece until the temperature of the piece reaches its flow point. Use direct heat on the solder joint not the solder.
7. **Using paste solder for sizing.** Paste solders are best for soldering small pinpoint joints and seams but will not fill a gap. Size with sheet solder for better results.
8. **Using the wrong solder on dissimilar metals.** When soldering two dissimilar metals together, use the lower temperature metal for soldering. For example, when soldering silver to gold, use silver solder.
9. **Using soft or repair solder when sizing.** Use a hard solder when sizing to prevent porosity and avoid seams.
10. **Buying only based on price.** Quality is like karma. Poor quality will come back to you. When choosing a solder provider, look for one with a wide selection, product knowledge, published temperatures and gold content.



**Common Mistakes** provided by **Krohn Industries Inc.**

*Extensive Selection and Expert Guidance*

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# Common Mistakes Jewelers Make When Plating

- 1. Not using a beaker.** Chemical beakers are designed to hold harsh chemicals and will not react with or contaminate plating solutions or the rinse water, where other containers can.
- 2. Using a karat gold anode.** Colored gold plating solutions (14K, 18K, Pink etc.) require the use of an insoluble stainless steel anode. Using any other anode will contaminate the solution.
- 3. Setting the rectifier to the incorrect voltage.** Too low can give incomplete plating coverage, and too high can result in spots or a dark finish. Use the voltage recommended by the plating solution manufacturer.
- 4. Not polishing to a mirror finish.** Plating solutions only plate, they do not polish. Plating will not hide flaws, only highlight them. Polish to a mirror finish before plating.
- 5. Thinking a small beaker half full of solution will save money.** Small baths are less efficient, so cutting corners here will cost you money.
- 6. Thinking a quart is a quart.** All solutions are not created equal. Check the bottle for metal content to know how much metal it contains.
- 7. Using tap water when rinsing.** The impurities in tap water can cause spotting and shorten the life of the plating solution. Use distilled water only.
- 8. Not changing the rinse water often enough.** Monitor the color or pH of the rinse water and replace when necessary.
- 9. Steam cleaning prior to plating.** Steam cleaning a piece before plating will contaminate the piece with the impurities from the steamer. So avoid steam cleaning.
- 10. Trying to electrostrip rhodium.** Rhodium cannot be chemically stripped. Mechanically stripping, like buffing, is the only method of removing rhodium.



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