

1. Electrolytic Chromate

Good, low cost, anti-tarnish protection with moderate protection against handling. Shelf life on coated product should be one to three months. Good for items that require gluing or epoxy after plating. Will not stiffen chain and rinses well from parts. Can be applied in rack or barrel process.

2. Tarnitan

Very good, widely used, anti-tarnish. This is a slightly waxy coating which bonds very tightly to an active silver surface. The bonded film is lubricious and will not scratch off with normal handling. This coating will provide a three to six month plus shelf life, and very good protection from handling and use. This coating is especially good on chain, giving it a silky feel and improving flexibility. Tarnitan cannot be used on any item that needs to be glued, epoxied, or lacquered after plating. Tarnitan can be applied rack or barrel. Some products that incorporate imitation pearls or glued in foil-backed stones may be degraded during the coating process.

3. E-coat

Similar to a conventional plating process in which D.C. current is used to deposit metal onto a part in a liquid plating bath. During the E-Coat process clear plastic resin is deposited onto the entire surface of the part. The parts are then rinsed and baked at 300 degrees F. for 45 minutes. This produces a crystal clear, durable coating, 200 to 300 micro-inches thick, with a pencil hardness of at least 4h. The coating is highly resistant to many chemicals, solvents and detergents. E-Coat should provide six months to one year plus shelf life and wear. There are some design limitations to remember when thinking of E-Coat. Many materials cannot withstand the heat during the baking process. These may include any casting metals containing cadmium and / or less than 92% tin, and parts with epoxy, rubber, or natural stones. Any parts that are hollow and may trap E-Coat solution also may not work. Some styles of chain may become stiff and inflexible if E-Coated. E-Coat can only be applied in a rack process.

There are other white processes as alternatives. Imitation rhodium is a white process that can provide good color, durability, and tarnish resistance. It should provide six plus months of shelf life. Imitation rhodium will turn only slightly darker over time and it will never turn yellow as would silver. It can be applied rack or barrel. Real rhodium is a very hard precious metal. It is similar to imitation rhodium except that it should be much more durable.