Durston Pen Plating Instruction Sheet

For all Gold Pen, White Rhodium Pen and Black Rhodium Pen applications.

Note the appropriate voltage for your application:

- **Rhodium White:** 4.5 - 8.0 Volts
- **Rhodium Black:** 9 - 10 Volts
- **24k Gold, 14K Gold, and Rose Gold Pen:** 9 - 12 Volts

Note on voltages: Test plate with the lowest voltage for your product and increase voltage as needed.

Temperature: Room temperature (25°C)

1. **Pen plating should be done on a perfectly clean metal surface. Following the same steps as preparing for bath plating is recommended.**
2. Mix the solution thoroughly. Swirling the bottle a few times is enough.
3. Allow the pen's felt tip to remain in the solution until the solution has been absorbed into the tip. Allow the tip to fill up with solution until it reaches the end of the pen or wand where the tip is inserted. This will ensure good electrical conductivity.
4. Rub the pen tip on the surface to be plated, moving back and forth smoothly and evenly. Make light contact with the surface you don't need to press down.
    - Small gas bubbles should form around the tip when plating. If there are no bubbles or plating is very slow try increasing the voltage 1 volt at a time for better results.
5. Refill the tip as needed to cover the area.
6. Dark spots or lines in the plating are usually caused by one of four things:
    a. Plating voltage is too high and the plating is happening too quickly.
    b. The pen tip is pausing too long in one area. Use steady non-stop motion.
    c. The surface is not clean and the solution is reacting with contaminates.
    d. The solution was not cleaned off the metal surface after plating and began to react with the metal especially silver. Clean sooner.
7. When you have the results you want wipe the surface clean. You can also clean with Durston Electrocleaner and this will extend the plating lifespan.
8. Rinse the piece with pure water.
9. If the remaining solution is clean and free of pen tip debris it can be returned to the container.