

# Hinging Success on A New Plating Process.

## Meet Our Customer

Time isn't always on our customer's side. When their customer approaches them with a large scale product that's quickly going to market, they do whatever they can to accommodate. They seek a partner they can trust, who can match their fast delivery without sacrificing quality or value. Enter Advanced Surface Technologies.

## Obstacle

Our customer came looking for a cost-effective solution for plating a small hinge that was critical to a new product. Time was short and quantities needed were high. The hinge itself was pretty small, measuring 1" long with an outside diameter of 3/8" and an inside diameter of 3/16". This MIM part required electroless nickel with PTFE to provide lubrication and prevent corrosion. The obstacle was getting enough coating on the inside diameter so the part would stand up to a 300,000 cycle test before going to market.

## Up for the Challenge

For this MIM alloy we developed a new cleaning, preparation and activation process to bond a hard, dense deposit to the I.D. In fact, we put an electrical current on the parts while in the electroless nickel plating tank to excite the surface to allow the nickel deposit to develop. Since the results had to be repeatable in large quantities, we plated thousands of components during an extensive testing phase. In the end, we established a reliable process that produced great parts for this customer and for many other customers as well.

## Impact

Creating a new process sometimes means failing multiple times before you succeed. We were determined to figure this one out and we did—quickly. Our customer was able to deliver a viable working solution to their customer on-time and on-budget.

“Our experience and expertise allowed us to not only maintain focus but be at the forefront of a process around electroless nickel that would become an industry standard.”

—Don Ytterberg, CEO, Advanced Surface Technologies

# The AST Approach

On the surface, we are a plating solutions manufacturer. Dig deeper and you'll discover that our customers think of us as problem-solvers, reliable partners and lateral thinkers. The longstanding relationships we've built over the past 50 years with our clients and our vendors are a true testament to our character. These relationships have allowed us to deliver superior plating solutions for every one of our customers. We listen, understand, and work diligently to get to the heart of our customers' pain points, because we believe that's when the magic happens.

Though we're able to meet all plating needs, we take extra pleasure in tackling the toughest plating challenges from various industries. Our tailored results don't always fit the norm in the plating world. If our process needs to change to address hard-to-plate surfaces, we'll change it. If tweaks to the chemistry of the plating composition are required to get it just right, we make them.

There's value in working closely with our customers and vendors, in fostering trust and mutual respect. When invited to collaborate at the beginning stages of a project, we're able to help customers avert potential problems before a product reaches a breaking point.

We don't settle for anything less than perfection, internally and externally. It's the reason we created our proprietary internal system with 12 lines dedicated to a specific metal and two that duplicate the same metal type, ensuring that each metal receives the proper cleaning in preparation for plating. Four of our lines are designated to certain customers, allowing us to deliver consistent quality—time and time again. We take pride in what we do, in the cleanliness of our facility, in our extensive knowledge and in ensuring the success of our customers—each and every one.

## Specialization

Our extensive experience positions us as the go-to company capable of handling unique metal plating.

- Electroless nickel plating
- Gold plating
- Silver plating
- Plating on magnesium
- Tin plating
- Electrolytic nickel plating
- Passivation and chemical conversion coatings

## Certification

We're driven by specifications and compliance, committed to creating unsurpassed products for our customers.



[astfinishing.com](http://astfinishing.com)

Phone: 303.432.8500

Fax: 303.432.8555

Email: [sales@astfinishing.com](mailto:sales@astfinishing.com)