



## Nickel-Plated Stereolithography

### The Process:

Standard Finish SLA parts are first painted with a conductive paint. Then, a coating of Copper is applied via an electroplating process. Finally, a coating of Nickel is also applied via electroplating.

### Stiffer:

Testing showed that Nickel-coating a part to 3.5 mil thickness increases its strength by 200%, at 3% strain. Also, testing shows that part stiffness is increased by more than 500%.

### Waterproof:

Testing showed that Nickel-coating makes the part virtually waterproof. When compared to non-coated parts, the coated part remains dimensionally stable over a 2 week period of immersion, whereas the uncoated part gradually increases in size (due to absorption) approaching a 2% size increase at the 2 week mark. Results in the weight gain test are similar.

### Electrically Conductive:

Nickel-coated parts are electrically conductive, especially since the coating contains copper, a highly conductive material. This means that you can now use SLA parts as prototypes for components that must be grounded or must provide some EMF shielding.



Nickel-Plated SLA

## Quickparts Advantage

- Instant SLA Quotes: Upload your 3D CAD data, define your project specs and a quote is calculated and presented, instantly.
- Latest 3D Systems Machines: Viper, SLA 7000, SLA 5000.
- Fast Time-to-Market: Same Day and Next-Day ship available for orders received before 5pm. Pick your ship date for all other orders.
- Overnight Delivery: Shipments are via FedEx Priority Overnight, unless otherwise specified.

## Highlights

- Maximum dimensions for instant quotes: 25"x25"x21"
- In the X and Y axes, standard tolerances are +/-0.005" for the first inch, +/-0.002" on every inch thereafter. In the Z height (vertical), standard tolerances are +/-0.01" for the first inch, +/-0.002" on every inch thereafter.
- DSM Somos material choices include: Semi-Flexible, Durable, Rigid, ABS-Like, ABS-Like Black, ABS-Like Gray, High Resolution (Durable, Rigid, ABS-Like)
- Wall thickness: Standard: 0.020" – 0.025"; High Resolution: 0.010" - 0.015"
- Layer thickness: Standard Resolution: 0.005" – 0.006" High Resolution: 0.002" – 0.004"
- Chrome & Nickel plating available upon request.

## Contact Information

301 Perimeter Center North  
Atlanta, GA 30346

**Phone:** 770.901.3200

**Fax:** 770.901.3240

**Email:** [qphelp@quickparts.com](mailto:qphelp@quickparts.com)

**Website:** [www.quickparts.com](http://www.quickparts.com)