



Application Note

Land Mobile Satellite TV

Problem

A major mobile satellite antenna manufacturer required a lightweight and reliable waveguide. The OEM selected PC/ABS, which required very precise thickness of Nickel plating over Copper to provide the needed antenna properties.

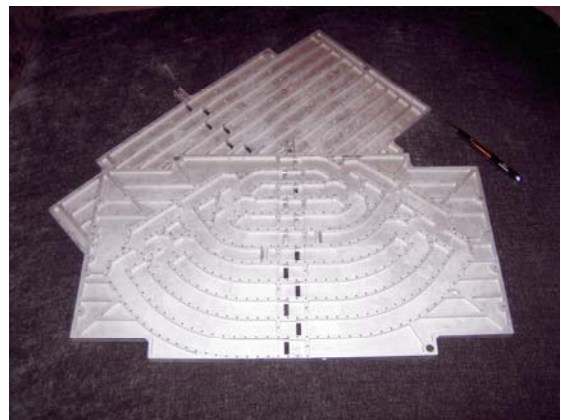
Cybershield Solution

Cybershield teamed with the OEM to develop the precise plating processes to achieve consistent plating thickness on every waveguide. PC/ABS was specified due to its low cost, high impact strength and ability to be plated. Cybershield applies all-over electroless plating with over 200 micro-inches (5.0 μ) total plating thickness onto the 12" x 20" molded waveguide.

Cybershield manages the supply chain, ordering the molded waveguides, tapping 4 precision threaded holes and applying the electroless plating. This streamlines the customer ordering process so that they only need to contact Cybershield for all ordering and scheduling of finished plated waveguides.



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Cybershield Plated Nickel over Copper Waveguide

Many other plastic resins are compatible with Cybershield plating processes.

Plateable Resins – Consult Cybershield for details

ABS, PC/ABS, Polycarbonate, Polyetherimide (Ultem), Syndiotactic Polystyrene (SPS), Noryl, Polypropylene, Polyphthalamide, Polyethersulfone (PES), LCP, Xylex, Urethane, Nylon, Epoxy, Polyetheretherketone (PEEK),

For more information about this application, Cybershield capabilities and/or to review your application requirements for metallized plastic, contact Cybershield

Cybershield
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 Lufkin, TX 75904
 214-227-3680

Email: sales@cybershieldinc.com

- Fabricate a full range of EMI shielding solutions – Electroless Plating and Conductive Paint
- Electroplating Copper, Nickel, Trivalent Chrome, including decorative plating on plastics and metal
- Offer engineering design assistance – plastic resin selection, metal coating specification and mechanical design recommendations
- Serve applications in volumes from 25 units per month to millions of units per month
- Provide extensive mechanical assembly services to its customers
- Manage entire supply chain, including plastic injection molding to provide customers with turnkey solutions, designed and manufactured to strict OEM requirements

EMI Shielding, ESD and Electroplated Coatings	Assembly Services
All-over & Selective Coverage Electroless Plating Copper, Nickel, Tin, Gold Electroplating Copper, Nickel, Trivalent Chrome Conductive Paint	Dispensed Gaskets (Conductive or Environmental) Insert Installation (Ultrasonic or Heat Staking) Decorative Paint Mechanical Assembly

Other Cybershield Plastic Metallization Systems



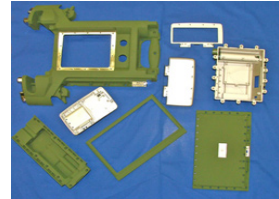
Plated Plastic
Router Chassis



Plated Plastic RF
Filter Housing



Plated Plastic
Shielded Connectors



Military Electronic
EMI Shielding