

An Electroless Nickel Process for A Clear Vision

NiOptic™

NiOptic is a high phosphorus Electroless Nickel process that can be applied with a deposit thickness up to .030" (762 microns). Developed at North American EN initially for optical components and salvage repair, NiOptic is now available for any operation that requires a substantial coating thickness that is versatile for secondary post plating operations. Ideal for diamond turning and polishing.

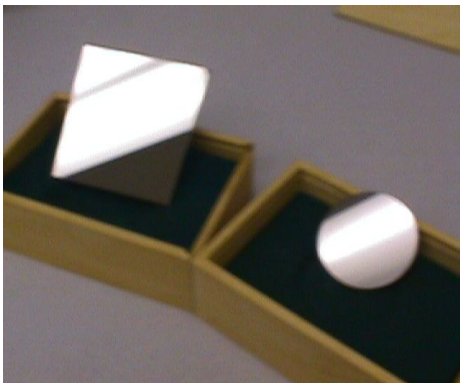


Benefits

- ✿ Unique Properties Required for Diamond Turning, Machining & Polishing
- ✿ Excellent Adhesion
- ✿ Pit Free Deposit
- ✿ Cost Saving Salvage Repair

Applications

- ✿ Optical
- ✿ Projection Video
- ✿ Automotive Safety
- ✿ Specialty Items
- ✿ Molds



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Subject to technical change without notice

Technical Data

Phosphorus Content - 11 – 12.5

Hardness

Knoops Hardness

100g Load 3.0 mil Deposit

As Plated..... 450 – 550

Heat Treated..... 900 - 1000

Wear

Taber Wear Test Index Value

Wt. Loss mg/1000 Cycle

As Plated..... 18 - 22

Heat treated 1hr 750 deg. F....10 –15

Salt Fog

Salt Spray Test (Per ASTM B117)

95 deg F 5%, NaCl, 1 mil deposit,

Hours till first Corrosion Sight Steel1000 hr

Melting Point

C 880

F 1620

Nitric Acid Test

Concentrated Nitric Acid 42 be'

30 sec room temp 1.0 mil deposit Meets or Exceeds

Electrical Resistivity - microhm-cm 0.0105

Coefficient of Thermal Expansion $\mu/m/c$14-16