

## An Electroless Nickel Process for A Clear Vision

### Ni-Optic™

Ni-Optic 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, Ni-Optic 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.

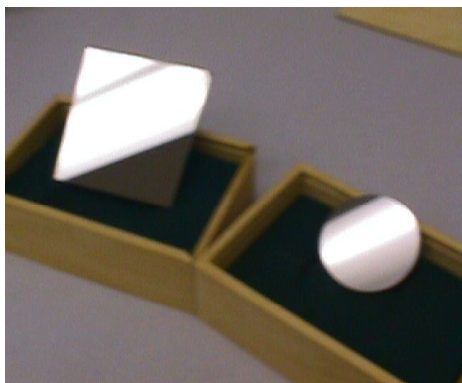


### Benefits

- 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



North American EN, Inc  
 776 Lunt Ave  
 Elk Grove Village, Illinois 60007  
 Tel 847.952.3680  
 Fax 847.690.0171  
[www.northamericanen.com](http://www.northamericanen.com)

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 Steel .....	1000 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 u/m/c.....14-16