

UPGRADE YOUR COATING

If you're looking for even more advanced features, consider upgrading to one of our synergistic Nedox® coatings. This family of coatings takes our Nedox® Basic electroless nickel to the next level by providing optimal release properties, as well as a lower coefficient of friction. Our Nedox® synergistic coatings contain polymers and dry lubricants for reliable lubricity and anti-stick properties.

Nedox® Basic

Electroless Nickel

Wear resistant coating offers corrosion protection on metals

Nedox® Basic electroless nickel is a high quality electroless nickel process worthy of the Magnaplate name, which delivers superior performance compared to other electroless nickel processes.

Our Nedox® Basic electroless nickel coating offers many distinct advantages when plating irregularly-shaped objects, holes, recesses, internal surfaces, valves or threaded parts. This coating features uniform deposit thickness and ductility relative to pure metals, and its high surface hardness and reliable corrosion-resistance makes it ideal for industrial applications.

Instead of electrolytic energy, our Nedox® Basic electroless nickel process relies on an autocatalytic reaction to create the plating by depositing nickel. As plated, Nedox® Basic's magnetic properties can range from magnetic to non-magnetic depending on the phosphorous content.









IDEAL APPLICATIONS

- · Chemical processing
- Aerospace and transportation
- · Electronics and semiconductors
- Instrumentation
- · Oil, gas and energy
- · Powder and bulk solids
- · Space exploration
- · Valves, pumps and compressors

MATERIALS

- · Stainless Steel
- Steel
- · Copper
- Brass
- Bronze
- Titanium
- Aluminum

TECHNICAL ADVANTAGES

- Operating temperatures from -250 to 1000°F
- Surface hardnesses up to Rc 63 (940 Vickers)
- Coating thicknesses from 0.0002 to 0.002 inches
- Low coefficient of thermal expansion: 7.22 x 106in/in/1°F $(13 \times 106 \text{ in/in/1°C})$
- Low thermal conductivity: 0.0105 to 0.0135 Cal-cm/sec/°C
- Excellent corrosion resistance can meet or exceed 1000 hours of salt spray resistance
- Superior quality and process control (NADCAP)
- Compliance with industry standards such as:
 - ASTM B117, ASTM B656 and ASTM B733
 - RoHS
 - **REACH**
 - MIL-C-26074 Class 1-4 and AMS 2404

TYPES OF ELECTROLESS NICKEL

- Medium phosphorous (5-9%)
- High phosphorous (10-14%)

To learn more about NEDOX Basic and other problemsolving surface enhancement coatings, contact technical representatives at General Magnaplate Corporation.