

## Nedox<sup>®</sup> Basic Electroless Nickel

*Wear resistant coating offers corrosion protection on metals*

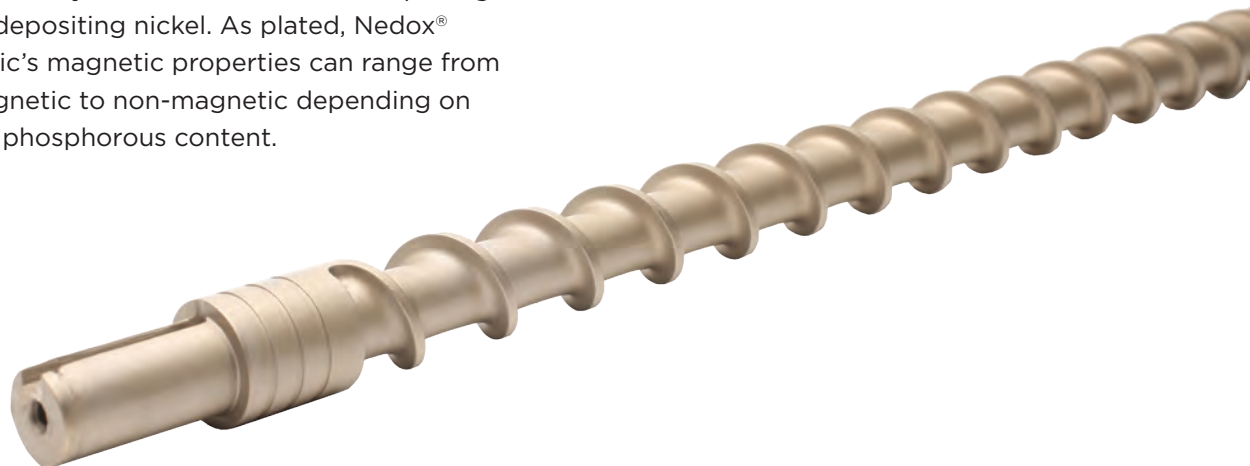
Nedox<sup>®</sup> Basic electroless nickel is a high quality electroless nickel process worthy of the Magnaplate name, which delivers superior performance compared to other electroless nickel processes.

Our Nedox<sup>®</sup> 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<sup>®</sup> Basic electroless nickel process relies on an autocatalytic reaction to create the plating by depositing nickel. As plated, Nedox<sup>®</sup> Basic's magnetic properties can range from magnetic to non-magnetic depending on the phosphorous content.

### UPGRADE YOUR COATING

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



## 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:  $7.22 \times 10^{-6}$  in/in/1°F ( $13 \times 10^{-6}$  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 and 2405.

## Types of Electroless Nickel

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

## 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.



ISO 9001:2008  
Certificate #43114



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