

# ENhanced Nickel

## A family of chemically deposited electroless nickel (EN) coatings

**ENhanced Nickel** is Anoplate's line of proprietary industrial, electroless nickel deposits. **ENhanced Nickel** deposits a uniform, smooth and shiny deposit that is proven to reduce wear, friction, and improve corrosion resistance on your components.

Strict control of bath parameters and a proprietary system setup gained from years of electroless nickel plating experience yield uniquely-developed **ENhanced Nickel** coatings with specific physical and metallurgical properties.

**ENhanced Nickel** is resistant to many common industrial gases and liquids, including:

- ✧ Acetone
- ✧ Beer
- ✧ Formaldehydes
- ✧ Milk
- ✧ Petroleum products
- ✧ Sodium Hydroxide

**ENhanced Nickel** can be applied to a wide variety of materials, including steel, stainless steel, Inconel, Monel, Invar, Kovar, aluminum, brass & copper.

### Benefits

- ✧ Uniform coverage, both internally and externally, including threads, grooves, sharp corners and other complex shapes
- ✧ Ability to hold close tolerances by preventing uneven build-up
- ✧ Variable formulations geared toward specific engineering purposes
- ✧ Excellent corrosion protection
- ✧ Superb wear resistance

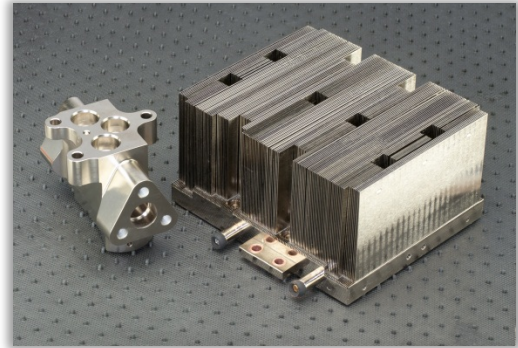
### Typical Applications

**ENhanced Nickel** should be applied where maximum wear life and corrosion resistance are required. **ENhanced Nickel** is an excellent solution for the following applications:

- ✧ Engraving and printing rollers
- ✧ Food-handling equipment
- ✧ Injection molds
- ✧ Hydraulic cylinders
- ✧ Medical diagnostic equipment

**ENhanced Nickels** meet and exceed the following requirements:

- ✧ AMS 2404
- ✧ ASTM B 733
- ✧ AMS-C-26074 (formerly MIL-C-26074)



### ENhanced Family

- ✧ **ENhanced LP9:** lowest electrical resistivity, hardest as-deposited hardness, good solderability
- ✧ **ENhanced MP6:** bright deposit, good corrosion resistance, good hardness
- ✧ **ENhanced Z11:** excellent corrosion resistance, best ductility, non-magnetic deposit
- ✧ **ENhanced PTFE:** Low-friction, self-lubricating, contains 20-25% by Volume

### Deposit Information

Formulation	Phos Content, %x Wgt	As-Deposited Hardness, HRC	RoHS, WEEE, ELV Compliant
ENhanced LP9	4-6	56-61	No
ENhanced MP6	6-9	45-50	Yes
ENhanced Z11	10-12	45-48	Yes
ENhanced PTFE	10-12	NA	Yes

### Film Thickness & Tolerances

**ENhanced Nickel** is typically specified for thicknesses in the range of 0.0002"-0.001", but can easily be applied to thicknesses up to 0.003". For extreme wear or corrosion applications, a deposit thickness greater than 0.001" per surface is recommended.