



Nickel

[QQ-N-290A]

There is a nickel finish for almost any requirement. Nickel can be deposited soft or hard, dull to bright. The difference is dependent on process used and conditions employed in plating. The hardness can range from 150 - 500 Vickers. Can range in appearance from matte, light gray (almost white) to a condition resembling stainless steel. Corrosion resistance is a function of thickness. Has a low coefficient of thermal expansion. Nickel plating is magnetic.

All steel parts having a hardness of Rc 40 or greater require a post bake at $375^{\circ}\text{F} \pm 25$ for 3 hours minimum. Note: All steel parts having a tensile strength of 220,000 or greater shall not be nickel plated without specific approval of procuring agency.

Class 1: For corrosion protection. Plating shall be applied over an underplating of copper or yellow brass on zinc and zinc based alloys.

In no case shall the copper underplate be substituted for any part of the specified nickel thickness.

Class 2: For engineering applications.

Grade A: .0016" minimum thickness

Grade B: .0012" minimum thickness

Grade C: .0010" minimum thickness

Grade D: .0008" minimum thickness

Grade E: .0006" minimum thickness

Grade F: .0004" minimum thickness

Grade G: .0002" minimum thickness