

Did You Know?

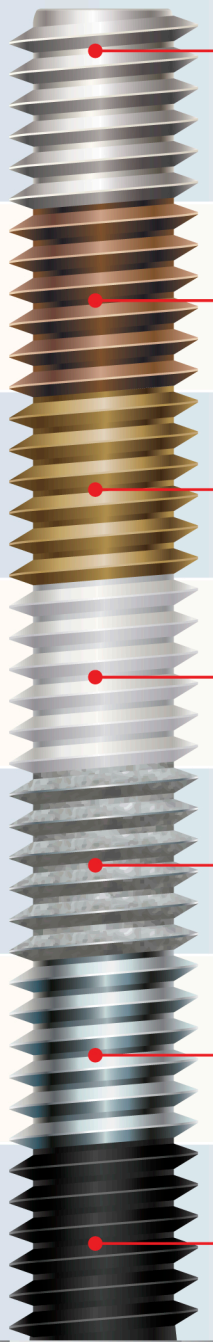
LEVELS OF CORROSION RESISTANCE

High

RESISTS CORROSION



Low



Stainless Steel

18-8: 300 series (302, 302HQ, 303, 304, 305, XM7 and others) have approximately 18% chromium and 8% nickel.

316: Austenitic and non-magnetic. Provides excellent corrosion resistance in salt (high chloride) exposures.

410: Used where strength and/or the ability to drill through mild steel is more important than high corrosion resistance.

Silicon Bronze

Silicon bronze is an alloy made mostly of copper and tin with a small amount of silicon and is used primarily in marine environments.

It's preferred over brass due to its higher strength.

Brass

Brass is an alloy of primarily copper and zinc that is highly corrosion resistant and electrically conductive.

Due to the relative softness of the metal, it is generally used for its appearance.

Aluminum

Aluminum is a light, soft, corrosion resistant metal.

Fasteners are made from a variety of aluminum alloys with added elements such as manganese, silicon, and zinc to increase strength and melting point.

Hot-dip Galvanized

Hot-dip galvanizing creates a thicker layer of zinc that bonds to the steel permanently, making it especially effective against corrosion.

Zinc Plated

Zinc plating or electroplating is a process where zinc is applied by using a current of electricity.

The zinc coating bonds to the exterior of steel or iron, creating a thin layer of protection. Zinc comes in clear, silver, and blue.

Black Oxide

Considered a decorative finish. The coating, usually oil or wax, has minimal corrosion protection.

Hot black oxide involves dipping the part into a caustic soda that bonds chemically to the surface of the metal.

Cold black oxide is a copper selenium compound that is applied at room temperature and tends to rub off easily.