



## APPLICATIONS

Aerospace industry • Medical industry  
Food processing related equipment • Defense applications

### Our Passivation Finishing Process

We can make stainless steel more corrosion-resistant through a process called passivation. It is a non-electrolytic finishing process that involves removing the free iron from the surface of the metal using a chemical solution of citric acid or nitric acid.

When the surface iron is removed, the other components of the alloy (mainly chromium, often nickel too) are left behind as a surface layer over the underlying steel. These elements react with oxygen to form a non-reactive oxide layer that protects the rest of the steel from corrosion.

The passivation does not remove the heat tint or oxide scale that may be left behind by welding or heat treating. Passivation improves corrosion resistance and leaves a clean finish, but ultimately does not change a part's appearance or make it visibly brighter.



### SPECIFICATIONS

ASTM A380 • ASTM A967 • AMS-QQ-P-35 • AMS 2700

#### CAPABILITIES & RELATED SERVICES

- Nitric acid passivation (types 1, 4 and 5)
- Citric acid passivation (types 3 and 4)
- Nitric & Sodium Dichromate passivation (type 1)
- Packaging

#### COMMON SUBSTRATES

- All grades of stainless steel

### LET US SUPPORT YOUR PASSIVATION NEEDS

Our qualified staff is ready to help you get started with a variety of passivation options. Contact our Fridley office at (763) 574-1000 or contact us for a risk-free quote at [www.ecofinishing.com](http://www.ecofinishing.com).