



Coating Material Compatibility Guide

■ - Successful Coating

■ - Contact SilcoTek for Clarification

■ - Not Successful Coating

Material Types	SilcoNert® 1000	SilcoNert® 2000	SilcoKlean®	SilcoGuard®	Silcolloy®	Dursan®	Dursox®	Notak®
6% Moly Alloys	✓	✓	✓	✓	✓	✓	✓	✓
ALNiCo Alloys	X	X	X	X	X	X	X	?
Aluminum ≥ 3% Magnesium (Mg)	X	X	X	X	X	X	X	X
Aluminum ≥ 0.4% Lead (Pb)	X	X	X	X	X	X	X	X
Aluminum ≥ 0.4% Bismuth (Bi)	X	X	X	X	X	X	X	X
Aluminum alloys not listed above	✓	✓	✓	✓	✓	✓	✓	✓
Brass	X	X	X	X	X	X	X	✓
Bronze	X	X	X	X	X	X	X	X
Carbon	✓	✓	✓	✓	✓	✓	✓	✓
Carbon and Tool Steel (Not for corrosion)	?	?	?	?	?	?	?	?
Ceramics	✓	✓	✓	✓	✓	✓	✓	✓
Copper and copper alloys	X	X	X	X	X	X	X	?
Elgiloy® (Possible undesired hardening)	?	?	?	?	?	?	?	?
Fecralloy®	✓	✓	✓	✓	✓	✓	✓	✓
Glass	✓	✓	✓	✓	✓	✓	✓	✓
Gold	?	?	?	?	?	?	?	?
Hastelloy®	✓	✓	✓	✓	✓	✓	✓	✓
Inconel®	✓	✓	✓	✓	✓	✓	✓	✓
Invar	✓	✓	✓	✓	✓	✓	✓	✓
Lead and Lead Alloys	X	X	X	X	X	X	X	X
Manganese	✓	✓	✓	✓	✓	✓	✓	✓
Monel®	X	X	X	X	X	X	X	?
Nickel and nickel plating	X	X	X	X	X	X	X	✓
Plastics and Fluoropolymers	X	X	X	X	X	X	X	X
Platinum	✓	✓	✓	✓	✓	✓	✓	✓
Silver	?	?	?	?	?	?	?	?
Stainless Steel	✓	✓	✓	✓	✓	✓	✓	✓
Super Duplex (Possible embrittlement)	?	?	?	?	?	?	?	?
Tantalum	✓	✓	✓	✓	✓	✓	✓	✓
Titanium	✓	✓	✓	✓	✓	✓	✓	✓
Tungsten Alloys	?	?	?	?	?	?	?	✓
Zinc	X	X	X	X	X	X	X	X
Surface Finish								
Electropolished	✓	✓	✓	✓	✓	✓	✓	✓
Passivated	✓	✓	✓	✓	✓	✓	✓	✓
Hardened	✓	✓	✓	✓	✓	✓	✓	✓
Polished	✓	✓	✓	✓	✓	✓	✓	✓
Laser etched/engraved	✓	✓	✓	✓	✓	✓	✓	✓
Other coated or plated	?	?	?	?	?	?	?	?
Weld or Braze								
Vacuum-nickel Brazing	✓	✓	✓	✓	✓	✓	✓	✓
TIG/MIG Weld	✓	✓	✓	✓	✓	✓	✓	✓
Silver Solder (Must withstand 450°C)	?	?	?	?	?	?	?	?
Bronze Solder	X	X	X	X	X	X	X	X
Common Lead/Tin Solder	X	X	X	X	X	X	X	X