Coating Material Compatibility Guide

✓ Successful Coating

C Contact SilcoTek for Clarification

X Not Successful Coating

Material Types	Silco- (SilcoNert [®] , SilcoKlean [®] , SilcoGuard [®])	Silcolloy®	Dur- (Dursan® & Dursox®)	Notak [®]	Siltride [®]
6% Moly Alloys	$\sqrt{}$	$\sqrt{}$	√	√	$\sqrt{}$
AlNiCo8	$\sqrt{}$	Х	Х	√	√
Other ALNiCo Alloys	С	С	С	С	С
Aluminum ≥ 3% Magnesium (Mg)	X	X	Х	Х	Х
Aluminum ≥ 0.4% Lead (Pb)	X	X	X	Х	X
Aluminum ≥ 0.4% Bismuth (Bi)	X	X	X	Х	X
Aluminum alloys not listed above	$\sqrt{}$	√	√	√	√
Brass	X	Х	Х	√	Х
Bronze	X	Х	Х	X	X
Carbon	$\sqrt{}$	√	√	√	√
Carbon and Tool Steel (Not for corrosion)	С	С	С	С	С
Ceramics	$\sqrt{}$	√	√	V	√
Copper and copper alloys	X	X	X	С	С
Elgiloy® (Possible undesired hardening)	С	С	С	С	С
Fecralloy®	$\sqrt{}$	$\sqrt{}$	√	$\sqrt{}$	$\sqrt{}$
Glass		$\sqrt{}$	√	√	√
Gold	С	С	С	С	С
Hastelloy®	$\sqrt{}$	$\sqrt{}$	V	√	V
Inconel®	$\sqrt{}$	$\sqrt{}$	V	√	V
Invar	$\sqrt{}$	V	√	√	√
Lead and Lead Alloys	X	Х	Х	X	Х
Manganese	$\sqrt{}$	$\sqrt{}$	V	$\sqrt{}$	V
Monel®	X	Х	Х	С	V
Nickel and nickel plating	X	X	Х	√	Х
Plastics and Fluoropolymers	X	Х	Х	Х	Х
Platinum	√	√	√	√	√
Silver	С	С	С	С	С
Stainless Steel	V	√	√	√	√
Super Duplex (Possible embrittlement)	С	С	С	С	С
Tantalum	√	√ V	V	√	√ V
Titanium	√	√ ·	V	√	√ V
Tungsten Alloys	C	C	С		C
Zinc	X	X	X	X	X
Surface Finish					
Electropolished	$\sqrt{}$	V	V	√	V
Passivated	$\sqrt{}$	V	V	V	√
Hardened	$\sqrt{}$	V	V	V	V
Polished	V	√ ,	√ /	√	√
Laser etched/engraved	√	V	√	√	√
Galvanized	X	X	X	X	X
Other coated or plated	С	С	С	С	С
Weld or Braze					
Vacuum-nickel Brazing		√	√	V	√
TIG/MIG Weld	\checkmark		√	$\sqrt{}$	\checkmark
Silver Solder (Must withstand 450°C)	С	С	С	С	С
Bronze Solder	X	X	X	X	X
Common Lead/Tin Solder	X	X	X	X	X

