



Material Compatibility with SilcoTek® CVD Coating Process

	recommended	marginal	Not treatable	comment
300 Series Stainless Steel	●			Good results
Duplex and Super Duplex			●	Possible Embrittlement
400 Series Stainless Steel	●			Good results
Carbon Steel		●		Process temperature will impact appearance
Hastelloy®	●			Good results
Inconel®	●			Good results
Monel®			●	Not treatable
Platinum	●			Good results
Gold			●	Not treatable, process temperature will damage part
Silver			●	Not treatable, process temperature will damage part
Aluminum		●		Contact us for detailed information
Borosilicate Glass	●			Breakage may occur during processing
Nickel			●	Not treatable
Brass			●	Not treatable
Copper & Copper Alloys			●	Not treatable
Zinc			●	Not treatable
Bronze			●	Not treatable
Plastics			●	Not treatable
Plated Materials			●	Process temperature can damage plating
Carbon	●			Good results
Titanium	●			Good results
Lead & Lead Alloys			●	Not treatable
Ceramics	●			Good results
Surface Finish				
Electropolished Surface	●			Excellent results
Polished Surface Bead	●			Excellent results
Blasted	●			Coating appearance proportional to surface roughness
Machined	●			Coating appearance proportional to surface roughness
Cast Surface	●			Good results, requires thicker film to ensure coverage
Painted/Coated Surface			●	Not treatable due to process temperature
Black Oxide Surface			●	Not treatable
Welded or Brazed Areas				
Vacuum-Nickel Brazing	●			Excellent results
TIG/MIG Weld	●			Results dependent on quality of welding process
Silver Solder			●	Not treatable
Bronze Solder			●	Not compatible with treatment process
Common Lead /Tin Solder			●	Not treatable, process temperature will melt solder

Hastelloy® is a trademark of Haynes International, Inc.

Inconel and Monel are trademarks of Inco Alloys International, Inc.

If you have questions please call us at 0049 (0)6172/279 718 or by e-mail (info@silcotekgmbh.de).

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