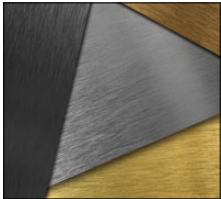



GALVANIC COMPATIBILITY



All dissimilar materials have the potential to react with each other in the presence of a catalyst such as humidity. For applications where humidity is low, the likelihood of galvanic corrosion will be low as well. If however you are working on a design for use in damp conditions or outdoors, the possible effects of galvanic corrosion can be significant.

Project designs often require dissimilar metals to come in contact during application. To prevent galvanic corrosion in these instances, plating is often used to protect the base materials from corrosion. Galvanic corrosion is a complex problem with many variables that are difficult to predict.

It is recommended that metals used together are located as close together as possible on the table below, as utilization of similar metals listed within a group will help to eliminate the possibility of galvanic corrosion. For additional guidance in solving potential issues regarding galvanic corrosion, please contact Orbel's technical sales or engineering department at 610-829-5000.

Group I	Group II	Group III	Group IV
Magnesium and Magnesium Alloys	Zinc and Zinc Plating	Cadmium Plating	Brass
Zinc and Zinc Plating	Galvanized Steel	Mild Steel and Wrought Iron	Stainless Steels
Galvanized Steel	Aluminum and Aluminum Alloys	Nickel and Nickel Plating	Copper and Copper Alloys • <i>Beryllium Copper</i> • <i>Phosphorus Bronze</i> • <i>Nickel Silver</i> • <i>Monel</i>
Aluminum and Aluminum Alloys	Chromium	Tin and Tin Plating	Silver
Chromium	Cadmium Plating	Tin/Lead Alloys – Solder and Plating	Graphite
	Mild Steel and Wrought Iron	Brass	Rhodium
	Nickel and Nickel Plating	Stainless Steels	Titanium
	Tin and Tin Plating	Copper and Copper Alloys • <i>Beryllium Copper</i> • <i>Phosphorus Bronze</i> • <i>Nickel Silver</i> • <i>Monel</i>	Platinum
	Tin/Lead Alloys— Solder and Plating		Gold
ANODIC 			CATHODIC

Whatever your industry, whatever your application, Orbel's custom design and manufacturing process means engineered solutions designed to your exact demands. Start to finish, from conception through delivery, Orbel offers today's most effective EMI/RFI shielding, photo-etched precision metal parts, precision metal stampings, and electroplated metal foils. For more information, visit Orbel.com or call 610-829-5000.