

Galvanic Series of Metals in Seawater

<u>Metals and Alloys</u>	<u>Corrosion Potential</u> (volts DC ref. Ag/AgCl)		
Magnesium and Magnesium Alloys	-1.60	to -1.63	anodic - active
Aluminum - Anode	-1.10		
Zinc	-0.98	to -1.03	
Aluminum Alloys	-0.76	to -1.00	
Mild Steel (clean & shiny)	-0.60	to -0.71	
Mild Steel (rusted)	-0.20	to -0.50	
Cast Iron (not graphitized)	-0.60	to -0.71	
Stainless steels	-0.46	to -0.58	
Stainless Steel, Type 316 (active in saltwater)	-0.43	to -0.54	
Aluminum Bronze (92% Cu, 8% Al)	-0.31	to -0.42	
Copper	-0.30	to -0.57	
Naval Brass (60% Cu, 39% Zn)	-0.30	to -0.40	
Yellow Brass (65% Cu, 35% Zn)	-0.30	to -0.40	
Red Brass (85% Cu, 15% Zn)	-0.30	to -0.40	
Muntz Metal (60% Cu, 40% Zn)	-0.30	to -0.40	
Admiralty Brass (71% Cu, 28% Zn, 1% Sn)	-0.28	to -0.36	
Aluminum Brass (76% Cu, 22% Zn, 2% Al)	-0.28	to -0.36	
Silicone Bronze (96% Cu max, 0.80% Fe, 1.5% Zn, 2.00% Si, 0.75% MN, 1.60% Sn)	-0.26	to -0.29	
90% Cu, 10% Ni	-0.21	to -0.28	
75% Cu, 20% Ni, 5% Zn	-0.19	to -0.25	
Lead	-0.19	to -0.25	
70% Cu, 30% Ni	-0.18	to -0.23	
Stainless steel, Type 304 (passive)	-0.05	to -0.10	
Stainless steel, Type 316 (passive)	-0.00	to -0.10	
Titanium	+0.06	to -0.05	
Platinum	+0.25	to +0.19	
Carbon, Graphite, Coke	+0.30	to +0.20	cathodic - noble

(Ref ABYC)