



**OXYTECH** is formed by an electrochemical reaction in sulfuric acid. This takes the naturally-occurring oxide that forms on aluminum when in contact with the atmosphere. This process changes it to a tightly adhering layer of aluminum oxide integral with the aluminum substrate which can be controlled to a specified thickness. At Techmetals we re using a modified sulfuric acid process which performs as well or better than MIL-A-8625 Type III.

The coating thickness proceeds  $\frac{1}{2}$  into the substrate and  $\frac{1}{2}$  from the substrate. For example, a part having a coating thickness of .001" per side will grow by .0005" per side. The coating is somewhat porous as plated and can absorb varying colors of organic dyes and other materials such as Teflon & Chromium compounds to enhance the coating properties. It can also be plated in a clear condition. The clear coating can range from perfectly clear to varying shades of opaqueness or dulling on the alloy.

The coating can be sealed (a process that closes the porosity) for maximum corrosion protection or can be left unsealed for maximum abrasion resistance.

Specifications covered: MIL-A-8625F, ASTM B 580-79R89,AMS 2472C, AMS 2471D, AMS 2468E, AMS 2469E

## **USER BENEFITS**

**An Extremely Hard Abrasion Resistant Coating**  
**Very Corrosion Resistant**  
**Economical**

**May be Selectively Plated**  
**Good Dielectric Qualities**  
**Can be Dyed in a Number of Colors**



## **PROPERTIES**

Thickness:	.0008-.003 for OXYTECH on most alloys
Hardness:	65-70 Rockwell
Corrosion Resistance:	>336 hours per ASTM B-117
Dielectric Resistance:	1000V per .001" coating thickness
Colors:	Any shade of the visible light spectrum or clear
Dichromate Seal:	Imports hexavalent chromium into the deposit for extra corrosion protection



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