

THE PROCESS

Anodizing entails the immersion of an aluminum part in a sulfuric acid electrolyte bath where DC electric current is passed through the part. An anodic coating penetrates and grows on the base metal by converting the surface to aluminum oxide, a porous layer receptive to dyeing.

— Aluminum oxide's hardness levels approach that of a diamond.

Proper formation of aluminum oxide coatings provides aluminum with a natural decorative appearance and increased resistance to corrosion and abrasion.

The final treatment of clear anodized aluminum is sealing, to close the pores of the aluminum oxide and render the coating non-absorptive. Sealing is accomplished by immersion in deionized water containing either nickel acetate, nickel fluoride, sodium dichromate or near boiling ionized water.

THE EFFECTS

Sulfuric anodizing has superb dielectric strength, good abrasion resistance and excellent corrosion resistance. Each alloy anodizes differently because alloy metals change the conductivity of the part and cause it to form aluminum oxide, either faster or slower. All aluminum can be anodized, but some alloys work better than others.

THE OVERVIEW

ANODIZE (TYPE II - CLEAR)

Pioneer Metal Finishing has over 65 years of experience delivering the highest quality Type II, clear anodizing. This process is ideal for providing protection and decorative qualities to your aluminum parts.

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RECEPTIVE METALS

Aluminum Alloys

THICKNESS

.0001 - .001"

MAX PART SIZE

156" X 60" x 30"

SPECIFICATIONS

MIL-A-8625 Type II (Class 1)

AMS 2471 & AMS 2472

ELV, RoHs & WEEE Compliant

CORROSION RESISTANCE

336 hrs salt spray

Per astm b117

PERFORMANCE BENEFITS

Wear Resistance

Corrosion Resistance

Heat Dissipation

Dielectric Properties

Bonding

Aesthetics



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