

### THE PROCESS

Pioneer's Hard Anodizing entails the immersion of an aluminum part in a 28 °F - 32°F 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.

### APPLICATIONS

Some industrial applications of Hardcoat anodizing include highly intricate parts such as pistons, anti-lock brake assemblies, pump components, valves, sliding parts, insulation plates and transmission parts. Some retail applications for Hardcoat anodizing include cookware, bike rims, locks and levels.

### THE OVERVIEW

#### HARD ANODIZING (TYPE III)

The Pioneer hardcoat anodizing process produces superior wear resistance and coating density.

[CLICK HERE TO VIEW IMAGES OF THIS PROCESS](#)

#### RECEPTIVE METALS

Aluminum Alloys

#### THICKNESS

.0005 - .003" Dependent on Alloy

#### MAX PART SIZE

156" X 60" x 32"

#### SPECIFICATIONS

MIL-A-8625 Type III (Class 1 & 2)

AMS 2468

AMS 2469

ELV, RoHs & WEEE Compliant

Approved for food grade applications

#### CORROSION RESISTANCE

>336 hrs salt spray per astm b117

#### WEAR RESISTANCE

Taber of <15 mg weight loss

#### PERFORMANCE BENEFITS

Superior Wear Resistance

High Dielectric Strength

Excellent Heat Dissipation

Excellent Corrosion Resistance



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