

THE PROCESS

Applying chromate solution to clean aluminum produces a thin, gel-like film, which is an integral part of the metal itself, converted into a non-metallic form.

Chromate treatments (sometimes called chemical film) produce effective paint bonds through molecular adhesions with the film being bound to the metal, in turn offering the same type of adhesion to the organic coating. The film reduces creep corrosion, forming an effective barrier against corrosive attack through pores or scratches in the paint.

THE EFFECTS

Pioneer Metal Finishing's chromate conversion coating leaves no measurable build-up on the part and provides excellent corrosion resistance. In many paint or adhesive applications, chromate is used as a base for superior bonding. The coating is conductive and offered in yellow iridescent to clear iridescent. Electrical resistance increases with the darkness of the yellow color. This coating is amorphous (permitting cold forming without rupture of the film) and nonporous (aids in corrosion resistance).

THE OVERVIEW

CHROMATE CONVERSION COATING

Pioneer Metal Finishing provides both traditional hexavalent chromium conversion coatings as well as newly developed trivalent chromate conversion coatings (ELV coatings). These coatings provide an excellent base for paint as well as corrosion protection for all aluminum.

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

RECEPTIVE METALS

Aluminum Alloys

THICKNESS

.00001 - .00003"

MAX PART SIZE

156" X 60" x 32"

SPECIFICATIONS

MIL-C-5541 (Type I & II)

Class 1A & 3

AMS 2473

PERFORMANCE BENEFITS

Excellent Corrosion Protection

No Measurable Build-Up

Bonding

Withstands Abrasion of a Non-Cutting Nature

Heals Scratches in Film



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