

AE Anodising

AE Black - 20um

AE Satin - 20um

NALCO AE

NALCO AE features a superior matt finish with improved colour and surface consistency, ideal for minimising surface blemishes and maintaining a consistent finish.

What is NALCO AE?

AE utilises a chemical acid etch pre treatment process to produce a superior matt surface finish compared to traditional caustic etch anodizing.

Why Use AE?

AE produces better colour and surface consistency than traditional caustic etch anodising and unlike bead-blasting does not risk physically deforming the product.

The Acid Etch process removes less surface material than the traditional caustic etch process reducing visual imperfections such as die and flow lines. While the superior matt finish reduces light reflection hiding the appearance of small scratches and scuff marks.

Key Benefits:

- Increased colour and surface consistency
- Reduced appearance of die lines and surface blemishes
- Superior matt finish
- More environmentally friendly

Available in:

- AE Black - 20um
- AE Satin - 20um



AE Anodising



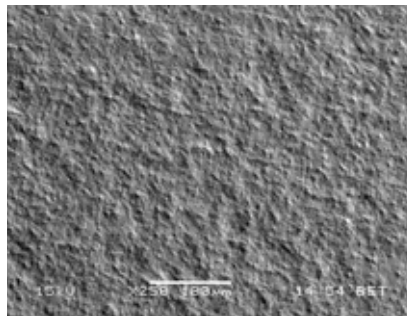
Acid etching is performed in the pre-treatment cleaning process prior to anodizing, replacing the typical caustic etching process. Acid etching better smooths surface imperfections such as extrusion lines and scratches, producing a more uniform appearance as well as changing the bright surface to a matt finish.

Surface Topography

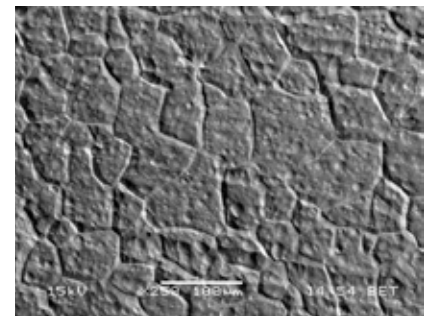
Acid etch anodising features a significantly more consistent surface topography compared to caustic etch anodising.

Surface roughness tests show acid etch anodising produces a more consistent surface roughness.

Acid etching is less aggressive on the aluminium surface and exhibits substantially less grain boundary attack compared to caustic etching.



Acid Etch Anodising



Caustic Etch Anodising

Independent testing conducted by Rio Tinto Alcan at Pacific Technology Centre

Maintenance of Anodising

As with all anodising some deterioration of the anodic oxide coating may occur, mainly as a result of grime deposition and subsequent attack by moisture, particularly if the moisture is contaminated with sulphur compounds.

Regular cleaning is essential to preserve the finish of anodised aluminium over a long period. In rural environments every six months; urban environments every three months; industrial and marine environments every six months, along with a monthly cold water rinse.

- Anodised aluminium should be washed with warm water and suitable wetting agent or mild soap. A fine brush may be used to loosen dirt or grime. The use of anything more abrasive may result in damage to the surface.
- Acid or alkali cleaners should not be used as these will damage anodic films
- Where greasy deposits or hard to remove grime is present, a soft cloth dipped in white spirit, turpentine, kerosene, or a mild liquid scourer may be used, followed by wiping with a dry rag.
- It is essential to rinse anodised aluminium thoroughly with copious applications of clean water after cleaning, particularly where crevices are present.
- For additional protection, waxing with a good quality car wax after washing will assist in lifting and maintaining the appearance of your anodised surface.

