

# ExtremEtch Chemical Finishing

Alexandria Extrusion Company (AEC) is excited to introduce the **ExtremEtch** process to the aluminum extrusion marketplace, while providing greater, unique advantages to its customers' product lines.

This specialized technology and process, patented in 2007, has been further developed by AEC and continues to advance through process studies and strategic process investments. ExtremEtch is **significantly different** and a **very cost effective** aluminum etching process compared to other chemical etching processes currently used throughout the industry.

Whether your product is currently **MIL SPEC Type III Hard Coat Anodized** or **clear, black sulfuric anodized**, this process is compliant to both environments. ExtremEtch will produce significant results, while eliminating costly secondary mechanical finishing operations. Another valuable benefit is **minimal reflectivity levels** and **reduced cosmetic defects**.



**ExtremEtch defined:** A chemical finishing process applied to aluminum products, which produces an excellent uniform, deep matte finish and is highly effective in hiding machining marks and mild scratches or abrasions as a result of manufacturing precision components.

## 12 Advantages of ExtremEtch

1. Uniform finish
2. Deep matte finish
3. Minimal reflectivity levels
4. Very low gloss readings levels
5. Hides marks, scratches and abrasions
6. Tolerance control with process repeatability
7. Significant reduction of material removal
  - Threaded holes
  - Critical I.D. and O.D. dimensions
8. Minimized oxide coating thickness
9. Greater wear resistance - Taber Abrasion Test (MIL-A-8625)
10. Greater density
11. Eliminates costly secondary mechanical finishing operations such as media blasting
  - (i.e. - Sand blast, Bead blast, Ceramic blast, Glass blast etc.)
12. Eliminates *Ghosting*, a direct result of process variance and residues of media blasting

Advantages	ExtremEtch	Alkaline Etch
<b>Low Gloss Level</b>	✓ 4-6	13-18
<b>Reduction of Material</b>	✓ 0.5-1.5 grams/sq.ft.	5.5-11 grams/sq.ft.
<b>Minimized Oxide Coating Thickness</b>	✓ 0.68-0.72	0.73-0.76
<b>Greater Wear Resistance</b>	✓ 3.73	3.50
<b>Greater Density</b>	✓ 42.94 g/in <sup>3</sup>	41.30 g/in <sup>3</sup>

# ExtremEtch

If you would like to learn more about the ExtremEtch process or would like samples for further inspection and/or testing, please contact Steve Schabel, Marketing Manager of Alexandria Extrusion Company at [sschabel@alex-extrusion.com](mailto:sschabel@alex-extrusion.com) or 800-568-6601. We are eager to assist you in your transition to ExtremEtch.

