



METAL FINISHING



Collaborate, Create, and Succeed. Together.

Product Overview for the Metal Finishing Industry



Overview

Anodizing and paint pre-treatment give aluminum both needed corrosion resistance and improved finish appearance. The anodic coating provides outstanding corrosion resistance that can be used with several attractive decorative colors. Quaker Houghton's paint pre-treatment provides an excellent base for most kinds of paints including liquid and powder alternatives. Quaker Houghton's metal finishing products are used in the medical device, automotive, aerospace, electronics and solar industries, as well as in construction, high-rise buildings and anodized aluminum curtain walls.

Our metal finishing value proposition:

- Technology and performance based
- Solution driven approach comprised of products and services
- Dedicated technical and application expertise to support customer process/operations requirements
- Global connectivity and account oversight/management to drive best practices
- Investment in product innovation and development

The Quaker Houghton Advantage

Metal Finishing products offer the latest technology. We specialize in Aluminum Finishing for anodizing including the electrocolor of aluminum alloys as well as aluminum paint pre-treatment. Quaker Houghton is the market and technology leader with many years of experience in aluminum finishing.

Flagship Product: ACID ETCH (patented process)

ACID ETCH Revolutionized the Etch Process in the Aluminum Finishing Industry:

- It is an alternative chemical etch process replacing conventional caustic prior to aluminum anodizing
- It produces a premium matte finish at low gloss values with minimum aluminum dissolution
- It is available in powder and liquid forms

Key Benefits of ACID ETCH:

- Significant reduction of aluminum removal
- Reduction in aluminum removal is dimensionally significant allowing customers to reduce aluminum usage by extruding thinner wall extrusions
- Significant reduction in etch time
- Significant reduction of waste sludge – greater than 50% in most cases
- Excellent uniform matte finish
- Very low gloss readings
- Energy saving process

Realized Customer Benefits for Aluminum Extrusion Customers:

- More effective in hiding extrusion lines and mild scratches
- Extends the life of process racks
- Not sensitive to zinc contamination
- Easy rinsing
- No cooling required
- Significant waste sludge reduction

Our Key Products

PRODUCT	DESCRIPTION
ANODIZING	
CLEANERS - (ALKALINE & ACID) POWDERS & LIQUIDS	
HOUGHTO-CLEAN® A-1000	A highly effective strong acid soak cleaner formulated with special surfactants to remove general soils, cutting oils and shop dirt from aluminum and its alloys while deoxidizing scale and oxides formed prior to processing.
HOUGHTO-CLEAN® A-1083	A powdered non-etching immersion cleaner formulated to remove general soils, cutting oils and buffing and polishing compounds from aluminum extrusions prior to anodizing and bright dip.
HOUGHTO-CLEAN® A-1090	A liquid alkaline soak cleaner for aluminum extrusions developed to remove general soils, cutting oils and shop dirt from aluminum extrusions prior to anodizing.
ETCHANTS - (ACID ETCH & ALKALINE) CHELATES, GRAIN REFINERS, DIE ETCHANTS	
HOUGHTO-ETCH™ AX-2050	A patented, highly effective acid etch formulated to provide a uniform fine matte satin finish that conceals surface defects on aluminum and aluminum alloys prior to anodizing.
HOUGHTO-ETCH™ AX-1897	A low foam etchant additive for aluminum and aluminum alloys especially formulated to minimize solution buildup and overflow. It contains chelators and grain refiners and operates as long-life or never-dump etch process.
HOUGHTO-ETCH™ AX-1875	A specially formulated liquid concentrate with chelators and grain refiners for use with dry or liquid caustic etches. It will provide a long life etch bath for aluminum and its alloys and provide an even, matte finish without staining.
DEOXIDIZERS	
HOUGHTO-DEOX™ A-1720	A premium powdered desmut additive, which can be used effectively for desmutting and deoxidizing aluminum and its alloys. Contains special additives to prevent pitting & does not require addition of Nitric Acid.
HOUGHTO-DEOX™ A-1724	A strong acid, non-chromated liquid concentrate used for desmutting and deoxidizing aluminum and its alloys. When used at an elevated temperature, will effectively remove oxides, as well as smut residues, prior to an aluminum bright dip step or following an etch step.
HOUGHTO-DEOX™ A-1714	A powdered aluminum iron-free desmut additive used for desmutting and deoxidizing aluminum and aluminum alloys that effectively removes oxides and smut residues following an etch step.
HOUGHTO-DEOX™ A-1745L	An iron based liquid for desmutting and deoxidizing aluminum and aluminum alloys that effectively removes oxides and smut residues after a caustic etch.
ANODIZING ADDITIVES - TYPE II & TYPE III ANODIZING ADDITIVES, HARDCOAT ADDITIVES	
ANODIZING ADDITIVE™ A-520	A high speed liquid additive used with sulfuric acid anodizing process to produce hard coatings for architectural use as well as other applications.
COLORANTS - (STAINLESS STEEL & TIN SYSTEMS)	
HOUGHTO-COLOR™ A-580	A single addition "all in one" liquid tin-based electrolyte used as a second step after clear anodizing to produce various earth tones on aluminum and its alloys. Does not require the addition of concentrates or stabilizers.
HOUGHTO-COLOR™ A-599	A liquid two-step electrolyte that contains tin sulfate, stabilizers and throwing power additives specially formulated to be used with stainless steel electrodes.
HOUGHTO-COLOR™ A-597	A liquid tin-based electrolyte used as a second step after clear anodizing to produce various earth tones including shades from champagne to bronze to black.
SEALANTS - (ROOM & MID TEMPERATURE) ANTI-SMUT ADDITIVES, HOT WATER SEAL ADDITIVES	
HOUGHTO-SEAL™ ECO	A non-nickel, mid-temperature range sealing system for anodized aluminum. Parts sealed in HOUGHTO-SEAL™ ECO will pass the Modified Dye Stain Test and the Acid Dissolution Test (ADT) immediately after sealing. Spent bath is free of hazardous metals.
HOUGHTO-SEAL™ A-617	A pure nickel fluoride cold seal designed to seal anodized aluminum parts from 86° to 90°F. Parts sealed in this product will pass the Dye Stain Test immediately after drying, pass the Modified Dye Stain Test six hours after, and pass the Acid Dissolution Test 24 hours after curing.
HOUGHTO-SEAL™ A-620	This product is formulated with special organic additives that effectively seal all types of anodic coatings without smutting, powdering or yellowing after exposure to sunlight.
ALUMINUM PAINT PRE-TREATMENT	
SPRAY & IMMERSION CLEANERS - (ALKALINE & ACID)	
HOUGHTO-CLEAN® A-801	A pre-paint alkaline spray cleaner concentrate for aluminum formulated to remove cutting and forming oils and lubricants prior to chrome/phosphate treatment in a paint line. It can also be used as immersion cleaner.
HOUGHTO-CLEAN® A-807	An accelerated liquid acid spray cleaner formulated to remove forming and cutting oils prior to treatment in a paint line. It can also be used as immersion cleaner.
SPRAY & IMMERSION CHROME PRE-TREATMENT	
HOUGHTO-COAT™ A-830/A-840	A concentrated liquid chrome-phosphate for aluminum prepaint treatment used with the HOUGHTO-COAT™ A-840 accelerator.

• QUAKER HOUGHTON BREAKTHROUGH PRODUCTS

Forward Together™

Global Headquarters

One Quaker Park
901 E. Hector Street
Conshohocken, PA 19428-2380
U.S.A.
+1.610.832.4000

quakerhoughton.com | info@quakerhoughton.com

