Lectroetch®

Originators of Electrochemical Marking

Metal Marking Systems

Catalog 696

Economical, Permanent, Stress-Free Marking

Lectroetch originated electrochemical marking in 1943. Since then, the process has proven itself in countless metal parts marking applications for identification, inspection and inventory control. It is ideal for reproducing trademarks, part and serial numbers, measurement markings, inspection stamps and date codes.

Objects made of conductive ferrous and nonferrous metals and alloys are easily marked. Metals plated with chrome, nickel, cadmium and zinc also mark well due to conductivity. Painted, anodized or phosphated parts can also be processed by deep etching (.001-.006 in.) prior to coating application.

The Lectroetch process is an etching process in which a minute amount of metal, about .0001 to .006 inches, is removed from conductive metals. The process eliminates the impermanence of labeling or ink marking, and will not weaken, deform or otherwise contribute to part failure. Even thin wall, delicate components can be easily marked without burrs or danger of part damage. It is often the only method which meets Mil-Spec standards.

Permanent Marking In Seconds

Depending upon the size and depth of mark desired, it takes only a fraction of a second to a few seconds to create high quality, permanent markings. Users can easily produce black, white or frosted markings.

Legible markings using characters as small as .025 inches are easily reproduced. Logos or any other markings are also easily made and faithfully reproduced by means of stencils.

Easy to Use

Using the Lectroetch process requires only minimal skill and training, both in terms of preparing stencils and marking parts. The process consists of five components: power unit, marking applicator, stencil, electrolyte and cleaner. Complete kits and components are described on the following pages.

Clear or frosted

Dark or contrasting

Deep etched mark

Low or High Volume Marking

Because of the efficiency of the Lectroetch process, small to medium batch sizes can be marked cost-effectively. For higher volume marking, semi-automatic and automated systems, capable of marking a thousand plus parts per hour, are recommended.

Marking Kits

Basic Industrial Kit

Includes 6A power unit, 826 CHP Handmarker, 1 roll RS Stencil, 1 pint each of LNC3 Electrolyte, Immersion Cleaner and Protective Oil.

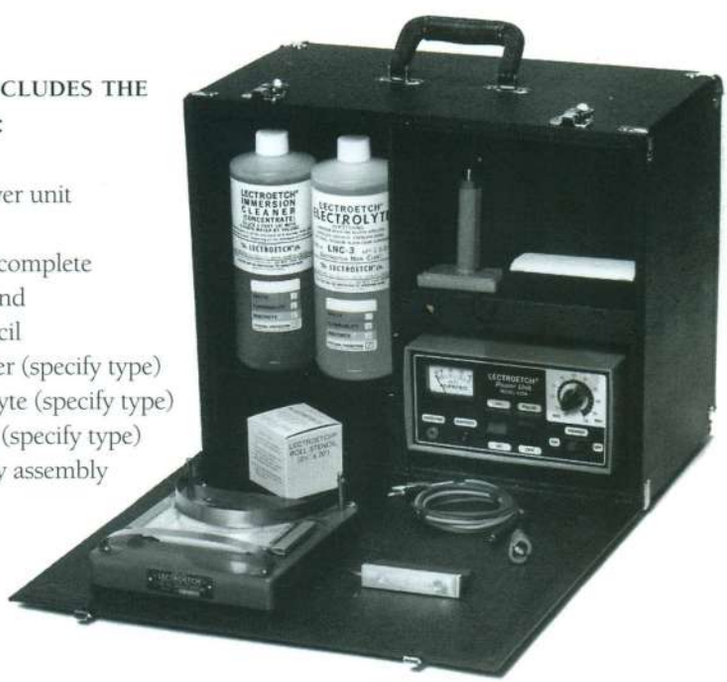
Lectroetch Deluxe Industrial Marking Kits

Contain all marking equipment in a custom-fitted carrying case.

6AK Furnished with 6A power unit
V-10 AK Furnished with V-10A power unit

Each kit includes the following:

Fitted case
Choice of power unit
Cord set
Bench fixture complete
BU hand ground
1 - roll of stencil
1 - handmarker (specify type)
1 - qt. electrolyte (specify type)
1 - qt. cleaner (specify type)
1 - cleaner tray assembly



(Knife cover photo compliments of Frost Cutlery)

POWER UNITS

Lectroetch power units provide lasting, trouble-free service. Five sizes are available to properly match the size and depth of marking to the available level of ampere output. All units produce safe, AC/DC voltage to produce both black and white marks. Universal cord set is included with all units.

MODEL 6A

Designed for occasional use with small marking areas such as surgical instruments and hand tools. Rheostat current control, circuit breaker and capable of AC or DC output. Not recommended for deep etching or supplemental coated surfaces.
Complete with cord set.

MODEL V-10A

Our "industry standard" unit. For most medium to moderate size marking areas including limited deep etching applications. Unit features variable power control, circuit breaker, current interrupter for deep etching, AC or DC output, and ammeter. Complete with cord set.

MODEL VT-15A

Lectroetch's intermediate deep etch power unit. Features variable power control, circuit breaker, current interrupter for deep etching, volt meter and ammeter, AC or DC output, and a 0 to 30 second dwell timer for consistent marks. Complete with 1 in. x 2 in. microswitch actuated handpad and cord set.

MODEL V-45A

Heavy duty power unit with 45 amp output for large marks or very deep etch applications. The model V-45A has a variable power control, circuit breaker, current interrupter for deep etching. Complete with heavy duty cord set.

MODEL VT-45A

Same as Model V-45A except with 0 to 30 second timer for more consistent marks. Complete with heavy duty cord set, and foot switch for the timer.

ACCESSORIES

Code

B	Replacement cord set for later model units with separate "banana jacks" on front of unit (use on late production units).
HDU	Replacement cord set for V-45A and VT-45A units only.
FS1	Footswitch for any power unit— allows operator to manually control etching current.
FSJ	Footswitch with 2-blade plug for use with VT-15 and VTT-15 power units.
TF1	Timer and footswitch unit— makes for a more consistent etch. Adjustable from 0 to 15 seconds. Can be used with any non-timer power unit.
UGC	Alligator clip adaptor for "B" or "U" cord.

Adaptors are available for other makes of equipment.–Inquire.

Automated Marking Equipment

Lectroetch semi and fully-automated marking systems are designed for high production metal marking needs. The rugged, heavy-duty design of these units allows many years of trouble-free etching. The units consist of a pneumatic-operated cylinder which moves the marking device to the part. Solid-state controls regulate the etching and loading cycles as well as current output to assure a constant etch. These compact units may be incorporated into almost any production or inspection line. The units can be tooled to the customer's special needs—up to and including completely automated marking systems—with loading and cleaning capabilities.

Basic AM-15C Semi-Automatic Markers

Includes marking head, holder, air prep unit, electrolyte feed, and footswitch and can be used in either manual or automatic modes. Fixtures or tooling are available at extra cost.

Basic AM-45C Semi-Automatic Markers

Same as above except has 45 amp power supply.

Options for automatic units include:

- Interrupter for deep etching applications
- Electrolyte metering valve
- Rotary table
- Special holding fixtures
- Special marking heads
- Conveyors
- Spraying station
- Automatic feeders
- Tooling available to set up turn-key operation.

Grid Marking Equipment

Deep Draw and Stamping Die Tryout

Lectroetch Grid Marking is available in stencil sizes to 10 in. x 20 in., factory processed with a variety of square or circular grid patterns. The stencil can be applied to sheet metal prior to forming and the grid pattern is reproduced with the use of a heavy-duty power unit and a rocker pad or a roller marker.

A wick pad is dampened with electrolyte and placed on the stencil. The marker is rolled or rocked back and forth over the pad and stencil. A clear, sharp, permanent mark is produced in seconds.

The blank is cleaned, lubricated, and formed, after which the distortions of the circles are measured and proper interpretations made. Large areas can be gridded by moving the stencil in steps across the blank.

GMK Grid Marking Kit

Includes the following items:

1 - V-45A power unit
1 - HDU cord set
1 - 7 in. x 10 in. microswitch activated rocker pad or 10 in. roller marker.
1 - Grid pattern stencil of customer's choice up to 10 in. x 10 in.
1 - Mylar measuring tape for interpretation
1 - Quart each of electrolyte and cleaner

GK Optional Fitted Carrying Case for GMK

NBK Grid Marking Kit

Includes V-10A power unit with cordset.

1 - 4-1/2 in. roller marker or RP-2 (2-1/2 x 6 in.) rocker pad
1 - grid pattern stencil to 7 in. x 7 in. size (customer's choice)
1 - Mylar measuring tape for interpretation
1 - pc. wick for roller marker
1 - Pint each electrolyte and cleaner (specify)
1 - Fitted carrying case

LE 28780

Roller Markers Available in Various Lengths

Hand Markers and Components

Lectroetch Marking Appliances combine stencil, electrolyte, and marking current at the part surface. Various styles of manual markers permit a wide choice of bench and hand-held appliance parts marking approaches. Round, flat, and recessed-shaped parts all can be production-marked with these appliances. Most markers permit use of either short-run Die Impression or 3L Long Life Stencils.

CH

Replacement cartridge holder for all Lectroetch 3L cartridge markers and cartridge hand pads except the 1525.

Cartridge Hand Pads

Six standard CHP sizes

Part	1525 CHP	826 CHP	20 CHP	15 CHP	8 CHP	5 CHP
Area	1-1/4 in. x 2-1/4 in.	3/8 in. x 1-3/8 in.	1 in. dia.	5/8 in. dia.	3/8 in. dia.	3/16 in. dia.
Screencloths	1525 CHPS	826 CHPS	20 CHPS	15 CHPS	8 CHPS	5 CHPS

Cartridge Open Hand Pads

The Cartridge Open Hand Pad employs a reservoir bottle which meters electrolyte and facilitates longer marking runs by eliminating interruptions to fluid supply.

Part No.	COP 412A	COP 416A	COP 424A	COP 816A	COP 824A
Area	1/4 in. x 3/4 in.	1/4 in. x 1 in.	1/4 in. x 1-1/2 in.	1/2 in. x 1 in.	1/2 in. x 1-1/2 in.

Screencloths (10/pkg.)

Part No.	COPS 412	COPS 416	COPS 424	COPS 816	COPS 824A

DEP (Deep Etch) Hand Pads

The DEP Hand Pad uses an open "bridge" to dissipate gas bubbles generated by electrolysis during marking. This provides highest quality marks while extending stencil life. Available in other sizes for special applications.

Part No.	Area	Screencloth (10/pkg)
DEP 13	1/4 in. x 3/4 in.	DEPS 13
DEP 16	1/4 in. x 1-1/2 in.	DEPS 16
DEP 26	1/2 in. x 1-1/2 in.	DEPS 26
DEP 48	1 in. x 2 in.	DEPS 48

CARTRIDGE MARKERS

Cartridge markers are convenient for inspection marking, date coding, and parts numbering on a production basis because they employ molded 3L Stencils with factory-processed marks. Capable of thousands of marks, worn stencils are replaced by slipping a new stencil over the marker nose.

CM units include cartridge nose assembly with Button Stencil and Cartridge Holder which also contains the shielded conductor for current flow to the nose piece.

When ordering, specify if the complete cartridge marker (CM) or button stencil only (BSO) is desired.

Catalog No.		Mark Size	Cartridge
CM	3L-5CM	3/16 in. dia.	Circle
STENCIL	3L-5BSO	3/16 in. dia.	
CM	3L-8CM	3/8 in. dia.	Circle
STENCIL	3L-8BSO	3/8 in. dia.	
CM	3L-15CM	5/8 in. dia.	Circle
STENCIL	3L-15BSO	5/8 in. dia.	
CM	3L-20CM	1 in. dia.	Circle
STENCIL	3L-20BSO	1 in. dia.	
CM	3L-826CM	3/8 in. x 1-3/8 in.	Rectangular
STENCIL	3L-826BSO	3/8 in. x 1-3/8 in.	
CM	3L-1525CM	1-1/4 in. x 2-1/4 in.	Rectangular
STENCIL	3L-1525BSO	1-1/4 in. x 2-1/4 in.	

SADDLE MARKERS

Saddle Markers are designed to mark cylindrical parts on which the mark encompasses about 120° or less of the circumference. The side arms flex and the pad and stencil form themselves around the part. This produces a sharp, clear mark, and is easier and more accurate than rolling a part across a flat surface. Used as a hand marker, the Saddle Marker (left) can be placed on large parts to eliminate parts "handling." Stencils are retained by plastic clips on standard saddle markers.

Part No.	Size	Replacement Screen & Wick
SM 14	1/2 in. x 2 in.	SMS 14
SM 26	1 in. x 3 in.	SMS 26
SM 48	2 in. x 4 in.	SMS 48

Other sizes available on request.

ROCKER PADS

The Rocker Pad is designed for large, broadline marks. It is rocked across the part so that current is concentrated in a small area during the progressive mark formation, permitting use of a smaller-size power unit. Because it squeezes out gas pockets and pushes them ahead, it minimizes mark imperfections caused by gas trapped between part and stencil.

Part No.	Size	Screencloth	Wick
RP 1	1-1/2 in. x 4 in.	RPS 1	RPW 1
RP 2	2-1/2 in. x 6 in.	RPS 2	RPW 2
RP 3	3-1/2 in. x 7 in.	RPS 3	RPW 3

Special sizes made to order.

SPECIAL MARKERS

Includes concave, convex, radiused and stepped—call the factory or nearest distributor with your special marking needs.

Bench Fixtures and Components

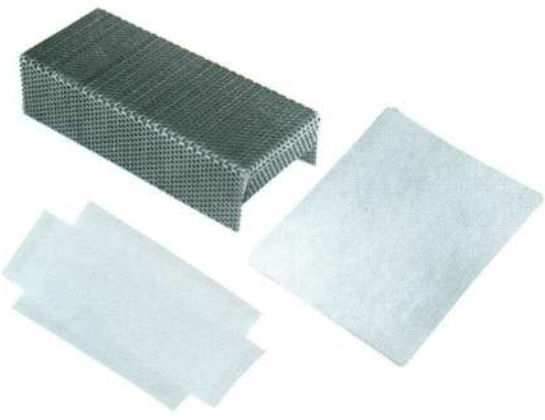
MU

The bench fixture permits versatile marking of flat pieces, including those with offsets, as well as plain or flanged round and cylindrical parts. The fixture includes a molded base, containing horizontal and vertical grounding straps and a reservoir tray for the electrolyte. Plate and pad, which fit into the well, provide the marking surface; electrolyte being fed to it by wicking action.

Parts to be marked are placed on the stencil which rests on the top pad. The marking circuit is closed by either applying the hand ground to the part, or contacting the ground strap with the part. Round parts are "rolled" across the stencil. Flanges or hubs are accommodated by using a "riser plate" to support the top pad.

MU1 (not shown)

Wired bench fixture base only. Does not include top plate, pads, ground straps, or location plate.



Riser Plate Assembly

RGU

Finger ground (not included with MU)

MU2

Top plate assembly (perforated top plate, screencloth and wick pad)

MU21

Perforated top plate only

MU22

Standard screencloth

MU22F

Special processed fiber top cloths (pkg. 10)

MU23

Standard wick pad (also used in cleaner tray)

MU5

Locating plate blank
Machine to index part with stencil

BU

Hand ground (not included with MU)

Riser Plate

Riser Size	Top Plate	Wick Pad	Screen Cloth
1/2 in.	MA5	MA8	MA11
3/4 in.	MA6	MA9	MA12
1 in.	MA7	MA10	MA13

LONG-LIFE STENCILS

PHOTOGRAPHIC STENCILS

- Made from our quality artwork and computerized photo typesetter
- Can be reproduced from sample logos, business cards or other customer artwork
- Manufactured to your drawings and specifications
- Standard sizes are 2-1/2 in. x 7 in., 3-3/4 in. x 7 in. and 5 in. x 7 in.. Other sizes available on request.

STANDARD 3L

Designed for use with marking applications with marks of small size and fine line weight.

#200 3L

A premium stencil, featuring a synthetic woven fabric base impregnated with the 3L plasticized coating. Recommended for most applications including deep etching.

DIE IMPRESSION STENCILS

Lectroetch Die Impression Stencils are designed for short to intermediate marking runs, or for applications requiring frequent copy changes. They can be used with all Lectroetch appliances, except CMs. The stencils may be furnished plain so the customer can type copy. They can also be processed by Lectroetch with the customer's trademark, part number, etc. Numbers, date codes, serial numbers, and other variables may be added by the customer.

R–L

Standard Blue Die Impression Stencil-for intermediate runs of 50 to several hundred pieces. It can be used to reproduce only fine line characters. In addition to standard sizes, it can be furnished in random length rolls of several hundred feet for extra economy.

RS–LS

Short-Run Blue Die Impression Stencil-for short run marking of 50 pieces or less. It is very easy to die impress, and gives a sharp, clear first mark. It is capable of slightly heavier line width.

RSG–LSG

Short-Run Green Die Impression Stencil-specifically designed for serial numbering and for similar coded identification as it is transparent and can be easily positioned over an existing mark.

Lectroetch tractor-feed die impression stencil is available for making stencils with a dot-matrix computer printer.

SPECIAL FORMED BUTTON STENCILS

- Used with special sizes and shapes of marking heads and fixtures
- Enables user to quickly change worn stencils
- Can be made to conform to most irregular surfaces
- Custom engineered to your marking requirements

Call the factory for pricing and lead times

WHEN ORDERING NEW OR REPLACEMENT STENCILS...

1. Indicate which type of marking fixture is being used (i.e. DEP style hand pad, CHP, Carbon Hand, marker etc.). This will help us lay out your stencil to maximize economy and usability.
2. Indicate how many parts are to be marked. This will tell us what kind of stencil materials to use.
3. The number of times and the spacing of the legends that are to appear on your stencil and whether format is vertical or horizontal.
4. Describe the maximum area the legends can occupy, including any obstacles such as chamfers, bolt holes, dowel pins, etc.
5. Most importantly, indicate exactly how the legend is to read including correct spelling, punctuation and spacing.
6. To ensure accuracy when reordering stencils, always reference your Lectroetch art file number.

Blue	Short-Run Blue	Green	Size
L	LS	LSG	2-1/2 in. x 7 in. 100 sheets/box
L2	LS2	LSG2	3-3/4 in. x 7 in. 100 sheets/box
L3	LS3	LSG3	5 in. x 7 in. 100 sheets/box
R	RS	RSG	2-1/2 in. x 20 ft. roll
R2	RS2	RSG2	3-3/4 in. x 20 ft. roll
R3	RS3	RSG3	5 in. x 20 ft. roll
Tractor Feed	Type RS only		2-1/2 in. 3-3/4 in. *Specify length up to 750 ft.-50ft. increments* 5 in.

ELECTROLYTES AND CLEANERS

ELECTROLYTES

Electrolyte is the conducting medium for the etching current. It carries the necessary metallic salts to etch the metal, and to develop the black residue for dark, contrasting marks. Necessary inhibitors, depolarizers, surfactants, and stencil cleaning media are also carried by the electrolyte. In addition, the electrolyte also serves as a heat dissipant, and controls depth of mark through electrochemical action.

Choosing the proper electrolyte and cleaner is necessary to obtain a clear, sharp, contrasting mark. Lectroetch has developed electrolytes for various conductive metals, alloys, and platings. The chart (pages 10 and 11) will serve as a guide for most applications. Parts made of other materials should be sent to Lectroetch for electrolyte evaluation.

Nuclear Grade Electrolytes- Carefully formulated from certified grade chemicals and distilled water to reduce halides, chlorides and impurities. Can be certified to contain less than 250 ppm or less of the above contaminants.

Lectroetch Cleaners remove the excess electrolyte, salts, and oxides which otherwise attract and hold moisture, leading to corrosion. Our **Cleaner No. 2** is formulated for use with ferrous materials, alloys, and carbides; and our **Cleaner No.3** is for use with nonferrous metals.

The **Type LIC Immersion Cleaner** is recommended for large production runs. A 5-minute bath is required before air drying. Other optional cleaning products include dry treated tissues for use with light production. Lectroetch **Powdered Cleaner** is recommended for polished surfaces. The part is simply dipped into the powder and the surplus wiped off.

- Lectroetch #1 all purpose cleaner for general purpose applications
- Lectroetch #2 cleaner for ferrous alloys
- Lectroetch #3 cleaner for nonferrous alloys
- Lectroetch immersion cleaner for dipping parts
- Lectroetch Powder Cleaner
- Lectroetch PH—paper for testing LIC cleaning solution - replace when PH level falls below 6.
- Lectroetch RV oil for protection against rust and corrosion after cleaning.
- Lectroetch cleaner tray for cleaning small parts after marking—use MU23 wick for replacement.

- Lectroetch cleaner tissues. 1,000 sheet package

All Lectroetch electrolytes and cleaners are also available in 1 gallon jugs, 5 gallon pails, and 55 gallon drums.

Lectroetch Electrolyte and Cleaner Chart

METALS, ALLOYS, PLATINGS	ELECTROLYTE	POWER UNIT CIRCUIT	COLOR	COMMENTS
ALUMINUM AND ALLOYS	210A	DC	BLACK	Allow a few seconds for color to develop before cleaning.
	LNC-9, LNC-3	DC	GRAY	Deep mark. Dark color on some alloys.
	LNC-5, LNC-2, 250A	DC	WHITE	Used on bright finish or polished surfaces.
ALUMINUM ALLOYS - HIGH MAGNESIUM OR SILICA	LNC-5, LNC-2, 250A	DC	CLEAR	Cannot be color marked.
ANODIZED ALUMINUM				Must be marked prior to anodize - see special instructions.
ALUMINUM BRONZE, BRONZE, PHOSPHOR BRONZE-BRASS, BRASS ELECTROPLATE	220A, 117A, LNC-5	AC	BLACK	Electrolyte depends on composition of alloy.
		DC	CLEAR	
CADMIUM ELECTROPLATE	LNC-5, 117A, 112A	AC	BLACK	Excess electrolyte may cause staining.
CARBIDES	LNC-3, 250A, 255A, LNC2	AC	DARK	Use maximum Power Unit output.
CHROME PLATE-HARD	LNC-3, LNC-4, GB-77	DC	CLEAR	Cannot be color marked, unless deep-etched through plating.
CHROME PLATE-DECORATIVE	LNC-7	AC	DARK	
		DC	CLEAR	
COBALT ALLOYS, STELLITE	LNC-1, LNC-3, 260A	AC	BLACK	Sandblast surface should have light oil film before marking.
		DC	CLEAR	
COPPER AND ALLOYS, COPPER ELECTROPLATE	220A, LNC-5, 117A	AC	BLACK	Electrolyte depends on composition of alloy.
		DC	CLEAR	
COVAR	255A, GB-2	AC	BLACK	
DEEP-ETCH ALUMINUM, FERROUS METALS	LNC-3, LNC-9, GB-77	DC	CLEAR	Use deep-etch Hand Pad, Type F Wick, interrupted current.
BRASS, BRONZE, COPPER	LNC-5			
DISCALOY	LNC-3, 260A	AC	BLACK	
GOLD AND ALLOYS, GOLD PLATE	LNC-1, LNC-3, 2611A	AC	BLACK	Use minimum electrolyte
		DC	CLEAR	
	GB-2 (Plate)	DC	BLACK	Reverse polarity.
HASTELLOYS	LNC-1, LNC-3,, LNC-4, LNC-8	AC	BLACK	
INCONEL	251A, LNC-1, LNC-3, 2611A	AC	BLACK	
	GB-2 (PLATE)	DC	BLACK	Reverse polarity.
IRON	LNC-1, LNC-3, 2611A, 112A	AC	BLACK	
LEAD AND ALLOYS, LEAD PLATE	LNC-4, 250A	AC	BLACK	
		DC	CLEAR	

Continued

METALS, ALLOYS, PLATINGS	ELECTROLYTE	POWER UNIT CIRCUIT	COLOR	COMMENTS
MAGNESIUM AND ALLOYS	LNC-4, LNC-5, 250A	DC	CLEAR	Mark before galvanic anodize - cannot be color marked.
MONEL METAL	LNC-1, LNC-3, 2611A	AC	BLACK	Circuit depends on surface finish and results desired.
		DC	CLEAR	
NICKEL AND ALLOYS, NICKEL PLATINGS	LNC-2, 250A, LNC-9	AC	BLACK	
		DC	CLEAR	
STEEL-LOW CARBON, MILD	LNC-1, LNC-3, 2611A, 112A	AC	BLACK	
STEEL-HIGH ALLOY, TOOL	LNC-3, LNC-9, 260A	DC	CLEAR	
SAW STEEL	L-50, LNC-1, 2611A	AC	BLACK	
STAINLESS STEEL 300 SERIES	D462, 53NC, LNC-2	AC	BLACK	Color depends on series of stainless.
STAINLESS STEEL 400 SERIES	LNC-8, CF-25, 260A	DC	CLEAR	
SILVER, SILVER PLATE	LNC-6, 117A, 251A	AC	BLACK	Permanency of mark depends on composition.
		DC	CLEAR	
TIN AND ALLOYS, TIN PLATE	LNC-5, 117A, 112A	AC	BLACK	
TITANIUM	250A, (Nuc. Gr.), LNC-3, 251A, 260A	AC	DARK	Minimum power, electrolyte.
	GB2 (plate)	DC	BLACK	Reverse polarity.
	2611A	DC		Deep etch.
ZINC AND ALLOYS, ZINC PLATING, ELECTRO-GALVANIZE	112A, 117A, LNC-5	AC	BLACK	
	GB-2 (plate)	DC	BLACK	Reverse polarity.
CHROMATED CADMIUM, ZINC	LNC-2, LNC-5, 117A	AC	BLACK	Surfaces partially passivated. Use max. output and pressure.
		DC	CLEAR	
BLACK OXIDE	270A	AC	WHITE	Electrolyte, circuit, power unit output depends on coating involved. See special instructions/submit samples for test marking.
	D462, LNC-4, LNC-3	DC	WHITE	
BLUE FURNACE OXIDE, PHOSPHATED STEEL, OTHER SUPPLEMENTAL COATINGS	D462, LNC-3, LNC-4	DC	WHITE	

NUCLEAR-GRADE ELECTROLYTES AND CLEANERS

Contain less that 250ppm of Halogens, Sulpher, and Lead. Available in LNC-2, LNC-3, Lnc-5, and 250 A Electrolyte formuations, and #2 and #3 Cleaner formulations. Certified Trace Analysis available at additional cost.

POSTCLEANERS AND PROTECTIVE OIL

#2 CLEANER - for ferrous metals by manual wiping.

#3 CLEANER - for non-ferrous metals by manual wiping.

#1 All Purpose Cleaner, Neutralyte } General purpose cleaners for all metals by manual wiping.

LIC CLEANER - Concentrate to be diluted 9:1 with water for immersion cleaning or wiping.

CT CLEANER TISSUES - for light cleaning applications on non-ferrous metals (pkg of 1,000)

RV OIL - a water-displacing (polarized) oil for in-plant protection after marking and cleaning.

SPECIAL CFX-2 NON-CLEANING ELECTROLYTE

For marking high carbon and mild steel, hardened/case-hardened steels, some high-speed steels, and iron. Requires little or no post-cleaning. Ideal for bearings, feeler gauges, and other parts prone to corrosion.

All Electrolytes and Cleaners are available in 1-quart plastic bottles (1, 4, 6, and 12-quart packages), 1-gallon plastic jugs, and 5-gallon plastic pails. Some electrolytes and cleaners available in 55-gallon drums. Prices on application.

SEND SAMPLES!

If in doubt as to which electrolyte is best for your parts, submit samples to LECTROETCH for test marking. Please include information on mteal composition, and type of mark (AC mark, DC etch, Deep Etch, etc.). There is no charge for this service. We will return parts with our recommendations.

Typical Marking Set-Up

Small parts are shown being marked by means of a cartridge hand pad. The parts lay on a ground plate connected to the Power Unit. The stencil is affixed to the marker, which is also attached to the Power Unit. When the marker is brought into contact with the part, electrical current flows, via the electrolyte, through the stencil apertures to produce the mark. When the marker is removed from the part, the current breaks, stopping the etching process.

A Hand-held marker contains stencil, electrolyte and wicking pad; and is connected to the low voltage Power Unit.

B Marker is rested on part, bringing stencil in contact with surface to be marked.

C Ground plate attached to the Power Unit. The marking current is closed when the stencil-holding marker is applied to the part on the ground plate.

D Power Unit transforms 115 volt, 60 cycle, AC power to low-voltage marking output which is fed to the ground plate and to the stencil-holding marker.

E Electrolyte fluid is the conductive medium which permits the marking current to flow evenly through the stencil openings.

Lectroetch®