Metal Blades with Electrolizing®

Product Description
The Electrolizing process uniformly bonds a smooth, very dense, pure chromium, non-magnetic, extremely hard proprietary alloy onto our stainless steel base premium metal blades. This alloy provides an unusual combination of bearing properties, remarkable wear resistance, extremely low coefficient of friction and corrosion protection. The smooth sliding properties enhances paste rolling and release that is essential in SMT PCB printing applications. Electrolizing optimizes print performance and maximizes blade life!

Features
Coating Thickness: .00001”
Hardness: Rc 70/72
Corrosion Protection: excellent
Wear Resistance: no chipping, flaking or peeling
Lubricity: excellent
Adhesion: absolute
Conductive: yes
Electrostatic build-up/discharge: eliminates
Appearance: smooth satin-gray
No Undercoating: no nickel or cooper

Hardness
Electrolizing provides the metal with a surface hardness of Rc 70/72 Rockwell. While the plating is extremely hard, it is also quite ductile. The density of the plating provides a surface free of irregularities. The combination of hardness and density results in reduced wear rates and a reduced coefficient of friction. There is no undercoating used; no cooper or nickel.

Adhesion
Adhesion is the most important feature of the Electrolizing technology. Without adhesion, surface treatments offer little benefit. The Electrolizing plating must meet standard repeated bend testing to 180°F / 82°C without showing signs of chipping, spalling or separation. Adhesion test results enables this technology to meet the standard ASTM-B-489-85.

Lubricity
The plating is excellent for providing a dry lubricant surface. With unplated steel against itself, the resultant frictional values range to about .20 or greater. Electrolizing provides the user with .09 to .12 values, or approximately 50% improvement. Lubricated conditions result in lower values and improves stencil life.

Corrosion Protection
The plating has been subjected to corrosion testing using ASTM-B-117 salt spray procedures. The results meet or exceed the criteria stated in the specifications QQ-C-320, AMS 2406 and AMS 2438. In addition, the plating has been evaluated in humidity tests, salt water, deionized water, bleach and various commercial reagents, acids, alkalines and salts.

Precision
Electrolizing was developed and designed to be a precise, thin deposition. The procedures, controls and techniques for applying Electrolizing assure that highly precise tolerances .00001” is maintained.

Aesthetics
The smooth plated surface is satin-gray in color, continuous, fine grained, adherent, uniform in thickness and appearance and is free of blisters, pits, nodules, porosity and edge build-up.

Conductivity
Unlike anodize and hard-coat, Electrolizing is a conductive plating. Combined with increased wear resistance, the conductivity property eliminates electrostatic build-up and discharge.

Ordering Information
Standard ordering information can be found on our website or by contacting the factory.

Availability
Products are available through global sales and a nationwide network of distributors.

Environmental Policy
As a leading manufacturer and supplier of SMT production supplies; INI is committed to providing high quality products and services in a manner that does not impact upon, but enhances the environment.