

Technic Electropolishing Systems

Applied Industrial Technology – Meeting the requirements of today’s automotive, medical, semiconductor, aerospace, electronics, superconductor, solar, petroleum and other high technology manufacturing sectors.

Introduction

Technic manufactures a full line of electropolishing systems for research and industry in manual and automatic configurations. Each is custom designed and supplied with the tools and accessories necessary for successful operation. Regardless of the sophistication of the application, a design can be developed to deliver the precision and accuracy required.

System Features

- Modular construction
- Corrosion resistant fabrication
- Water conserving rinse design
- Data collection
- Totally enclosed
- Minimal maintenance
- Steam or electric heat
- Manual or automatic operation

System Benefits

- Easy to operate
- Easy to maintain
- Reproducible results
- Waste minimization
- Controlled environment

Application

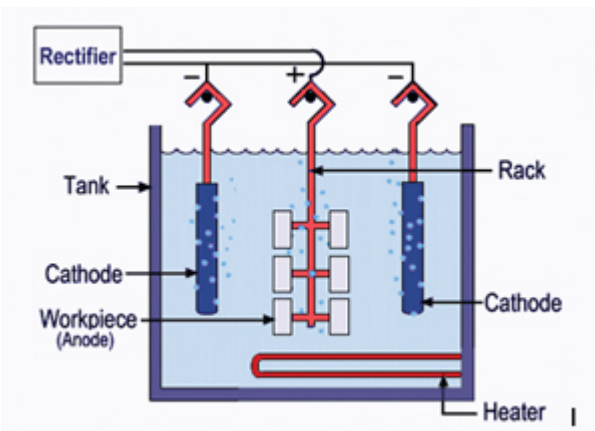
Technic electropolishing systems are recommended for the 300 and 400 series of stainless steel alloys and many other metals. Uses include polishing, sharpening and deburring. Each system is configured to match the size of parts in the optimum arrangement for processing.





The Electropolishing Process

Electropolishing is an electrochemical process which is used for smoothing metal surfaces by removing microscopic amounts of material from the surface of the product. The metal work-piece is immersed in a temperature controlled bath of electrolyte while connected to the anodic (positive) position in a DC circuit. A current passes from the anode where metal is dissolved to the cathode where hydrogen is evolved. Electrolytes used for most commercial electropolishing are usually concentrated acid mixtures such as sulfuric acid and phosphoric acid. Alkaline processes may be used for some metals. The protruding elements of a part's surface profile dissolve faster than the material in the recesses resulting in a chemically altered smoother surface.



Almost any metal can be electropolished

The metal can be ferrous or non-ferrous. Typical metals and alloys that can be electropolished are as follows:

Beryllium-Copper Alloys	Monel
Brass	Nickel
Bronze	Nickel Silver
Copper	Steels
Gold	Stainless Steels
Hastelloy Alloys	Titanium

About Technic

Technic is a global supplier of electroplating chemistry, engineered powder & flake and custom built equipment to the metal finishing industry.

Technic's Equipment Divisions provide engineering, design and construction services for a wide

range of reel to reel and other metal finishing applications.

Technic offers the highest quality resources and most reliable application expertise for all your equipment needs including: Retrofits, Upgrades, Complete Systems, Supplies and Service.

We are committed to bringing advanced technology, reliable equipment and support services to our clients. As a company, we take pride in maintaining ongoing relationships with a broad range of manufacturing clients that continue to turn to Technic for all their application needs.