

SURFACE  
TREATMENT

# PROTECTIVE SURFACE TREATMENT

## Anodizing

### 3 possibilities for colored, resistant and protected titanium devices

These electrochemical processes lead to the formation of a titanium oxide layer on the surface of products, granting the materials enhanced resistance to wear and corrosion.

#### **TYP I ANODIZING** (50 COLORS):

- » Crystallographically oriented oxide layer
- » Enhanced resistance to wear and corrosion
- » Ease of identification

#### **TYP III ANODIZING** (50 COLORS):

- » Same properties as the Typ I anodizing
- » Preservation of the initial surface finition (shiny, brushed, sandblasted)
- » No material removal or dimensional loss

#### **TYP II ANODIZING:**

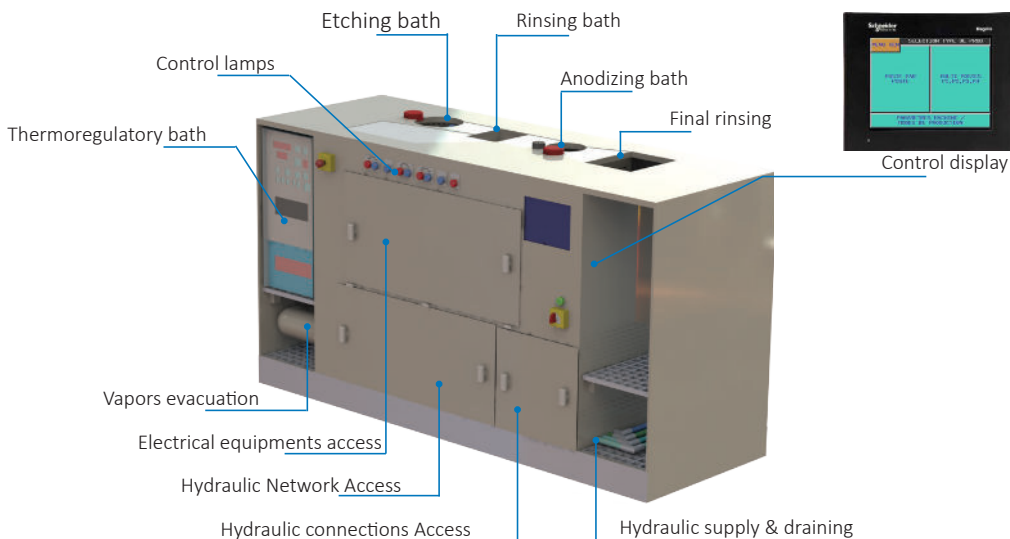
- » Enhanced mechanical properties thanks to the specific oxide layer created
- » Increased resistance to scratches and wear
- » Reduction of the coefficient of friction compared to non-anodized titanium
- » Improved osseointegration of the implants



## Colorbox

### Automated equipment for titanium anodization

With our experience and expertise, we implement our own surface treatment processes and equipments. Depending on the requirements of each process, a compatible machine is designed and manufactured. Our teams work for and with you in order to develop the best solutions to your requirements.





Our team is expert in chemical and electrochemical surface treatments of medical devices made of polymers, stainless steel and titanium alloys. All processes are developed qualified and validated in order to comply with NF EN ISO 13485 and FDA (21CFR) regulations .

## Electropolishing

### Shinier and more resistant stainless steels

- » Edges and surfaces deburring
- » Surface brightening
- » Dirts removal
- » Corrosion resistance
- » Micro-cracks removal
- » Functional parts protection
- » Dimensional parts protection



## Passivation

### Optimized protection of implants and instruments

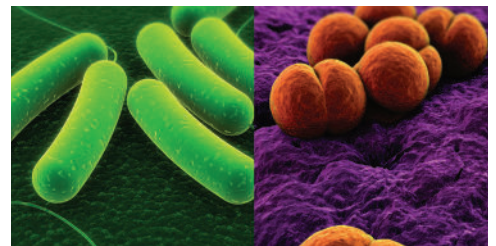
- » Corrosion resistance
- » Laser marking stabilization
- » Biocompatibility improvement
- » Increase of the resistance to chemicals



## Cleaning Disinfection

### For in-depth and secure cleaning and packaging of your medical devices

- » Three levels of cleanliness.
- » IQ, OQ, PQ and PPQ process validations according to ISO 19227.



## TRACEABILITY SURFACE TREATMENT

### Laser marking

#### Tamper-proof traceability

- » High precision
- » Full marking integrity
- » Traceability
- » Custom marking (QR codes, serialization, etc...)



# OUR EXPERTISE

**Our experts in chemical and electrochemical surface treatments for medical devices are ready for all your inquiries.**

## Validation and quality

Your satisfaction is our priority. All our processes are developed and validated by our expert teams in compliance with our IQ, OQ, PQ and PPQs procedures. Our employees and our processes are 100% dedicated to medical devices. We are NF EN ISO 13485 and ISO 9001 certified by the LNE/G-MED notified body (identification no. 0459), and FDA compliant. According to our business risk analysis, patient safety is our main focus.

## R&D Surface Treatment

Our teams are constantly researching, designing and developing new surface treatment processes more efficient and intelligent. Based on your implants or instruments functional requirements, we strive to anticipate market trends and bring your dreams to life.

Either for contract manufacturing operations, or to develop your own process and integrate the associated equipment in your facility, we are here to support and answer to your requests.



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