



# Experience, Service & Reliability



# **Technical Advantages**

- BioBrite Validated Electropolish
- MedaPass Passivation
- MedaDize Titanium Anodize(Color & Gray)
- TechCoat PVD Color Coatings
- TM-Rx Medical Grade Chromium
   Coating (ISO 10993-1)
- Aluminum Anodize / Hard Coat
- Blasting & Grinding Services
- Laser Etching / Dark Marking
- Ultrasonic Cleaning
- R&D Engineered Finishes

# **Medical Coatings & Processes**

For over 50 years, Techmetals, Inc. has been recognized as a leader in the metal finishing industry – proudly assisting clients around the globe with unmatched quality, service and reliability.

We understand that parts utilized in the medical field demand precision, quality and compliance to the highest degree. Our services are ensured through compliance with the industry's most stringent testing facilities such as **Nadcap Chemical Processing**, **Nadcap Coatings**, **ISO 9001:2015** and **ISO 13485:2016** to name just a few.

Our team of professionals offer a variety of metal finishes including **titanium and aluminum anodizing**, **passivation** and **medical-grade chrome plating**. We also provide **laser etching** services, truly making us a one-stop-shop for all your medical finishing needs.







Call: (937) 253-5311

www.techmetals.com

Techmetals will work closely with you to develop the processes and metal finishing to meet your specific requirements. From concept through completion, we will offer you the peace of mind that your projects are done right — the first time!

#### **BioBrite**, Medical Validated Eletropolish

- Stainless Steels 300, 400 Series, PH and Aluminum
- Meets ASTM B912, ASTM 380 & ASTM A967 requirements

# MedaPass, Medical Stainless Steel Passivation

- Both citric & nitric passivate
- Small to large part capacity with validated processes
- Accredited industry specifications

### MedaDize, Color & Gray Titanium Anodize

- Validated titanium anodize (compatible)
- SAE AMS 2488 type II gray
- Standard colors on chart & custom colors available

#### **Aluminum Anodize & Hard Coat**

- FDA compliant validated processes
- NSF approved colors available
- Custom and standard colors
- OxyTech processes for critical parts

#### **Other Processes**

- Laser Etching
- Dark Marking
- Blasting
- \_\_\_ Cuita alita
- Ultrasonic Cleaning
- R&D Engineered Finishes
- Prototyping
- Grinding Testing & more

#### **TechCoat PVD Coatings**

- Extreme hardness & durability, low coefficient of friction
- Micro hardness 1,800 to 3,500 (Hv)
- Validated processes
- TechCoat 100 (TiN)
- TechCoat Med 100 (TiN)
- TechCoat DLA 200 (DLC),1-5 Microns
- TechCoat 300 (AITiN)
- TechCoat 345 (AlTiN), Medical
- TechCoat 400 (CrN)
- TechCoat 500 (ZrN)
- TechCoat 600 AlTiCrN)



#### TM-Rx, Medical Grade Chromium Coating

- Can be applied to ferrous and non-ferrous metals steel, stainless, aluminum and other materials
- Wear reduction & anti-galling coating, extreme hardness
- Low coefficient of friction, lubricity & corrosion protection
- Validated lines and processes

## **Plating Solutions**

- Nickel
- Silver

**Aluminum Anodize Color Imaging** 

- Platinum
- Chrome Gold
- and Others



# **Techmetals Industry Specifications**

# Alkaline Zinc ASTM B 633

Anodize
MIL-A-8625

MIL-A-8625 AMS 2469 AMS 2471 AMS 2472 ASTM B 580\*

Brush Plating
Nickel, Cobalt, Copper
MIL-STD-865C (USAF)
AMS 2451

Copper AMS 2418

Chemfilm

MIL-C-5541

AMS 2473

MIL-DTL-5541 (Hex)

MIL-DTL-5541 (Hex Free)

BAC 5719

MAP-311088-1300

9904151 (Type 1)

# QQ-P-416

AMS QQ P 416

Electropolish
ASTM B 912

Gold
ASTM B 488

Hard Chrome

AMS 2406 AMS 2460 ASTM B 177 FED-QQ-C-320 MIL-DTL-23422 MIL-STD 1501 F

Nickel Boron
AMS 2433
ASTM B 607\*

Nickel/EN AMS C 26074\* AMS 2404 AMS 2405

#### Nickel/EN (cont.)

AMS 2454 ASTM B 733 MIL-C-26074 MIL-DTL-32119

Nickel / Sulfamate

AMS 2403 AMS 2424 AMS-QQ-N-290 FED-QQ-N-290 Union Carbide J5 1396

Passivation

AMS QQ P 35 AMS 2700 ASTM A 380 ASTM A 967 ASTM F86\* FED-QQ-P-35 9904301

Silver AMS 2410 MS 2411

#### AMS 2412 ASTM B 700 QQ-S-365

Tin
ASTM B 545\*

Titanium Coating
AMS 2488

Zinc Nickel
AMS 2417
BAC 5680
BAC 5637

PVD / Thin Film Vacuum

> AMS 2444, TiN, DLC, TiCN, CrN, AITiN, AITiCrN, ZrN

Other

MIL-STD-186 MIL-STD-171 BAC 5625 Cobalt, Tungsten, Nickel PTFE, Diamond Coatings, OptaKoat, Hard Chrome, Replacements & more

#### Testing

Coating Weight, Adhesion Scratch & Chisel, Corrosion/Salt Spray & Porosity, B12 Adhesion Bend, Thickness & Magnetic, Eddy Current, XRF Micro-hardness, Water Immersion Bond Strengthtape, Metallography & Microstructure

Nadcap™ Accredited Processes are Shown in Blue.

Other Nadcap™ processes may be available upon request. \*Nadcap™ Accredited "other" under scope.

Nadcap Chemical Processing Nadcap Coatings Nadcap NonDestructive Testing

ISO 9001:2015 ISO 13485:2016
ISO 10993-1

