Techmetals, Inc.

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. Our services are ensured through compliance with the industry’s most stringent testing facilities such as Nadcap Chemical Processing, Nadcap Coatings, ISO 9001:2015, ISO 13485:2016, AS9100D, ITAR, FAA Repair Station, 10 CFR App B to name just a few.

We take great pride in assisting our customers with metal plating solutions that fit both their requirements, as well as their budgets – even offering in-house R&D for customized finishing solutions to fit your specific needs. You can depend upon Techmetals time and again, just as many of the most well known players in the Aerospace, Military, Manufacturing, Automotive and Medical and many other fields do.

Medical Coatings & Processes

Parts utilized in the medical field demand precision, quality and compliance to the highest degree.

Techmetals is certified to provide a variety of metal finishes including both titanium and aluminum anodizing, passivation and medical grade chrome plating, just to name a few. We also provide the laser etching services now required by the medical industry to properly track or document each part’s use.

BioBrite (Validated Electropolish)

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

MedaPass (Medical Stainless Steel Passivation)

- Both Citric & Nitric Passivate
- Small to large part capacity with validated processes
- Accredited industry specifications
Medical Coatings & Processes (continued...)

MedaDize Color & Gray (Titanium Anodize)
- Validated titanium anodize (biocompatible)
- SAE AMS 2488 type II gray
- Standard Colors on Chart & Custom Colors available

TechCoat PVD Coatings
- Extreme hardness and durability — low coefficient of friction
- Micro hardness 1,800 to 3,500 (Hv)
- TechCoat Med-DLA 1-5 microns
- TechCoat 100 - 300
- Diamond Like Carbon coating (DLC)
- Titanium Nitride (TiN)
- Chromium Nitride (CrN)
- Titanium Carbonitride (TiCN)
- Zirconium Nitride (ZrN)
- Aluminum Titanium Nitride (AlTiN)
- Aluminum Titanium Chromium Nitride (AlTiCrN)
- Validated processes

TM-Rx (Medical Grade Chromium Coating: ISO 10993-1)
- Can be applied to ferrous and non-ferrous metals — steel, stainless, aluminum and other materials
- Wear reduction and anti-galling coating — extreme hardness
- Low coefficient of friction, lubricity and corrosion protection
- Validated lines and processes

Other Processes
Laser Etching, Dark Marking, Blasting, Grinding, Ultrasonic Cleaning, R&D, Prototyping, Testing and more

Aluminum Anodize & Hard Coat
- FDA compliant – validated processes
- NSF approved colors available
- Custom and standard colors
- OxyTech processes for critical parts

Plating Capabilities
Nickel, Chrome, Silver and others

Defence Surface Finishing

There are few clients that demand more from metal plating solutions than the Defense Industry.

Techmetals ensures precision and reliability in some of the most advanced technologies on the planet. We achieve success through our certifications with the industry’s most demanding testing facilities, such as:

- Nadcap Chemical Processing
- Nadcap Coatings
- AS9100D
- ATF-FFL

We have a 160,000 square foot facility with a capacity to handle any sized project — custom colors available.
**Aerospace Metal Finishes:**

Techmetals has been instrumental in helping some of the aerospace industry’s most recognizable names with high-quality and dependable metal plating solutions. We work closely with each of our clients to develop unique metal finishing procedures for commercial and military aircraft, helicopters and even spacecraft.

We assist both OEM component and MRO facilities — providing metal plating and anodizing for a variety of parts. With the reputation as an industry leader, Techmetals ensures the highest quality is obtained through our certifications such as Nadcap Chemical Processing, Nadcap Coatings, AS9100D — as well as our participation in the FAA flight safety program. We proudly are recognized as an FAA Repair Station and able to handle the most flight-critical components available.

**Techmetals Industry Specifications:**

Below is a list of specifications that are most often provided by Techmetals. We also offer metal finishing to additional specifications such as AMS, MIL, ASTM, SAE or customer specifications. Our services include R&D, optical coatings, medical coatings, large ID & OD grinding — as well as opportunities with up to 20-ton capacities.

- **Alkaline Zinc**
  - ASTM B-633

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

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

- **Chemfilm**
  - MIL-C-5541
  - AMS 2473
  - MIL-DTL-5541 (Hex)
  - MIL-DTL-5541 (Hex Free)
  - BAC 5719

- **Cadmium**
  - QQ-P-416

- **Electropolish**
  - ASTM B912

- **Gold**
  - ASTM B 488

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

- **Nickel Boron**
  - AMS 2433
  - ASTM B 607*

- **Nickel/EN**
  - AMS-C-26074*
  - AMS-2404
  - AMS-2405
  - ASTM-B-733
  - MIL-C-26074
  - **Nickel/EN (cont.)**
    - MPR 1059
    - MIL-DTL-32119

- **Tin**
  - ASTM-B-545*

- **Nickel / Sulphamate**
  - AMS 2403
  - AMS 2424
  - FED-QQ-N-290
  - AMS QQ-N-290
  - Union Carbide J5 1396

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

- **Silver**
  - AMS 2410
  - AMS 2411
  - ASTM B 700
  - QQ-S-365

- **Titanium Coating**
  - AMS 2488

- **Zinc Chromate:**
  - IAW ASTM B633

- **Zinc Nickel**
  - AMS 2417
  - BAC-5680
  - BAC-5637

- **Other**
  - Cobalt, Tungsten, Nickel
  - PTFE, Diamond Coatings, OptaKoat, Copper, Hard Chrome Replacements

- **Thin Film Vacuum**
  - TiN, DLC, TiCN, CrN
  - AlTiN, AlTiCrN, ZrN
  - AMS 2444

- **Other**
  - Cobalt, Tungsten, Nickel

*Nadcap® Accredited Processes are Shown in Blue. Other Nadcap® Processes may be available upon request. *Nadcap® Accredited “other” under scope.*
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