



TECHMETALS

ENGINEERED METAL FINISHING & PERFORMANCE COATINGS

Line Card



ISO 13485:2016 ■ ISO 9001:2015 ■ ATF-FFL 7 & 10 ■ FAA Repair Station ■ ITAR

Techmetals, Inc.

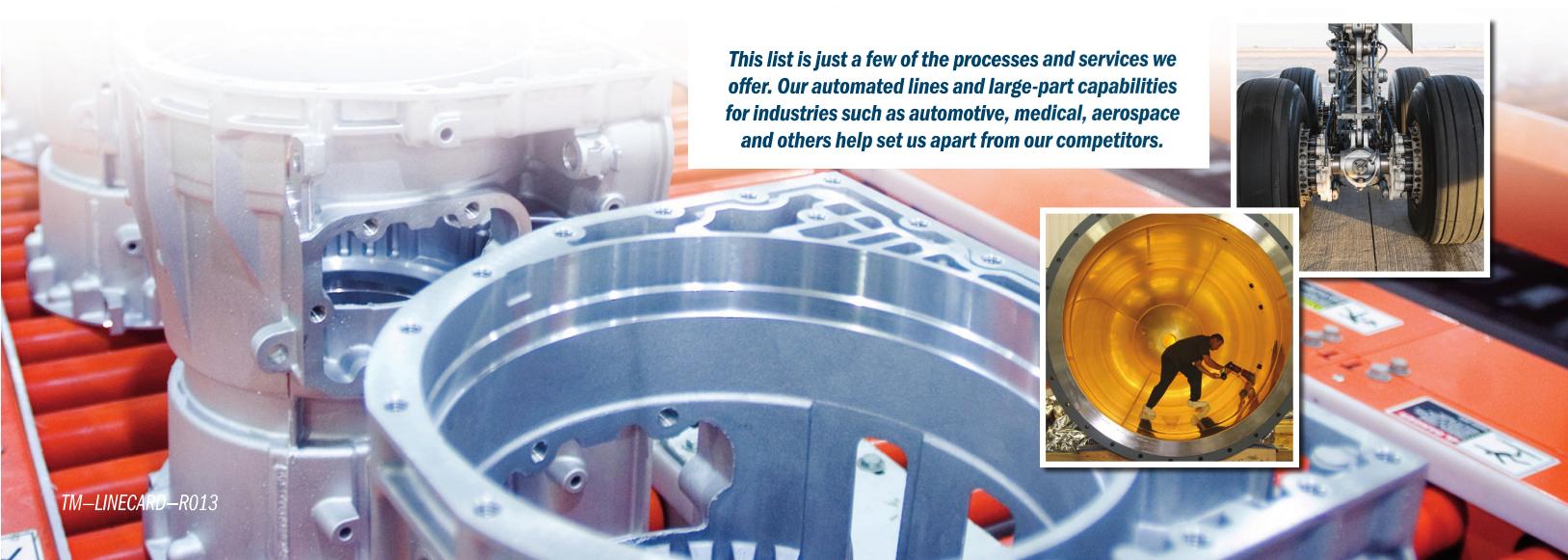
For over 50 years, our customers have relied upon Techmetals for unmatched metal plating, reliability and customer service. We take great pride in our ability to work closely with our customers, offering a personal and efficient solution for over **86 finishing processes** and **engineered performance coatings** – helping to set us apart from our competitors.

We support a variety of industries such as **Aerospace, Automotive, Medical, Military, Power Generation, Agriculture** and more with certified solutions backed by Nadcap CP & CT, ISO 13485:2016, ISO 9001:2015, ITAR, FAA Repair Station and Medically Validated Coatings and Processes to name a few.

Large-part Capabilities and **Automated Lines** help maximize our services to you with regards to quality, turnaround and customer service. With a **172,000 sq. ft. campus** and up to **20-ton capacities**, no job is too large or too small. Techmetals truly is a one-stop-shop for a variety of finishing solutions. Just a few of our services include:

- | | | | | |
|----------------------|------------------------|-----------------------|------------------------|--------------------|
| ■ Anodized Aluminum | ■ Copper Plating | ■ Laser Etching | ■ Nickel, Electrolytic | ■ Silver Plating |
| ■ Anodized Titanium | ■ Diamonize | ■ Mag Particle NDT | ■ Nickel, PTFE | ■ Tin Plating |
| ■ Brush Plating | ■ Electropolish | ■ Materials Lab | ■ OPTAKOAT® | ■ Walk-in Blasting |
| ■ Cadmium Plating | ■ Gold | ■ Masking Dept. | ■ Optical Coatings | ■ Wet Lab |
| ■ Chemfilm | ■ Grinding, ID & OD | ■ Nickel Boron | ■ Passivation | ■ Zinc Plating |
| ■ Chrome, Industrial | ■ Grinding, Centerless | ■ Nickel, Electroless | ■ PVD (DLC, TiN, etc.) | ■ Zinc Nickel |

This list is just a few of the processes and services we offer. Our automated lines and large-part capabilities for industries such as automotive, medical, aerospace and others help set us apart from our competitors.



Aerospace & Defense 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.

ISO 13485:2016 ■ ISO 9001:2015 ■ ATF-FFL 7 & 10 ■ FAA Repair Station



Nadcap™
Administered by PRI
ACCREDITED

Chemical Processing

Nadcap™
Administered by PRI
ACCREDITED

Coatings

Nadcap™
Administered by PRI
ACCREDITED

NonDestructive Testing

Medical Coatings & Processes

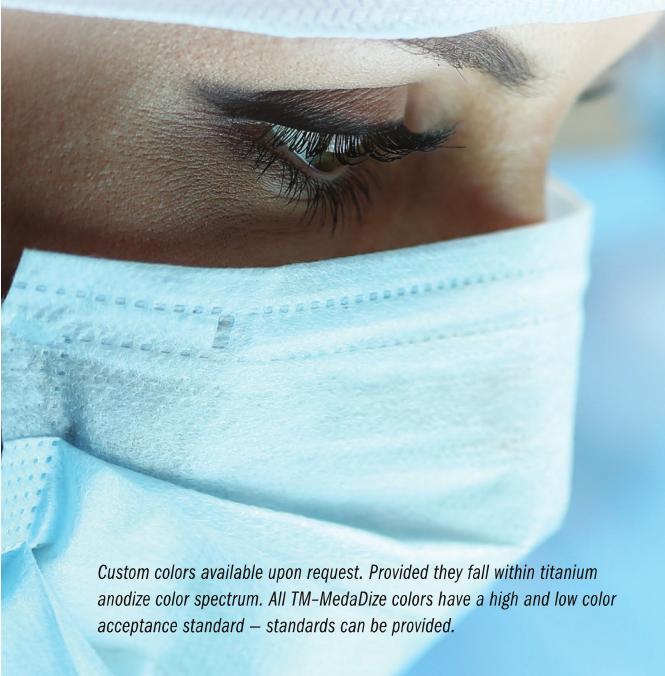
Parts utilized in the medical field demand precision, quality and compliance to the highest degree.

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.

Our medical processes have all undergone and passed biocompatibility testing for **bioburden, cytotoxicity and wear resistance** — with our MedaDize finish meeting even aerospace requirements.

Medical Processes Include:

- **BioBrite** (Validated Electropolish)
- **MedaPass** (Validated Passivation)
- **TM-Rx** (Medical Grade Chromium Coating; ISO 10993-1, Validated)
- **Medically Validated PVD Coatings:**
 - TechCoat 100, 200, 300, 400
 - TiN, AITiN, DLC, CrN & more
- Aluminum & Titanium Anodizing
- Laser Etching/Dark Marking
- Blasting, Testing, Prototyping
- Ultrasonic Cleaning
- Research & Development
- **MedaDize Color Titanium Anodize**
 - TM-0079 (Aqua)
 - TM-0064 (Magenta)
 - TM-0092 (Dk. Blue)
 - TM-0003 (Green)
 - TM-0001 (Gold)
 - TM-0005 (Seafoam)
 - TM-0096 (Purple)
 - TM-0004 (Lt. Blue)
 - TM-0093 (Bronze)
 - TM-0002 (Blue)
 - TM-0134 (Teal)
 - AMS2488 (Type II Gray)



Custom colors available upon request. Provided they fall within titanium anodize color spectrum. All TM-MedaDize colors have a high and low color acceptance standard — standards can be provided.

Grinding Services

Techmetals can do pre-grinding on parts before plating, as well as post-grind hard chrome projects to meet dimensional specifications. Having these resources under a single roof helps improve turnaround times and efficiency.

Just another example of Techmetals commitment to being a one-stop-shop for customers in Aerospace, Nuclear, Heavy Machinery and more.



5-Axis 30" x 30" x 30"



Large Scale ID Grinding

Vertical Grinding Capabilities: 72" Vertical Stroke ■ 60" Table ■ 30,000 lbs.

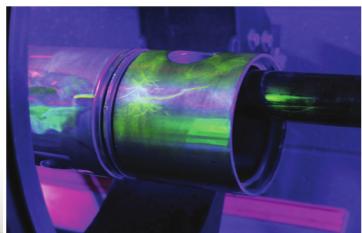
Horizontal Grinding: Up to 100" Length ■ 20" Diameter ■ 2,500 lbs.

5-Axis Grinder: (30" x 30" x 30")

Centerless Grinding is also available (call for details)

Engineered Performance Coatings (MV - Medically Validated)

- | | | | | |
|------------------|----------------------------------------------|-------------|----------------------------------------|----------------------------------------|
| ■ OxyTech | ■ TM111 | ■ TM104 | ■ TM109 | ■ TechCoat 200 <small>(MV)</small> |
| ■ OxyLube | ■ TM119 | ■ TM117C | ■ OPTAKOAT | ■ TechCoat 300 |
| ■ Armatech | ■ TM121 | ■ TM117P | ■ Optic EN | ■ TechCoat 345 Med <small>(MV)</small> |
| ■ Diamoforce | ■ TM-Rx Medical Chromium <small>(MV)</small> | ■ TM129 | ■ TechCoat 100 <small>(MV)</small> | ■ TechCoat 400 <small>(MV)</small> |
| ■ Splatter Guard | ■ E-Krome | ■ TM133 | ■ TechCoat 100 Med <small>(MV)</small> | ■ TechCoat 500 |
| ■ TM105 | ■ TM103 | ■ UltraKoat | ■ TechCoat 200 <small>(MV)</small> | ■ TechCoat 600 |



Nondestructive Testing (NDT)

Techmetals currently is certified in **Magnetic Particle Testing**, allowing our customers to verify their equipment or parts with techniques that do not damage them. Magnetic particle inspection is the most efficient and affordable testing method available. We have **three separate NDT benches**, with the largest **able to accommodate parts up to 54" in length**.



ACCREDITED

NonDestructive Testing



UNDE

Techmetals Industry Specifications

Below are specifications that are most often provided by Techmetals. We also offer metal plating solutions to additional specifications such as AMS, MIL, ASTM, SAE and Customer Specifications. Techmetals also offers R&D, Optical Coatings, Medical Coatings, Large ID & OD Grinding & Areas with 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

■ Copper

AMS 2418

■ Chemfilm

MIL-C-5541

AMS 2473

MIL-DTL-5541 (Hex)

MIL-DTL-5541 (Hex Free)

BAC 5719

9904151 (Type 1)

MAP-311088-1300

■ Cadmium

QQ-P-416

AMS QQ P 416

■ Electropolish

ASTM B 912

■ Gold

ASTM B 488

■ Hard Chrome

AMS QQ C 320

AMS 2406

AMS 2460

ASTM B 177

FED-QQ-C-320

■ Hard Chrome

MIL-DTL-23422

MIL-STD 1501 F

■ Nickel Boron

AMS 2433

ASTM B 607*

■ Nickel/EN

AMS C 26074*

AMS 2404

AMS 2405

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

AMS 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,

AlTiN, AlTiCrN, ZrN

■ Other

MIL-STD-186

MIL-STD-171

BAC 5625

MPR 1059 Navy

NAVAIR/NAVSEA/

NAWCAD

Nickel PTFE, Diamond

Coatings, OptaKoat,

Hard Chrome,

Replacements & more

■ Testing

NDT Mag Particle

Adhesion Scratch & Chisel

Corrosion/Salt Spray

& Porosity

B12 Adhesion Bend

Thickness & Magnetic

Eddy Current

XRF Micro-hardness

Water Immersion Bond

Strength-tape

Metallography &

Microstructure

Other Nadcap™ processes may be available upon request.

**Nadcap™ Accredited "other" under scope.*

■ Engineering

(937) 253-5311 ext. 1207

engineering@techmetals.com

■ Quoting/Sales

(937) 253-5311 ext. 13

quoting@techmetals.com

■ Quality

(937) 253-5311 ext. 1263

qualitydist@techmetals.com

■ Research & Development

(937) 253-5311 ext. 1273

RandD@techmetals.com



Nadcap™ Accredited Processes are Shown in Blue.

ISO 13485:2016 - ISO 9001:2015

ATF-FFL 7 & 10 • FAA Repair Station