



DAYTON COATING TECHNOLOGIES

Leaders In

PVD COATING

2 - 3 DAY
Turnaround





RAPID RELIABLE PVD HARD COATINGS

Dayton Coating Technologies provides specially engineered PVD Coatings to a range of industries including:

Die Casting, Medical, Beverage Tooling, Aerospace / Defense, Cutting Tools, Firearms, and others.

With industry leading repeatability and quality, we work with our customers to increase productivity and lower manufacturing costs.

Your Success is Our Success.

We make ordering easy with no minimum order requirements and a team of Customer Fulfillment Specialists trained to simplify inquiries with a vast array of vertically integrated products and services.

Service and Supply Chain Solutions

Flexible pickup and delivery options are available along with shipping at standard and expedited speeds.

By operating three shifts from multiple locations, we proudly provide the fastest industry turnaround.

Contact us to see when we will be in your area.

Vertically Integrated Products and Services

Our custom engineered processes result in superior adhesion through effective surface treatment solutions - before and after coating.

We offer diverse services including: Edge Preparation, Heat Treating, Polishing, Lubricants, OEM Tool Refurbishing, Process Specifications for Regulatory Submissions, and Other Custom Engineered Solutions.

A.T.M.

Is our problem solving model

ADHESION - THICKNESS - MORPHOLOGY

★ **What PVD Coating is best for your application?** See our Coating Selection Chart on the back cover.

FLEXIBLE SOLUTIONS

937.278.2060

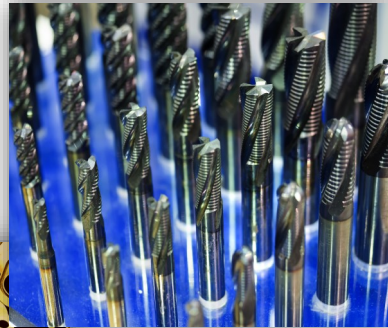
for your manufacturing needs

We help you understand the coating process so you can make informed decisions.

TiCN Coating



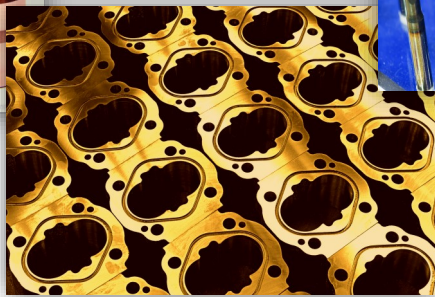
TiAlN Coating



1 - 10,000

*Contact us to coat
your order at any
quantity.*

NO MINIMUM



TiN Coating

BEVERAGE TOOLING

Dayton Coating Technologies provides the smoothest coatings for some of the most significant participants in the Beverage Tooling Industry.

We understand delicate score line tolerances, essential handling requirements, and specialized quality needs.

All Beverage Tools are inspected before and after PVD Coating in our state of the art Tribology Lab.

MEDICAL INDUSTRY

Our industry expertise extends into different branches of the medical field with experience surface treating and PVD Coating medical instruments such as: orthopedic and alignment devices, implants, surgical cutting tools, and more.

Our coatings are biocompatible for use with devices in contact with skin, tissue, bone, and blood.

DIE LIFE

A unique deep diffusion treatment that stops heat check while adding ductility. This process has been perfected to eliminate size change.

Our Die Life process includes custom surface preparation, with PVD top coat, providing hard wear surface solutions for exotic materials and the most discriminating manufacturing processes.



Our team is ready

to answer your technical coating questions.

937.278.2060

customerfulfillment@webdct.com

	TiN	TiCN	TiAlN	AlTiN	TiAlSiN	ZrN	CrN	AlCrN	AlCrN-HC
	Titanium Nitride	Titanium Carbon Nitride	Titanium Aluminum Nitride	Aluminum Titanium Nitride	Titanium Aluminum Silicon	Zirconium Nitride	Chromium Nitride	Aluminum Chromium Nitride	Aluminum Chromium Nitride - High Compression
COATING COLOR	Gold	Rose	Dark Gray	Dark Gray	Gray	Pale Gold	Silver	Blue - Gray	Blue - Gray
HARDNESS (HV)	2300 - 2500	2800 - 3200	2900 - 3100	3000 - 3400	3200 - 3500	2300 - 2500	1800 - 2100	3000 - 3200	3000 - 3200
COATING THICKNESS (μ = microns)	Industry Standard:	2.2μ - 3.2μ	2.5μ - 3.5μ	1.8μ - 3.2μ	1.8μ - 3.2μ	2.2μ - 3.8	2.2μ - 3.8	1.8μ - 3.2μ	1.8μ - 3.2μ
	Maximum	1 - 8μ	1 - 8μ	1 - 5μ	1 - 5μ	1 - 4μ	1 - 5μ	1 - 5μ	1 - 5μ
	DCT	2.5μ ± 20%	2.8μ ± 20%	2.4μ ± 20%	2.5μ ± 20%	2.5μ ± 20%	3.0μ ± 20%	3.0μ ± 20%	2.5μ ± 20%
COEFFICIENT OF FRICTION	0.4	0.3	0.35	0.35	0.35	0.35	0.45	0.35	0.35
COMMON USE	Machining Ferrous Materials, Molding, Medical Instruments	Stamping, Punching, Blanking, Forming Tools, Tough Machining, Injection Molding	Machining Difficult Materials, Dry or High Temp Machining, Fast Feed Rate Machining, Hot Forging	Dry Machining, High Temp Machining, Fast Feed Rate Machining, Hot Forging	Machining Cast Iron, Tough Applications in High Temp, High Temp Drilling	General Purpose Machining, Medical Industry Instruments	Corrosive Machining, Machining Aluminum, Copper, Metal Forming	Machining: Gear Cutting Tools, Inserts, Punching	Punches, Dies, Stamping, Coining, Beverage and Powdered Metal Industries
	Great general purpose coating for numerous applications.	Improved hardness, toughness, wear resistance over TiN coating with very low COF.	Forgiving coating with high surface hardness at elevated temps.	Versatile coating with a low COF and higher breakdown temperature than TiAlN.	Extremely hard and tough coating with a higher break down temperature than TiAlN / AlTiN. Excellent wear resistance when combined with DCT's post treatment	Exceptional abrasion resistance and lubricity.	Great sliding wear resistance, ductile and helps prevent cold welding. Similar in use to hard chrome plating.	Superb hot hardness with extra ordinary wear resistance under extreme mechanical stress.	Ideal for coating PM steels used on cold work applications. Enhances performance of precision instruments under extreme compressive loads.

We are able to perform COATING REMOVAL on most of our own coatings. Contact our Sales Team with questions.

DAYTON COATING

TECHNOLOGIES

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DCTCAT19A