



**DAYTON
COATING
TECHNOLOGIES**



The Fastest Delivery in the Industry



DCT Provides Vacuum Hard Coatings for Tool and Die, Medical, Aerospace, Electronics, and Automotive Industries.

www.webdct.com • 937.278.2060

We Hard Coat Parts To Maximize Performance & Life

Give Us a Try . . .

You Will Be a Customer for Life

- Fastest turnaround in the industry.
- We treat your precision parts carefully, no damage.
- Professional experienced technicians guarantee consistent results of the highest quality.
- DCT coatings maximize the performance of precision details and tooling.



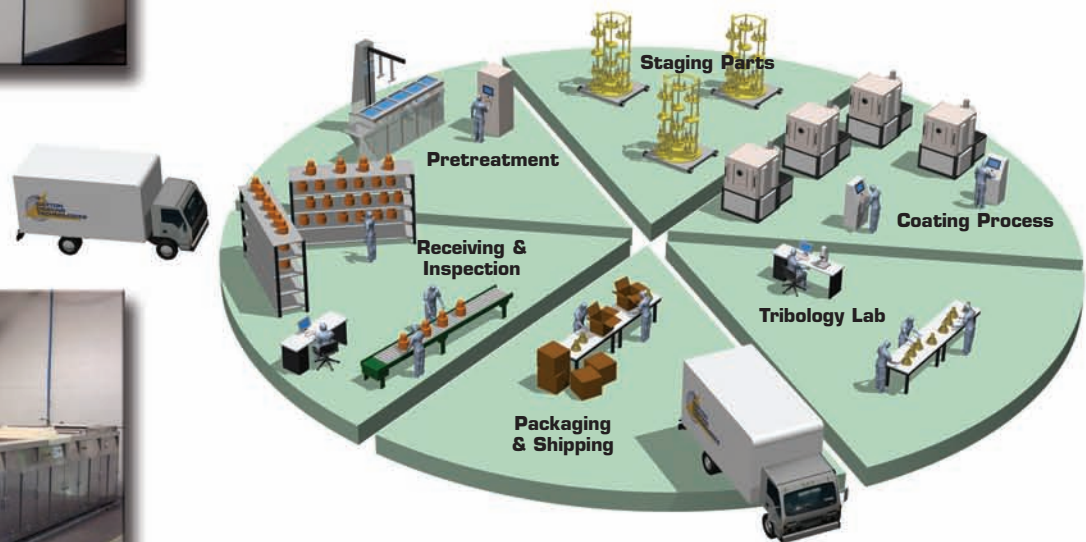
George Korenyi-Both, owner



DCT Gives You the Ultimate in Service

- Pick-up and delivery, 24 hour and weekend schedules.
- Free test coating, engineering support and laboratory analysis to assist you in saving time and money.

Here's How It Works . . .



We listen and we care . . . your success is our success.



Edge Prep™ -
A DCT specialty area.

Edge Prep™ Services Now Available from DCT

- We can help you surface prep parts before and after our PVD coating to increase performance and eliminate costly secondary operations.
- You will be amazed at how the “right” surface preparation can increase your ability to retain and win new business.
- If it wears out, DCT can help you develop a cost effective process to make parts last up to 10X longer!



Adhesion Excellence

- DCT prides itself in only the highest level of adhesion.
- Our unique systems and rigorous quality control guarantee your results.
- After all, what good is any coating if it fails to bond to your critical parts?

Keys to World Class Adhesion

- Parts are inspected before cleaning to identify areas of concern. Small holes and unusual polishing compounds can be problems. DCT has procedures to guarantee results.
- Custom engineered ultrasonic cleaning and part handling procedures have been developed at DCT.
- Proprietary technology gives your parts longer lasting performance.
- Large impersonal coating giants don't sweat the details like DCT.



World Class Technology and Skilled Craftsmen

Our laboratory performs quality assurance testing on every production run. We inspect parts at every critical stage for zero defect coating.

ISO 9001:2000 • AS9100:2004 Rev B



COATING SELECTION CHART

DCT can provide over 157 coating formulations, including a first class alternative to TiB2

COATING NAME	COATING COLOR	HARDNESS (HV)	COATING THICKNESS (μ = MICRONS)	COEFFICIENT OF FRICTION (COF)	COATING TEMP (F)	DEFINITION AND COMMON USE Call us for assistance in coating selection
TiN (Titanium Nitride)	Gold	2300-2500	Industry Standard: 2.2 μ - 3.2 μ Maximum Range: 1-8 μ DCT Tolerance: 2.5 μ +/- 20%	0.4	700	Great general purpose coating, a proven starter coating for numerous applications (common use: machining ferrous materials, molding, medical industry) <i>NOTE: Can be stripped and reapplied to add life to expensive components.</i>
TiCN (Titanium Carbo Nitride)	Rose	2800-3200	Industry Standard: 2.5 μ - 3.5 μ Maximum Range: 1-8 μ DCT Tolerance: 2.8 μ +/- 20%	0.3	800	Improved hardness, toughness, wear resistance over TiN with very low COF (common use: stamping, punching, blanking, forming tools, tough machining, injection molding. <i>NOTE: Can be stripped and reapplied to add life to expensive components.</i>
TiAlN (Titanium Aluminum Nitride)	Dark Gray	2900-3100	Industry Standard: 1.8 μ - 3.2 μ Maximum Range: 1-5 μ DCT Tolerance: 2.4 μ +/- 20%	0.35	850	Forgiving coating with high surface hardness at elevated temp (common use: machining difficult materials, dry or high temp. machining, fast feed rate machining, die cast core pins) <i>NOTE: Can be stripped and reapplied to add life to expensive components.</i>
AlTiN (Aluminum Titanium Nitride)	Dark Gray	3000-3400	Industry Standard: 1.8 μ - 3.2 μ Maximum Range: 1-5 μ DCT Tolerance: 2.5 μ +/- 20%	0.35	800	Versatile coating, low COF, higher breakdown temp. than TiAlN (common use: dry machining, high temp. machining, fast feed rate machining, hot forging)
TiAlSiN (Titanium Aluminum Silicon Nitride)	Gray	3200-3500	Industry Standard: 1.8 μ - 3.2 μ Maximum Range: 1-4 μ DCT Tolerance: 2.5 μ +/- 20%	0.35	850	Extremely hard and tough, higher breakdown temp than TiAlN/AlTiN, excellent wear resistance when post treated by DCT (common use: machining cast iron. Any tough application in high temperatures, high temp drilling) <i>NOTE: Can be stripped and reapplied to add life to expensive components.</i>
ZrN (Zirconium Nitride)	Pale Gold	2300-2500	Industry Standard: 2.2 μ - 3.8 μ Maximum Range: 1-5 μ DCT Tolerance: 3.0 μ +/- 20%	0.35	600	Exceptional abrasion resistance and lubricity (common use: General purpose machining, medical)
CrN (Chromium Nitride)	Silver	1800-2100	Industry Standard: 2.2 μ - 3.8 μ Maximum Range: 1-5 μ DCT Tolerance: 3.0 μ +/- 20%	0.45	700	Great sliding wear resistance, ductile and helps prevent cold welding similar in use to hard chrome plating (common use: machining in a corrosive environment, machining aluminum, copper, metal forming, die cast molds)
AlCrN (Aluminum Chromium Nitride)	Blue-Gray	3000-3200	Industry Standard: 1.8 μ - 3.2 μ Maximum Range: 1-5 μ DCT Tolerance: 2.5 μ +/- 20%	0.35	900	Superb hot hardness with extraordinary wear resistance under extreme mechanical stress (common use: machining such as gear cutting tools, inserts, some punching and die cast)

EDGE PREP™

- DCT offers unique ways to improve your parts performance using our Edge Prep™ tribology lab.
- The right pre-coat surface conditioning and post coat surface enhancement gives you major advantages!
- Cutting edges can be honed and modified using our proprietary systems. DCT can polish parts to mirror finishes.



If you have a tooling problem or an excessive wear issue – give us a call. We solve problems by using a team approach. We are available to visit your facility and offer proven solutions.

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