COATING SERVICE
Thin Films That Improve Lifetime and Performance

COATINGS FOR INCREASED PRODUCTIVITY
As production demands are greater than ever, manufacturers and users of industrial tools and parts are under constant pressure to increase their productivity. High performance coatings are becoming more and more important in manufacturing to achieve this goal.

We are leaders in the field of thin film coating technologies (physical vapor deposition, PVD) and offer the development of high performance wear coatings and the associated coating services.

Our customers include end users and manufacturers of cutting tools and wear components.

EQUIPMENT
Our coating center is equipped with PVD technology including:

- Cathodic arc evaporation
- RF/DC magnetron sputtering
- Linear ion beam sources
- Laser-Arc plasma system

CHAMBER LOAD CAPACITIES
Ø14” by H16” for single parts
240 x 0.5” or 120 x 1” round tools
800 x 0.5” or 400 x 1” cutting tool inserts (w/ hole)

Combinations of various parts per run is possible. Different part and tool sizes are offered upon request.
PREMIUM QUALITY

Customers turn to us because we provide them with high quality coatings, fast turn-around times, careful handling of their products, and thorough inspection throughout the coating process. We are able to dedicate machines for orders to avoid cross contamination. In addition to visual inspection, we also use Fraunhofer's LAwave® quality control machine, an innovative non-destructive testing system, as part of our inspection process.

As specialists for smaller coating batches, we deliver:

- Premium quality service tailored to your specific requirements
- High degree of flexibility
- Fast turn-around time
- Thorough inspection
- Dedicated machines and team
- Assurance of no cross contamination

COATING & PROCESS DEVELOPMENT SOLUTIONS

Here at Fraunhofer CCD we dedicate all resources and expertise of our operations to meet the needs of our customers. With our extensive experience in industrial, applied research and our state of the art equipment, we are able to provide first rate technology solutions for your coating and process development needs in areas such as machining and wear problems. We also offer coating characteristic and consulting services. Typical technology solutions include:

- PVD coating development for machining and wear issues
- In-house performance and machining tests
- Coating characterization
- Consulting services to support your coating, cleaning and characterization needs

CAPABILITY

We provide all standard plus custom designed coatings. One of our key strengths is to tailor coatings to customer specific requirements. Our facility has fully automated PVD systems using the latest plasma sources. Batch size capabilities are listed on the front page of this flyer.

COATINGS OFFERED

Coatings offered include standard coatings: AlTiN, TiAIN, TiN, ZrN, AlCrN

Other possibilities include metal nitrides, metal alloy nitrides, metal carbides, metal carbo nitrides and borides

Fraunhofer’s Diamor® (ta-C) and other DLC coatings.

Nanostructure and nanolayer coatings for highly stressed surfaces on forming and forging tools.

Please contact us at 517-432-8173 to learn how we can help you with your specific requirements.

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2 Coated drills
3 Coated roll
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