

VaporTech.

VT-Series[™] & CADENCE[®] Thin-Film Coating Systems

N VT-1000i



VaporTech[®] PVD Coating Machines

Bringing coating processes in-house simplifies production and significantly reduces per-part coating costs. In addition, in-house coating adds value to your products by providing control over product appearance, durability, and performance.

Many of our customers report a rapid return on investment, predictable operating costs, ease of use, and—often most important—adaptability. Our systems can apply many types of coatings to a variety of part types, sizes, and geometries. Our coating recipes are optimized to meet your exact needs.

VaporTech systems offer compelling benefits for products requiring different properties, such as a steel gear that needs to be hard and durable, a scalpel that has to retain an extremely sharp edge, or a faucet that must be available in a wide choice of colors. Our systems feature a compact footprint and are easy to use and maintain.





VT-Series[™] Systems

Vapor Technologies (VaporTech[®]) manufactures **VT-Series** physical vapor deposition (PVD) and diamond-like carbon (DLC) coating systems to benefit companies of all sizes in various industries. Our machines enable you to coat products in-house for just pennies per part, freeing you from high third-party coating costs and production delays. We designed VT-Series chambers for consistency and maximum control of your product's finish. A coating zone height of up to 122 cm accommodates your largest parts.

Our lower-temperature process increases your choices of base materials—including steel, brass, zinc, and prepared plastics—and gives multi-material parts a standard finish and appearance. We can optimize coatings to meet your specifications for color and performance. If you use multiple types of coatings (for example, both chrome and DLC), you can apply them using the same chamber.

These systems provide the following:

- Excellent color uniformity.
- Even coating deposition rates throughout the chamber.
- A lower-temperature process suitable for metal and plastic parts.
- Ideal design for large parts up to 122cm long.
- Multiple size systems, multiple processes per system.
- Multiple coating technologies in a single system.
- Easy-to-use graphic interface with automated recipes built in.
- Improved ROI with better, faster in-house coatings.

Our compact systems are easy to integrate, use, and maintain.







Cadence[®] Systems

When you need your products to perform, **Cadence** systems using our proprietary RAAMS[®] technology improve coating structure, hardness, and wear resistance compared to traditional sputtering methods. Our high-energy process shortens coating times, and multiple coating sources further increase the deposition rates of composite materials.

Benefits of Cadence systems:

- Deposit thick coatings in a short process.
- Can be configured for rapid coating deposition.
- Improve coating properties over other magnetronsputtered coatings.
- Increase efficiency using the simple graphic interface with automated recipes built in.
- Create more durable coatings.
- · Improve ROI with better, faster in-house coatings.



Cadence® System

VaporTech System Comparison

	VT-1000i [™] System	VT-1500i [™] System	VT-3000i [™] System	Cadence [®] System
Description	Our smallest coating machine, the VT-1000i system offers a compact 6-rack design and can deposit a broad range of durable/decorative and functional PVD finishes on met- al or plated parts, including some plastics.	The VT-1500i system provides approxi- mately 70% of the VT-3000i's throughput in a compact footprint with both cathodic arc and optional magnetron sputtering technologies. With the ability to coat parts up to 100cm long and 10 high- capacity racks, this is a high-volume, price-competitive coating system for larger operations and those offering coating services.	The VT-3000i system is the largest VaporTech coating machine designed for high throughput or larger parts up to 122cm. Our highest-volume machine, the VT-3000i system holds 16 racks. This equipment is used by large-scale opera- tions globally.	Cadence systems provide high deposition rates to shorten coating times as well as multiple coating sources to further increase depo- sition rates or deposit composite materials. Our proprietary RAAMS® technology is a high-energy process that improves coating structure, hardness, and wear-resistance.
Perfect for	Durable/decorative and DLC applications for medium-sized operations.	Functional, durable/decorative, and DLC applications for medium to large operations.	Functional, durable/decorative, and DLC applications for large operations.	Functional coatings for any size operation.
Applications include	Home hardware, plumbing products, sports equipment and firearms, tools and tooling, medical devices, automotive components, and other consumer and industrial products.	Home hardware, plumbing products, sports equipment and firearms, tools and tooling, medical devices, automotive components, and other consumer and industrial products.	Home hardware, plumbing products, sports equipment and firearms, tools and tooling, medical devices, automo- tive components, and other consumer and industrial products.	Tools, tooling, automotive, and other engineered components where very high durability is required.
Number of racks	6	10	16	1
Rack size	100cm x 25.4cm Ø	100cm x 25.4cm Ø	122cm x 20.3cm Ø	45cm x 20.3cm Ø
Coating area per batch	4.79m²	7.98m²	12.44m²	0.29m²
System footprint (LxW)	3.4m x 1.6m	4.4m x 2.0m	4.3m x 3.6m	3.8m x 1.2m
Coating technologies	 Cathodic arc (LTAVD[®]) Plasma-enhanced chemical vapor deposition (PECVD) 	 Cathodic arc (LTAVD[®]) Plasma-enhanced chemical vapor deposition (PECVD) Magnetron sputtering 	 Cathodic arc (LTAVD[®]) Plasma-enhanced chemical vapor deposition (PECVD) 	 Magnetron sputtering (RAAMS[®]) Plasma-enhanced chemical vapor deposition (PECVD)
Complexity	Easy to operate and maintain.	Easy to operate and maintain.	Easy to operate and maintain.	Easy to operate and maintain.
Available coatings	Functional or decorative zirconium, titanium, chromium, or DLC coatings.	Functional or decorative zirconium, titanium, chromium, or DLC coatings.	Functional or decorative zirconium, titanium, chromium, or DLC coatings.	Functional zirconium, titanium, chromium, or DLC coatings.

Vapor Technologies, Inc. (VaporTech®) manufactures PVD and DLC coating equipment for a wide range of manufacturing operations. We partner with you to optimize performance coatings or PVD colors that meet your needs. We are located in Longmont, CO, and have been serving clients worldwide for more than three decades.

VaporTech.

Learn more today!

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