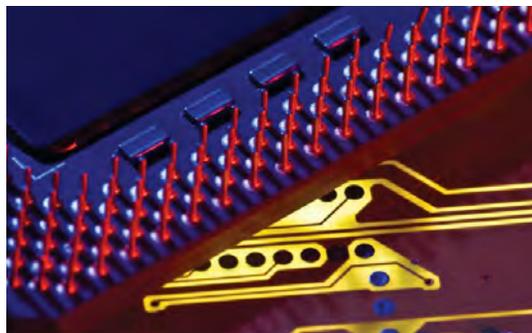




DENTON DESKTOP PRO

COMPACT, HIGH VACUUM
SPUTTERING PLATFORM



DENTON VACUUM ENABLES INNOVATION AND HAS FOR OVER 50 YEARS.

With thousands of thin film deposition tools installed globally — including a large, globally installed base of precision optical deposition systems — engineers and researchers rely on Denton's thin film innovations to drive higher throughputs, better yields and low cost of ownership (COO) while benefiting from comprehensive service and support, and a dedicated R&D program that delivers enabling technologies.

Denton's Compact, High Vacuum Sputtering Platform

- Compact
- Versatile
- DC & RF sputtering
- Consistent, repeatable results
- Fast change-overs
- Broad process flexibility

DENTON VACUUM
Enabling Innovation

DENTON'S COMPACT, HIGH VACUUM SPUTTERING PLATFORM

THE DENTON DIFFERENCE

The Desktop Pro provides consistent, repeatable sputtering results in a compact and economical desktop configuration. With up to two 2.0" diameter magnetrons confocally configured over a rotating substrate stage and RF or DC power supplies, the Desktop Pro sputters both dielectric and metal films. The Desktop Pro provides uptime, product yield and throughput for your most demanding research and development applications.



The Desktop Pro delivers best-in-class sputtering on your desktop, measuring less than 36" (.95 m). A versatile, high vacuum, DC & RF sputtering platform, the Desktop Pro pumps down to high vacuum (10^{-6} torr range) in under 30 minutes.

CAPABLE

For fast change-overs in a multi-user environment, the industry's premier compact sputtering platform pumps down to high vacuum (10^{-6} torr range) in just under 30 minutes and features a rotating, speed-adjustable, easily-changed, drop-in style substrate table for precise, consistent, repeatable results. For delivery of high-uniformity films over a 4" diameter area, Denton's Desktop Pro supports up to two cathodes in a confocal configuration.

VERSATILE

Power, gas flow and cathode-to-substrate distance easily adjust to optimize uniformity and deposition rates. Add co-sputtering and get even more work done. Need to reactive sputter? Get the optional programmable mass flow controller for ultimate, precise process control.

COMPACT

Occupying a mere 36" (.95 m) of your desktop space, Denton's Desktop Pro opens your work space. Less footprint, more lab space. And the power supply output switching (RF/DC combination switch) allows you to power two cathodes sequentially from a single power supply—a significant savings in operating costs—creating a smaller footprint for your pocketbook, too.

SMART

The Desktop Pro's Programmable Logic Controller (PLC) manages the system at every point in the process, from pumping to venting to time-power deposition sequences for repeatability. System controls provide manual operation of the vacuum components: sputter power supplies, cathode shutters, substrate rotation and reset of the vacuum gauge.

EASY

The Desktop Pro's color touch-screen interface reduces your learning curve. Monitor, manage and change processes in real time with the Desktop Pro's built-in Programmable Logic Controller (PLC). Using the intuitive color touch-screen, you can easily execute single- and multi-layer processes, auto pump your system, control your power supplies, shutter, rotation and work rates. Ergonomically designed and built, the Desktop Pro's one-piece molded case—for easy maintenance and service access—comes with a hinged chamber lid for fast target change-out and larger sample access.

SAFE

Automated interlocks ensure safe operation at all times; hard-wired safety features and an emergency stop button protect both operator and machine. All power distribution and system controls are enclosed in the cabinet. The front and rear cabinet panels are hinged, but interlocked to provide safe and convenient access to internal components for servicing and inspection.

In addition to the Desktop Pro, Denton Vacuum offers the following Research Productivity Products:



BenchTop Turbo



Desk V



DV-502

DESKTOP PRO OPTIONS

DESKTOP PRO FEATURES	STANDARD	OPTION
Stainless steel chamber 12" (305 mm) dia. x 10" (254 mm) high. 2" (51 mm) glass viewport	X	
4" (100 mm) rotating assembly, bottom drive. Programmable speed 0-20 RPM	X	
2" (51 mm) cathode (enhanced cathode for magnetic materials available)	X	
Turbo pump 77 lps. Two-stage rotary roughing pump 3 cfm	X	
Full range Bayard-Alpert Pirani gauge	X	
Color touch-screen Programmable Logic Controller (PLC)	X	
Hardwired interlocks. Emergency off switch	X	
Stainless steel chamber 8" with front-opening door with 2" (51 mm) glass viewport		X
6" (150 mm) rotating assembly		X
1 kW substrate stage heater		X
Second 2" cathode (enhanced magnetic cathode for magnetic materials available)		X
Additional RF/DC power supplies		X
Power supply switching		X
Upgraded pumping, including a scroll pump		X
Capacitance manometer		X
Gas mass flow controller (MFC) for reactive sputtering		X
CE certification		X

ABOUT US

All Denton Vacuum solutions are backed by a 12-month warranty on parts and labor, over 50 years of process knowledge, an in-house process engineering group, worldwide representation and support, and a Global Factory Service Center.