

CVD-handy®



PRODUCT INFORMATION

Vaksis "handy" series is convenient for use and easily handled as the adjective "handy" described in the dictionary. This series can be used for deposition of Nitrides (Si_3N_4), Oxides (TiO_2 , SiO_2), Semiconductors ($\alpha\text{-Si:H}$ (i), $\alpha\text{-Si:H}$ (n), $\alpha\text{-Si:H}$ (p)) and diamond-like Carbon (DLC). Chemical Vapor Deposition (CVD) is practiced in a variety of configurations in this platform. Vaksis' "CVD-handy" types of configurations are shown below:

CONFIGURATION MATRIX

Techniques	Microwave Plasma-Assisted CVD (MPCVD)	Plasma-Enhanced CVD (PECVD)	Atomic Layer CVD (ALCVD)	Hot Filament CVD (HFCVD)
CVD-handy	✓	✓	✓	✓

This series can be used for deposition of SiO_2 , SiNx , ($\alpha\text{Si:H}$), SiC , DLC or similar thin films with using Chemical Vapor Deposition technique.

TECHNICAL SPECIFICATIONS

Ultimate Vacuum Pressure $\approx 10^{-7}$ Torr
Substrate Size max. 6" diameter
Substrate Heating max. 400°C
Substrate Rotation 3-30 rpm
Cooling Where necessary
Loading From the lift-open top plate or Load Lock
Control Fully Automatic
Number of MFC's for different Gas Types max. 12
Additional Gas Safety Available Upon Request
Gas Cabinet Included and Integrated to System Software

POWER SOURCES

-Microwave power supply in Microwave Plasma-Assisted CVD (MPCVD)
-DC and/or RF Power Supply for Capacitively coupled plasma (CCP) and RF Power Supply for Inductively coupled plasma (ICP) Sources

SOFTWARE

System operation by user-friendly software. It is not only the automation and control software but also coating management software which allows the user design his/her specific coating experiments, examine the process parameters used in the past, and use the recipes/coatings developed in the past without hustle.
Human and machine safeties are prime importance in the operations performed by the software. A graphical user interface will allow the user to see the status of the system during operation.