

# VAKSiS

R&D AND ENGINEERING

## CVD-handy<sup>®</sup>/tube



## PRODUCT INFORMATION

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Low Pressure Chemical Vapor Deposition System (LPCVD) is similar to other types of CVD where gaseous species react on a solid surface or wafer. The LPCVD process has a quartz tube co-axially placed in tube furnace. The main advantages of LPCVD are the excellent uniformity of thickness and purity, simple handling, homogeneity of deposited layers and high reproducibility.

This "CVD-handy tube" series is a high temperature CVD system, most successfully applied in deposition of graphene, carbon nanotubes and nanowires (ZnO, GeO).

## TECHNICAL SPECIFICATIONS

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Ultimate Vacuum Pressure .....	$\approx 10^6$ Torr
Quartz Tube Diameter .....	max. 130 mm
Max. Temperature .....	1100°C
Continuous Working Temperature .....	1050°C
Heating Area Length .....	250 mm
Temperature Control System .....	PID method
Cooling .....	Rapid cooling with lifting mechanism
Loading .....	From one end of the quartz tube
Control .....	Fully Automatic (Semi-Automatic is Optional)
Number of MFC's for different Gas Types .....	Max 12

If requested, our CVD-handy tube systems can be **combined with Inductively Coupled Plasma (ICP)**.

## SOFTWARE

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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.