

# e-bulletin

Vaksis Vacuum Systems Bulletin

Year: 2, No: 5, July 2012

## PVD AND CVD COATING SYSTEMS FOR VARIOUS APPLICATIONS

[www.vaksis.com](http://www.vaksis.com)

2 golden  
suggestions

new product

PVD-*handy*<sup>®</sup>/1M-sm

activities

- PVD: Physical Vapor Deposition
- CVD: Chemical Vapor Deposition

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## For Vacuum Systems Users

### 2 golden suggestions!

1) When you use Nitrogen and/or Argon which are not poisonous but choking gases in your system, you sure that these gases do not decrease the oxygen of the environment (e.g. inner of the vacuum chamber).

2) Do not forget that air-conditioning of the room that you will place the thin film coating device is important. For user's health and film quality, dust rate of the environment should be as low as possible and noisemaker devices (like vacuum pump, chiller unit and air compressor) and gas cylinders should be in the separate room like service room.

*We will continue giving golden suggestions in the next bulletins...*



**Dr. Baybars ORAL**  
**COMPANY MANAGER**

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## new product

### PVD-*handy*<sup>®</sup>/1M-sm

*handy series*

*1M: One piece of magnetron sputtering source*

*sm: Small*

Special design sputtering system  
with one magnetron source and  
Manual control for low budget projects.

Magnetic materials, especially Nickel can be  
sputtered in this system which is designed for low  
budget.

#### CONTROL AND USAGE

All electrical and electronic devices are controlled  
from their front panel. By opening chamber's  
cover, the target can be changed and  
accessibility to the substrate is possible.

System includes the following specifications.

#### Technical specifications

Pressure measurement:  $<1 \times 10^{-5}$  Torr

(Base pressure:  $<3 \times 10^{-6}$  Torr)

High-speed pump 70 lt/s turbo pump

Mechanical pump: 1 m<sup>3</sup>/h oil-free diaphragm  
mechanical pump

Substrate size: Ø25 mm

Deposition method: Magnetron sputtering

Deposition mode: Downward

Number of source: 1

Loading: From top

Control: Manual



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## activities

### which we attended...

Condensed Matter Physics Aegean Region Meeting  
(6th April 2012)

39th ICMCTF International Conference on Metallurgical  
Coatings and Thin Films, San Diego CA USA  
(23rd -27th April 2012)

ICSM 2012 International Conference on  
Superconductivity and Magnetism Kumburgaz – İstanbul  
(29 April-4th May 2012)

8th Nanoscience and Nanotechnology Conference  
NANOTR-8, Hacettepe University-Ankara  
(25-29th June 2012)

### which we will attend...



27th European Photovoltaic Solar Energy  
Conference and Exhibition, Frankfurt- Germany  
(25-28th September 2012)

[www.photovoltaic-conference.com](http://www.photovoltaic-conference.com)

[www.photovoltaic-exhibition.com](http://www.photovoltaic-exhibition.com)



SOLARTR-2 Solar Energy Conference and  
Exhibition, Antalya Dedeman  
(7-8th November 2012)

<http://www.solartr.org/index.html>



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