

# Precursor evaporation systems for optimized CoO

Precursor evaporation is required for all gas phase processes, like ALD, CVD or EPI processes. SEMPA has been developing VAPOR'BOT to address this broad range of applications.

More than a decade of experience ensures precise evaporation - safely and with the SEMPA quality promise.

# Economically optimized

VAPOR'BOT SMART offers a cost-effective solution at prime quality standards, realizing best in class CoO (Cost of Ownership). The construction is optimized for economic efficiency without making any compromise to safety nor quality.

## Designed to precursors

SMART generates precursor vapor by either vapor draw or bubbler technology. The systems can be adapted to the different precursor properties ensuring optimized vaporization experience.

## Customized to your needs

VAPOR'BOT is designed to safely and efficiently supply ALD, CVD and EPI tools with centrally generated precursor vapor. It is available in three basic versions meeting different process needs and budgets. Any System can furthermore be adapted very precisely to your requirements through a variety of available options.







## SMART Features

- Automated bubbler based evaporation system
- Safe evaporation of dangerous (toxic or pyrophoric) precursor chemicals
- Used in all CVD, ALD processes
- Cost optimized design

### Configure your VAPOR'BOT

Many options are available to adapt the system exactly to your application or the specific requirements of the precursor.



### **Unsurpassed Safety**

- SEMI S2 certification
- Design according to ATEX where applicable
- Coax tubing and monitoring
- LCAS (Liquid Containment and Abatement System) for pyrophoric metalorganics

### **Precursor specific Solutions**

- Vessel, panel, trace heating and cooling
- High alloy steel design for corrosive precursors
- Concentration measurement
- Solid precursor solutions

Please contact us to customize your VAPOR'BOT. Our experienced engineers will be happy to assist you.

## Your VAPOR'BOT for every application

VAPOR'BOT is available in three basic versions meeting different process needs and budgets. For any questions or to check out PRO and EXPERT visit us at www.sempa.de or get in touch through sales@sempa.de.



