

Direct Vapor generation for highest demands - extremely high flows, extremely precise

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

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

For demanding EPI processes

VAPOR'BOT EXPERT is based on direct liquid injection. The target applications require both, very high evaporation rates and extremely precise vapor concentrations. EXPERT is applied in very demanding EPI processes and is the solutions of choice for silicon and compound semiconductor applications.

Seamless supply

EXPERT ensure seamless supply. A transport vessel feeds a day tank which supplies the SEMPA proprietary Direct Vapor unit with liquid precursor feed.

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.



EXPERT Features

- Fully automated Direct Liquid Injection System
- Direct Vapor generation for highest throughput
- Used where bubbler bases systems reach it's limits
- Central precursor vapor fab supply to multiple points of use is

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

GAS'BOT is available in three basic versions meeting different process needs and budgets.

For any question or to check out SMART and PRO visit us at www.sempa.de or contact us sales@sempa.de

Technical Data

Dimension:

2010 (w) x 2050 (h) x 610 (d)

Weight:

~300 kg

Electrical Connection:

1 x 110 - 240 V-AC

50/60 Hz NSV

1 x 110 - 240 V-AC

50/60 Hz UPS (Option 13)

Inlets:

1 x 1/4" VCR Purge Gas Inlet (1-6 bar)

1 x 1/4" VCR Push Gas Inlet (1-6 bar)

1 x 1/4" SW Pneumatic Inlet (4-7 bar)

Outlets:

4 x 1/4" VCR Process line

1 x 1/2" VCR Vacuum

1 x 1/4" SW Safety line

1 x 101,6 x 1,2 mm Exhaust

