

Advanced precursor delivery systems for optimized CoO

CHEM'BOT supplies precursor chemicals to bubblers or vaporizers, direct liquid injections or on-board buffer containers at deposition tools from all OEM's.

More than a decade of experience ensures ultra-high purity liquid supply - safely and with the SEMPA quality promise.

Economically optimized

SMART cabinets offer 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.

Safe and efficient

SMART is fully automated featuring a PLC with a touch screen display. Preinstalled service routines ensure optimized purging of lines for safe vessel exchange procedures. The systems include advanced container level sensing leading to maximum utilization of precious precursor chemicals.

Customized to your needs

CHEM'BOT is designed to safely and efficiently supply ALD, CVD and EPI tools with liquid precursor chemicals. 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 liquid precursor feed system
- Safe supply of dangerous (toxic or pyrophoric) precursor chemicals
- Used in all CVD, ALD processes
- Cost optimized design

Configure your CHEM'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
- Solvent purging
- · Supply volume monitoring



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

Your CHEM'BOT for every application

CHEM'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 get in touch through sales@sempa.de

Technical Data

Dimension:

600 (w) x 2250 (h) x 600 (d)

Weight:

~200 kg

Electrical Connection:

1 x 110 - 240 V-AC 50/60 Hz NSV

Inlets:

1 x ¼" VCR Purge gas Inlet (1-6 bar) 1 x ¼" VCR Push gas Inlet (1-6 bar) OPTIONAL 1 x ¼" Swagelok Connection dry pneumatic air (4-7 bar) 1 x ½" G Sprinkler (2-3 bar)

Outlets:

1x 1/4" male VCR Process line 1x 1/2" male VCR Vacuum 1x KF25 Exhaust



