

# Advanced precursor delivery systems for semiconductor fabs

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.

## High-end flagship system

CHEM'BOT EXPERT is our high-end flagship system meeting all requirements of nowadays 24/7 high tech production fabs. It features a buffer tank for seamless supply and advanced connectivity to integrate your CHEM'BOT into your fab monitoring system.

EXPERT is set up with maximum redundancy and a dead space free design ensures best purge ability for highest purity supply experience.

## Maximum reliability

The high quality product is a guarantee for maximum reliability and uptime. EXPERT stands for the utmost in liquid delivery technology and production equipment.

## 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.



## EXPERT Features

- Fully automated design with buffer tank for seamless precursor feed
- Build according SEMI S2 standards
- Dead space optimized design with highest redundancy
- Designed for high demanding semiconductor fab operation

## 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 SMART and PRO visit us at [www.sempa.de](http://www.sempa.de) or get in touch through [sales@sempa.de](mailto:sales@sempa.de)

## Technical Data

### Dimension:

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

### Weight:

~280 kg

### Electrical Connection:

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

### Inlets:

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

### Outlets:

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

