# MEMSLAB

BATCH TYPE

VERTICAL FURNACE

R&D / SMALL PRODUCTION





Semco MEMSLAB is a **compact batch-type**, single or multi-chambers vertical PECVD platform offered by ECM Greentech. The MEMSLAB is designed and built with high precision components, which allows for high quality **thin film deposition**. The applied Low Frequency Plasma feature permits the furnace to reach excellent process performance through a most advantageous horizontal thin substrate processing. This platform excels in the processing of small quantities of substrates; therefore, allowing the MEMSLAB to meet requirements of universities, research laboratories, or small production facilities.



## SUBSTRATE DIMENSIONS

100-150-200 MM

- Microelectronics
- Power devices (SiC, GaN)
- Sensors (MEMS)
- Optoelectronics
- Aeronautics
- Medical

## AN ECM GROUP OFFER

ECM Lab Solutions helps laboratories to develop innovative products and processes by offering advanced furnace technologies under one ECM Group brand. This offer gathers all laboratory furnaces from the ECM Group. Its expertise includes the heat treatment of steels, ceramics and silicon. As well as crystal growth applications, coatings and melting processes for a wide range of research fields.



### **FFATURES**

Modular, Flexible & compact footprint 1 to 2 independant process chambers

Up to 25 wafers per chamber

Up to 200 mm (Semiconductor round wafers)

## Manual or automatic boat loading

#### Reactor design:

Excellent process precision and repeatability
High performance and life-time process technology
Modular design 1-2 reactors side to side
Vertical reactor with uniform gas distribution

#### Machine:

All furnace components Hub connected Industrial Process PLC
Windows® based Mycore supervision
CE certified & SEMI S2 compliant

#### **Process Flexibility:**

**PECVD** 

Gas Cabinet for up to 13 gases Liquid precursor cabinet, vaporization, DLI & ALD compliant

## **OPTIONS**

- Process related pump package
- Laminar Flow class 1 (vertical or horizontal)
- SECS/GEM compliant with SEMI E30, E37
- Full traceability of processed products
- Dedicated additional process features upon request
- Integrated robotic automation

### MORE THAN JUST AN EQUIPMENT

- Robotization and compatibility with automation
- Process integration with dedicated expertize
- Technology support upon customer needs





## **MATERIAL**

- Silicon
- SiC
- GaN
- Sapphiire
- Quartz
- Ceramic
- Metal





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