

TUBESTAR

BATCH TYPE FURNACE

FLEXIBLE & COMPACT

R&D / PILOT PRODUCTION



TUBESTAR is a **compact batch-type, single or multi-reactor horizontal furnace** offered by ECM Greentech. Key characteristics of this furnace line are: **advanced semiconductor wafer processing** combined with industrial high-end process control, integration modularity, and a user-friendly interface. Each populated chamber can be independently configured and operated in a large range of **atmospheric, sub-atmospheric or low pressure processes**. The TUBESTAR furnace can also handle multiple gases and liquid precursors with a temperature range from **200 to 1300°C**. Its modular design allows to meet a large range of clean thermal treatment for **R&D and pilot production facilities**.



SUBSTRATE DIMENSIONS

100-150-200-300 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.



FEATURES

Modular, Flexible & compact footprint
1 to 4 independent process chamber
Reactors from 4" up to 12" wafer size
Configurable from 25/50 to 50/100 wafers per chamber

Manual or automatic boat loading

Reactor design:

Excellent process precision and repeatability
High performance and life-time process technology
Spike & Profile thermocouple advanced Control

Machine:

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

Process Flexibility:

Atmospheric, sub-atmospheric or low pressure capabilities
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)
- Furnace roof top with exhaust ducts or water cooled heat exchanger
- SECS/GEM compliant with SEMI E30, E37
- Full traceability of processed products
- Dedicated additional process features upon request
- Integrated robotic automation

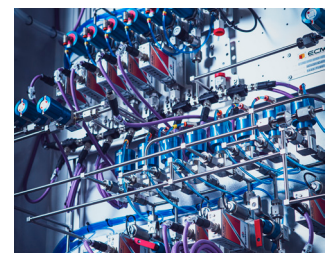
MORE THAN AN EQUIPMENT

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



MATERIAL

- Silicon
- SiC
- GaN
- Sapphire
- Quartz
- Glass
- Metal
- III - V
- II - VI
- Superconductors



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