



Tabletop Furnace

Model SV×Fur-RD Ideally suited for R&D labs and pilot fabs

Table Top Furnace

The SVCS Tabletop Furnace system provides a semiconductorgrade quality tool for universities, R&D laboratories and pilot fabs. The system can be used for wide range of processes due to outstanding flexibility and many optional modules available to meet special and often unique requirements of every customer.

The core element of the system is combination of resistive-type heater made of Kanthal[®] wire with vacuum ceramic thermal insulation and proprietary in-house designed control system which ensure precise and stable temperature control resulting in continual repeatability of processes. Easy interaction with control system is achieved by using a graphical touchscreen interface paired with PC for advanced service, remote control, updates and troubleshooting. Easy maintenance procedures, like quartz parts replacement or chemical vessels refill, are achieved by elaborate mechanical design.



We apply a longstanding experience in design and fabrication of gas delivery systems for Tabletop Furnace. All gas lines and components are made of stainless steel with electropolished inner surfaces to achieve a high quality processes with minimal contamination level. Using orbital welding and metal gasket face seal connections allows safe handling of various types of gases and vapors, including corrosive, flammable and toxic.

SVCS also provide a complete solution to our customers by offering facility tools such as gas panels, automatic gas cabinets and scrubbers.

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PROCESS APPLICATION

- Gas, liquid or solid source diffusion
- Dry/Wet oxidation + Trans-LC
- Annealing forming gas or hydrogen
- Sintering

- APCVD, LPCVD, MOCVD
- Silicon nitride
- Poly-Si, α-Si
- TEOS, HTO, LTO

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FEATURES

- Atmospheric or vacuum design
- Small footprint (standard configuration: 1900 x 1100 x 680 mm, 95 kg)
- Low power consumption
- Easy operation and maintenance
- Heating element with 1 or 3 temperature zones and max. temperature up to 1300 °C
- Modern modular proprietary control system
- Up to 8 gas lines and 2 liquid sources
- Independent hardware safety interlocks
- Integration of vacuum pump systems in cooperation with leading pump manufacturers

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TECHNICAL PARAMETERS

| Wafer size | 150 mm, 200 mm |
|---------------------|---|
| Wafer load | 25 – 150 wafers |
| Heating system | 3 or 5 zone |
| Flat zone | up to 600 mm; \pm 0,5 °C across flat zone |
| Process temperature | 200 °C to 1230 °C |
| Power consumption | 50 kW |
| Power supply | 3-phase, 400 or 480 VAC, 40 - 100 A, 50 or 60 Hz |
| | (system is always adapted to country - specific power supply network) |
| Clean dry air | 70 – 110 psig (4,8 to 7,6 bar) |
| Cooling water | 10 - 15 LPM |
| Exhaust | 210 m ³ /h |
| Options | CEM unit, EBS system, facility equipment |

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SAMPLE DIMENSIONS



Dimensions are varying with configuration, please consult factory R&D models are always custom designed







SVCS Process Innovation s.r.o. Head office:

Optátova 37 • 637 00 Brno • CZECH REPUBLIC Tel.: 420 541 423 211 • Fax: 541 221 580 e-mail: info@svcs.com • www.svcs.com **Production plants:** Zámecká 133 • 757 01 Valašské Meziříčí • CZ Tel.: +420 517 070 010 • Fax: +420 577 700 009





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