

SUBSTRATE Heaters

MeiVac Heaters are configured for two general types of applications, Samples and Wafers.

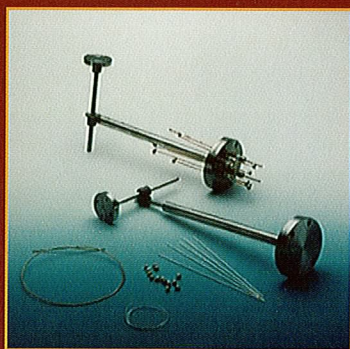
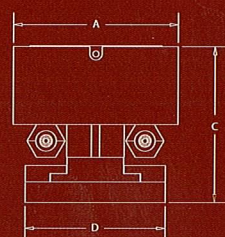
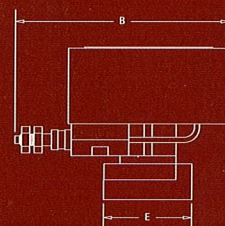
- Sample Blocks may be drilled and tapped for sample holding clips. Note this is per customer specification at an additional charge.
 - Sample Blocks are made of Haynes Metal and MUST be pre baked at atmosphere by the customer at or exceeding the desired operating temperature prior to use.
 - Haynes metal heater blocks are compatible with the Silver Thermal Paste, which is sold as an accessory by MeiVac.
- Wafer Blocks are Inconel metal and are wafer size specific. Wafer pockets are machined into the surface of the heater blocks.
 - Inconel is NOT compatible with Silver Thermal Paste.

See manual or Web Site for proper preparation and care of heater blocks.



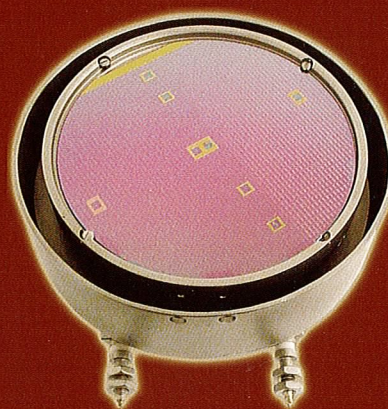
SU-300-HH
"Sample" Heater Block

Part Number	SU-200-HH	SU-200-IH	SU-300-HH	SU-400-IH	SU-600-IH
Stage Type	Sample	Wafer	Sample	Wafer	Wafer
Size (inches)	2	2	3	4	6
Dimension (inches)	Refer to sketches				
A	2.50	3.00	3.50	5.00	6.75
B	3.33	3.48	3.83	5.60	7.38
C	2.37	2.37	2.37	3.30	3.30
D	2.12	2.62	2.62	3.00	3.00
E	1.38	1.38	1.38	2.30	2.30
Max. Temperature	950C	950C	950C	950C	950C
Temp. Uniformity	+/-1%	+/-1%	+/-1%	+/-2%	+/-2%
Area of uniformity	center 1.25" dia.	2" dia.	center 2.25" dia.	4" dia.	6" dia.
Temp. Repeatability	12 C	12 C	12 C	13 C	13 C
Ramp time to 950C	12 min	12 min	13 min	22 min	30 min
Cool-down time	35 min	35 min	40 min	3 hrs	4 hrs
Max. Current	10 A	10 A	9 A	14 A	14 A
Max. Voltage	45 V	45 V	85 V	85 V	135 V
Input power	AC/DC	AC/DC	AC/DC	AC/DC	AC/DC
Heater resistance	5 ohms	5 ohms	10 ohms	6 ohms	10 ohms
Heater material	Haynes	Inconel	Haynes	Inconel	Inconel



OPTIONAL ACCESSORIES

- Deluxe mounting stands, adjustable bracket with X,Y, & Z movement mounted on 2.75", 4.5" & 6" rotatable CF flanges.
- Mounting stands with power and thermocouple feedthroughs
- 18" Hook-up kit, which includes:
 - One thermocouple with 18" lead wire
 - Two 0.050" OFHC Copper Power Leads 18" long
 - Ceramic tubes and beads for insulation and protection from plasma



SU-400-IH "Wafer"
Heater Block

FEATURES

- UHV Compatible
- O2 Compatible
- Electrical bias capability
- Unprecedented temperature uniformity

APPLICATIONS

- Sputtering
- Laser ablation
- Ion beam deposition
- ECR, MOCVD, and others