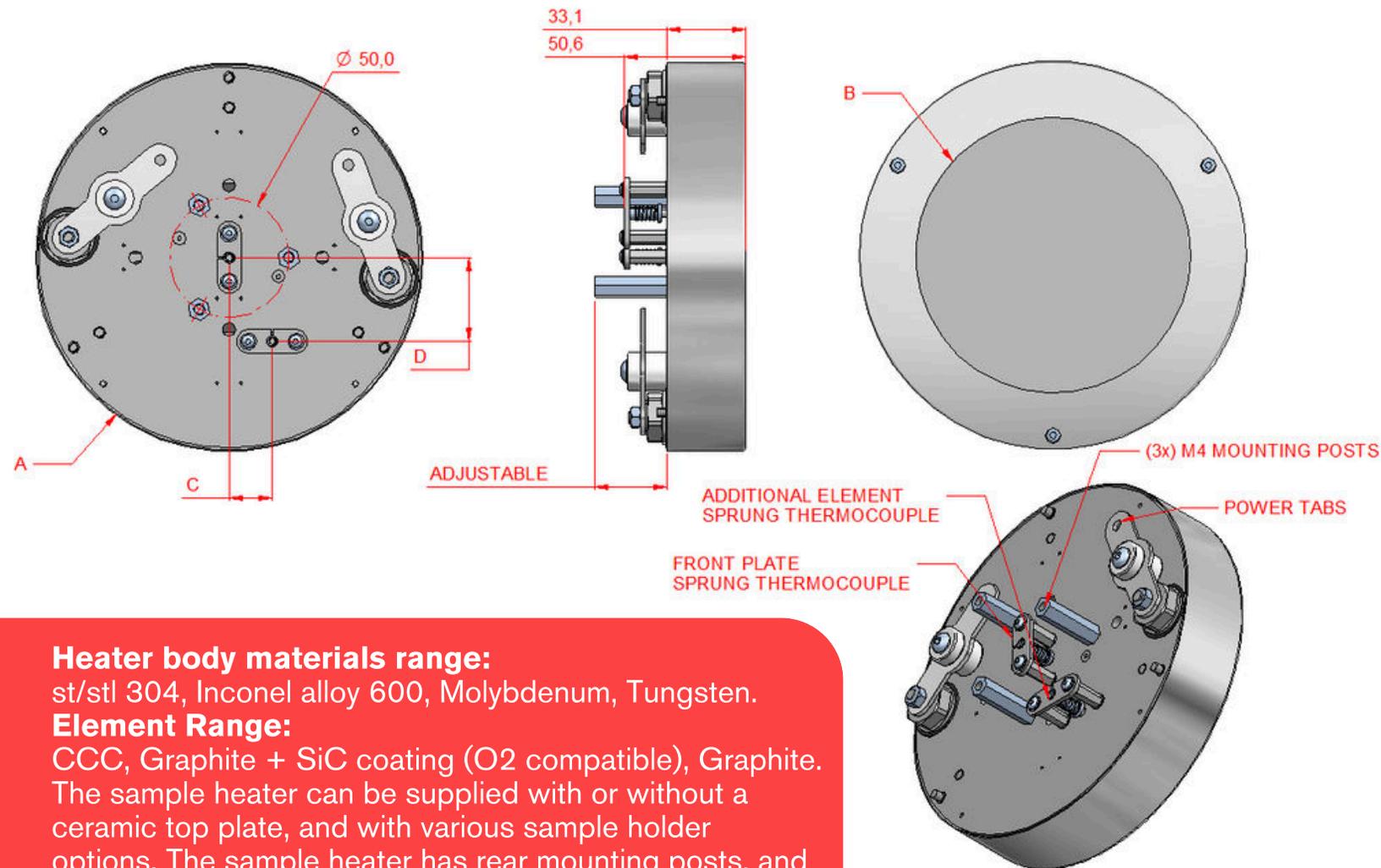


## VERSATILE MULTIPURPOSE HEATERS RANGE

The new Thermic Edge Versatile Heater offers a new approach to sample heating. The sample heater's versatile nature enables it to be easily upgradeable so that body, element and mounting options can be interchanged for a variety of materials to suit different heating requirements. The heater's high power density (enabling faster ramp-up times) coupled with the low body mass (reducing cool-down times) and high thermal uniformity across the hot zone is an effective solution to your sample heating requirement.

### HEATER SIZES:



### Heater body materials range:

st/stl 304, Inconel alloy 600, Molybdenum, Tungsten.

### Element Range:

CCC, Graphite + SiC coating (O<sub>2</sub> compatible), Graphite. The sample heater can be supplied with or without a ceramic top plate, and with various sample holder options. The sample heater has rear mounting posts, and can be mounted in any orientation. The figure below details the spun st/stl & Inconel alloy 600 casings, whilst the mounting options figures (next page) detail the higher temperature rated Molybdenum & Tungsten casings.

Voltage and current figures for 1000c based on ccc element with top plate in vacuum. Other nonstandard sizes available by custom design.

		<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>W</b>	<b>Volts</b>	<b>Amps</b>
<b>Sample Size</b>	2"	103	56	10	15	25	30	30
	3"	129	82	20.5	25	27	48	48
	4"	154	107	20.5	35.5	45	64	64
	5"	179	132	20.5	35.5	58	62	62
	6"	205	158	20.5	35.5	77	60	60

### CERAMIC TOP PLATE HEATER:



## VERSATILE HEATER STANDARD RANGE

1000c ceramic top plate temperature with inconel body, alumina / inconel heatshields and G + SiC element. For use in High vacuum, O<sub>2</sub>, N<sub>2</sub>, H<sub>2</sub> environment or Air

Part No.	Hot zone $\varnothing$	o.d. (mm)	Body	Base plate	Heatshields	Element	Power legs	Ceramic supports	Top plate	TC
VH-2-1000-GS-O2	2"	99	Inconel	SS 304	Al <sub>2</sub> O <sub>3</sub> +In600	G + SiC	Nickel	Alumina	ABN2000	K
VH-3-1000-GS-O2	3"	130	Inconel	SS 304	Al <sub>2</sub> O <sub>3</sub> +In600	G + SiC	Nickel	Alumina	ABN2000	K
VH-4-1000-GS-O2	4"	170	Inconel	SS 304	Al <sub>2</sub> O <sub>3</sub> +In600	G + SiC	Nickel	Alumina	ABN2000	K
VH-5-1000-GS-O2	5"	179	Inconel	SS 304	Al <sub>2</sub> O <sub>3</sub> +In600	G + SiC	Nickel	Alumina	ABN2000	K
VH-6-1000-GS-O2	6"	203	Inconel	SS 304	Al <sub>2</sub> O <sub>3</sub> +In600	G + SiC	Nickel	Alumina	ABN2000	K

1000c ceramic top plate temperature with molybdenum body, heatshields and CCC element  
For use in High vacuum, N<sub>2</sub> or inert atmosphere

Part No.	Hot zone $\varnothing$	o.d. (mm)	Body	Base plate	Heatshields	Element	Power legs	Ceramic supports	Top plate	TC
VH-2-1000-CC-HV	2"	99	Moly	SS 304	Moly	CCC	Moly	Alumina	ABN2000	K
VH-3-1000-CC-HV	3"	130	Moly	SS 304	Moly	CCC	Moly	Alumina	ABN2000	K
VH-4-1000-CC-HV	4"	170	Moly	SS 304	Moly	CCC	Moly	Alumina	ABN2000	K
VH-5-1000-CC-HV	5"	179	Moly	SS 304	Moly	CCC	Moly	Alumina	ABN2000	K
VH-6-1000-CC-HV	6"	203	Moly	SS 304	Moly	CCC	Moly	Alumina	ABN2000	K

1600c ceramic top plate temperature with molybdenum body, heatshields and CCC element  
For use in High vacuum, N<sub>2</sub> or inert atmosphere. Good for UHV with top plate removed

Part No.	Hot zone $\varnothing$	o.d. (mm)	Body	Base plate	Heatshields	Element	Power legs	Ceramic supports	Top plate	TC
VH-2-1600-CC-HV	2"	99	Moly	Moly	Moly	CCC	Moly	Alumina	ABN2000	C
VH-3-1600-CC-HV	3"	130	Moly	Moly	Moly	CCC	Moly	Alumina	ABN2000	C
VH-4-1600-CC-HV	4"	170	Moly	Moly	Moly	CCC	Moly	Alumina	ABN2000	C
VH-5-1600-CC-HV	5"	179	Moly	Moly	Moly	CCC	Moly	Alumina	ABN2000	C
VH-6-1600-CC-HV	6"	203	Moly	Moly	Moly	CCC	Moly	Alumina	ABN2000	C

**(ABBREVIATIONS GUIDE BELOW)**

**Abbreviations:**

**ABN2000** = AlN +BN ceramic

CCC = Carbon carbon composite

G + SiC = Silicon carbide coated graphite,

Moly = Molybdenum,

st/stl = Stainless steel,

PBN = Pyrolytic Boron Nitride,

PG = Pyrolytic Graphite,

AlN = Aluminium Nitride,

TC = Thermocouple,

Al<sub>2</sub>O<sub>3</sub> = Alumina, In600 = Inconel Alloy 600.

**Alternative elements also available on request:** - Graphite + PBN coating, PBN/PG/PBN ceramic composite, Moly, Tantalum, CCC + PG coating

**Alternative top plate materials also available:** Alumina, AlN, PBN, Graphite + PBN, Sapphire, SiC coated graphite.