

High Temperature Cell (HTC)

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CreaTec High Temperature Cell is designed to evaporate materials with low vapor pressure at temperatures up to 2000 °C. The hot area of the effusion cell is made entirely from tantalum and tungsten. The cell is characterized by its stability and durability.

Available versions

- HTC made from molybdenum
- HTC with flip-shutter
- Downward looking | Face-down version
- Multiple cells



TYPE	HTC 1700	HTC 2000
TEMPERATURE RANGE	100 - 1700 °C	100 - 2000 °C
HEATING SYSTEM	radiation heating self-supported wire filament	
TEMPERATURE STABILITY	± 0.1 °C depending on the PID controller	
THERMOCOUPLE	type C	
MAX. OUTGAS TEMP.	1900 °C	2100 °C
MAX. POWER	600 W 10 cc crucible	800 W 10 cc crucible
MAX. CURRENT	16 A 10 cc crucible	16,5 A 10 cc crucible
BAKE-OUT TEMP.	250 °C	
FLANGE SIZE	DN 40 CF 63 100 160 others on request	
MAX. OUTER DIAMETER	38 mm 61 mm 97 mm or as specified	
MIN. UHV LENGTH	180 mm	
OPTIONAL		
COOLING	integrated water cooling separated cooling jacket	
COOLING DATA	water consumption: 1,5 l/min temperature: 5 - 15 °C connection: ø 6 mm	
CRUCIBLE SIZE	0,1 - 25 cc	
CRUCIBLE MATERIAL	PBN PGR W Ta Al ₂ O ₃ VC Mo CRUCIBLE DATA SHEET	
CRUCIBLE INSERT	on request	
SHUTTER	integrated rotary shutter manual, pneumatical or electrical actuation SHUTTER DATA SHEET	
POWER SUPPLY	PS - S800 PS - S1500	
CABLE	length 6 m (bakeable) others on request	

Elements to be evaporated

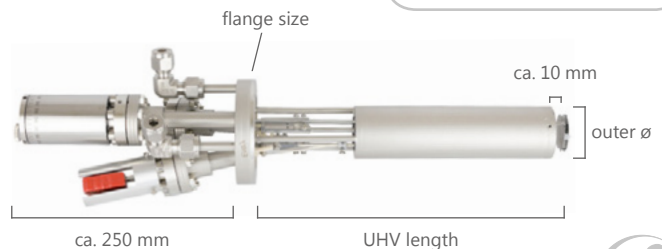
H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra	Lr	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Uut	Fl	Uup	Lv	Uus	Uuo

La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb
Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No

Evaporation Guide of Elements

How to order?

Individual Cell Request



SUPPORT	support@createc.de
APPROVAL	Drawing will be provided before manufacturing
CONDITIONING	Heated to maximum temperature with and without crucible
DOCUMENTATION	User manual will be provided with the delivery
SHIPPING	In stainless steel container under dry nitrogen
SERVICE	On request, a general overhaul can be performed after long-term use