

Valved Cracker Cell (V- CRC)

sales@createc.de | www.createc.de

The Valved Cracker Cell combines evaporation and cracking of elements with medium vapor pressure. This cell has an integrated valve to reproducibly control and rapidly change the beam flux by more than two orders of magnitude. The valve is located at the orifice and is heated to prevent any condensation of material.

Available versions

- Downward looking | Face-down version



TYPE	V-CRC		
TEMPERATURE RANGE	bulk zone	100 - 800 °C	
	cracker zone	100 - 1000 °C	
HEATING SYSTEM	dual wire filament radiation heating		
TEMPERATURE STABILITY	± 0.1 °C depending on the PID controller		
THERMOCOUPLE	two independent type C		
MAX. OUTGAS TEMP.	1500 °C		
MAX. POWER	400 W		
MAX. CURRENT	bulk zone	5 A	10 cc crucible
	cracker zone	6,5 A	10 cc crucible
BAKE-OUT TEMP.	250 °C		
FLANGE SIZE	DN 40 CF 63 100 160		
MAX. OUTER DIAMETER	38 mm 61 mm		or as specified
MIN. UHV LENGTH	ca. 250 mm		
VALVE ACTUATION	motorized linear feedthrough		
VALVE DESIGN	depending on the material to be evaporated		
OPTIONAL			
COOLING	integrated water cooling separated cooling jacket		
COOLING DATA	water consumption:	2l/min	10 cc crucible
	temperature:	5 - 15 °C	
	connection:	ø 6 mm	
CRUCIBLE SIZE	2 - 60 cc		
CRUCIBLE MATERIAL	PBN PGR W Ta Al ₂ O ₃ Quartz CRUCIBLE DATA SHEET		
SHUTTER	integrated rotary shutter manual, pneumatical or electrical actuation SHUTTER DATA SHEET		
POWER SUPPLY	PS - D800 w/ Eurotherm controller type 3504 motor control unit		
CABLE	length 6 m (bakeable)	others on request	

Elements to be evaporated

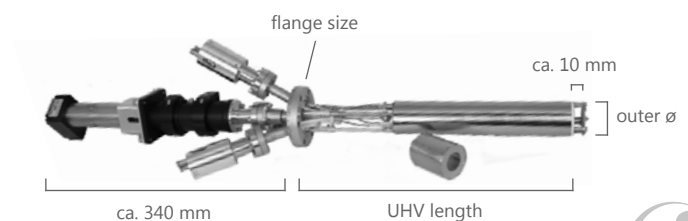
H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra	Lr	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Uut	Fl	Uup	Lv	Uus	Uuo

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