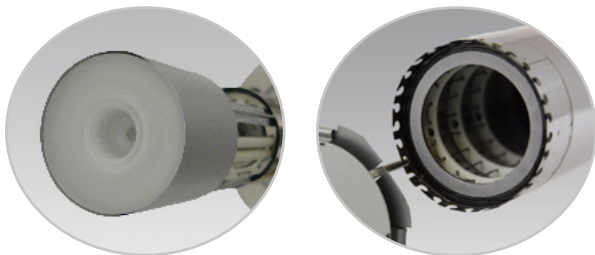


The Cracker Cell integrates evaporation and cracking of materials that are typically evaporated as molecules. By cracking these molecules it is possible to achieve smaller molecules. A special heating system is attached to the top of the cell for much higher temperatures than the evaporation temperature. Special insulation parts are used to minimize crosstalk between the two heating stages. Each heating stage is separately adjustable and has its own thermocouple. The crucible and the cracking insert are designed in such a way that the evaporated material has to flow through the cracking zone. The design and number of inserts can vary.

Available versions

- Valved Cracker Cell (V-CRC)
- Downward looking | Face-down version
- CRC made from molybdenum



TYPE	CRC		
TEMPERATURE RANGE	bulk zone	100 - 1000 °C	
	cracker zone	100 - 1200 °C	
HEATING SYSTEM	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	bulk zone	115 W	10 cc crucible
	cracker zone	100 W	10 cc crucible
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	150 mm		
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		
CRUCIBLE INSERT	on request		
SHUTTER	integrated rotary shutter manual, pneumatical or electrical actuation SHUTTER DATA SHEET		
POWER SUPPLY	PS - D800 w/ Eurotherm controller type 504		
CABLE	length 6 m (bakeable)	others on request	

Elements to be evaporated

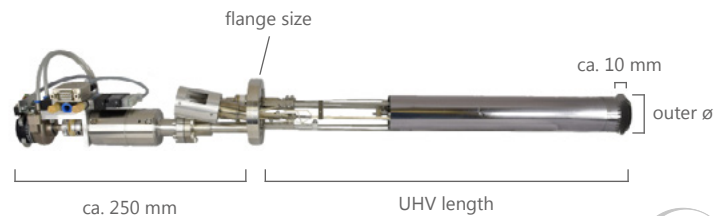
H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra	Lr	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Uut	Fl	Uup	Lv	Uus	Uuo

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

