Electron Beam Evaporator (EBE-C)

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The Electron Beam Evaporator - Carbon (EBE-C) is designed to generate carbon atoms in typical MBE systems. The heating of the rod-shaped carbon is performed by electron beam bombardment. The evaporator is built on a cluster flange with water cooling shroud. On top of the cooling shroud, the filament holder and the flux measuring system are mounted. The carbon rod is equipped with a separate cooling unit. The filament is made from a Tungsten-Thorium Oxide wire. The use of the E-Beam Evaporator in a more vertical mounting position is preferable, because the water cooling can work most effectively.

Available equipment

- Unit for vacuum isolation
- Filament kit

TYPE	EBE-C	
TEMPERATURE RANGE	up to 2300 °C	
HEATING SYSTEM	e-beam heating bombardment self-supported wire filament	
EVAPORATION FROM	rod	
ROD DIAMITER	3 mm	
MEASUREMENT	flux meter	
BAKE-OUT TEMP.	200 °C	
FLANGE SIZE	DN 40 CF | 63	or as specified
MAX. OUTER DIAMETER	38 mm	or as specified
MIN. UHV LENGTH	180 mm	
COOLING	integrated water cooling	
COOLING DATA	water consumption: 1l/min temperature: 5 - 15 °C connection: ø 6 mm	
POWER SUPPLY	EBE-C-PS	
MAX. VOLTAGE TARGET	up to 3 kV	
MAX. EMISSION CURRENT	300 mA	
MAX. POWER FILAMENT	800 W	
OPTIONAL		
SHUTTER	integrated rotary shutter manual, pneumatical or eletrical actuation *SHUTTER DATA SHEET*	
CABLE	length 6 m (bakeable)	others on request

Elements to be evaporated

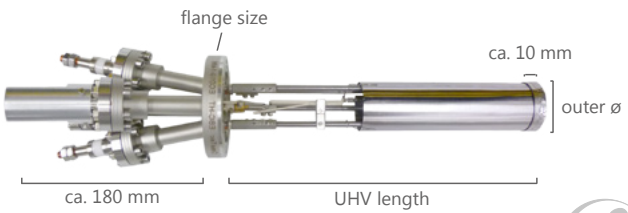
H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra	Lr	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Uut	Fl	Uup	Lv	Uus	Uuo

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

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