

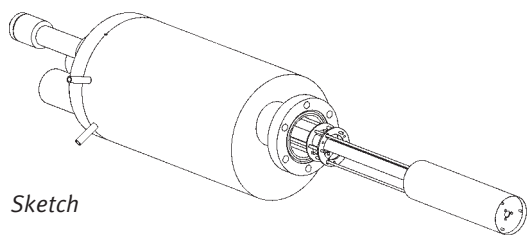
VALVED CRACKER EFFUSION CELL

V-CRC



The CreaTec valved cracker cell combines the evaporation and cracking of elements like P, S, As, Se, Te, etc. with a valve to reproducibly control and rapidly change the beam flux over more than two orders of magnitude.

The valve is located at the orifice and is heated to prevent any condensation of material.



Sketch

Technical Data

Standard :

Type	V - CRC
Heating system	Radiation heating, tantalum wires with PBN insulators
Temperature range	100 °C ... 800°C bulk zone 100 °C ... 1000°C cracker
Temperature stability	≤ 0.1 K depending on the PID controller
Max. outgas temp	1200°C without crucible 800 °C ... 1200°C depending on the crucible material
Max. power	1200°C cracker 220 W bulk zone 180 W cracker
Max. current	8 A bulk zone 9 A cracker
Integral valve	manual
Bakeout temperature	250°C
Conditioning	Heated to maximum temperature with and without crucible
Shipping	Stainless steel container with valve

Custom :

Flange size	CF 40 / CF 63 or specified
Max. outer diameter	38 mm/ 60 mm or specified
Length	As specified

Thermocouple type	Two independent thermocouples type C / WRe 5% - 26%
Crucible material	Ta / quartz
Crucible capacity	80 ccm ... 500 ccm

Options :

Motorized	Optional
Water cooling	Optional
Other dimensions	As specified

