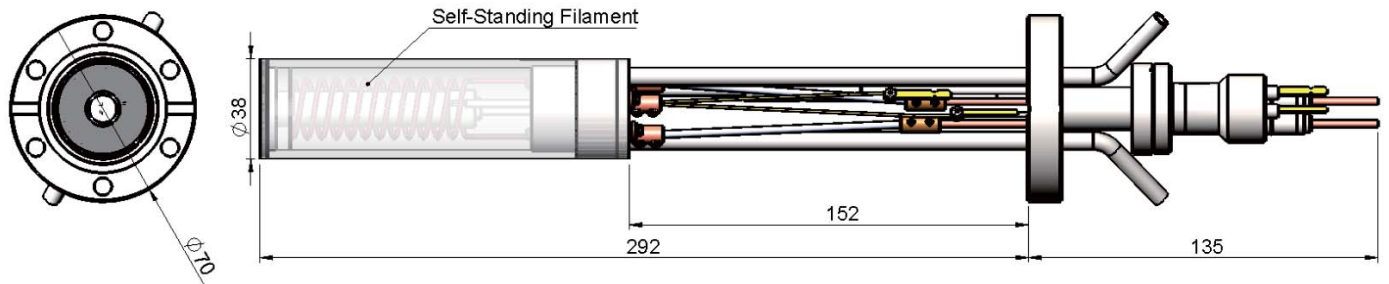


Evaporators

High Temperature Effusion Cell



All dimensions in mm

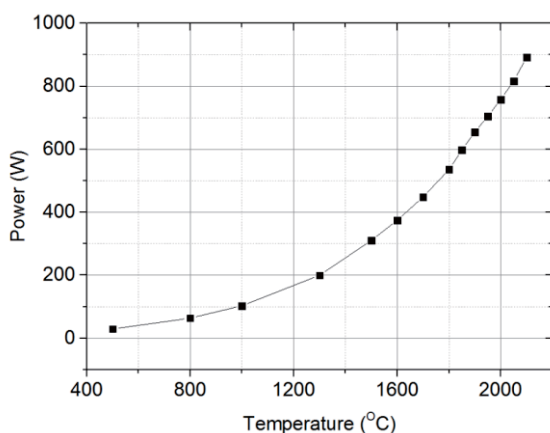
The High Temperature Effusion Cell is designed for clean UHV operation up to 2000°C. The concept of ceramic support heating element is no longer valid here as:

- Most ceramic is semiconducting at such high temperature thus insulating is difficult.
- PBN decompose significantly above 1500 °C.

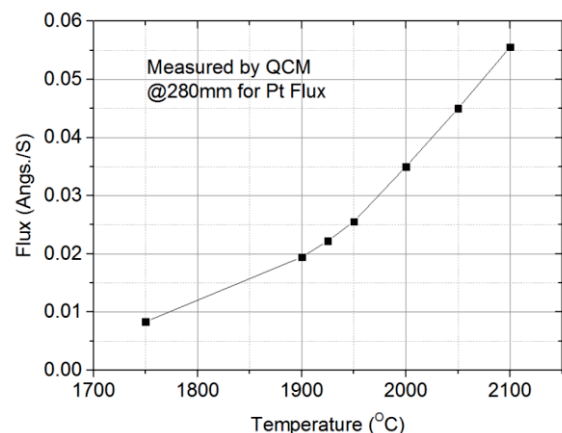
To overcome these issues, one self-standing filament is manufactured which is the key point for this high temperature evaporator. With this free-standing filament of thick tungsten wire, the ultimate version is capable of even 2000°C.

To prevent the flange being heated by the radiation of the heating element and cool the electrode during max power running, one internal water cooling stage is included with high temperature evaporator. However external water cooling shroud is always recommended to prevent the chamber being heated up.

Mounting Flange	Crucible Size (cc)	Working Temperature (°C)	Degas Temperature (°C)	Thermocouple	Stability (°C)	Part Number
NW38CF (2.75 inch)	10	800~1800	1900	C	0.1	EC2HT
		1000~2000	2000	C	0.1	EC2UHT



Power Test



Flux Test