

Ion Sources

Filamentless Broad Beam
Formerly Anatech Ltd.

Applications

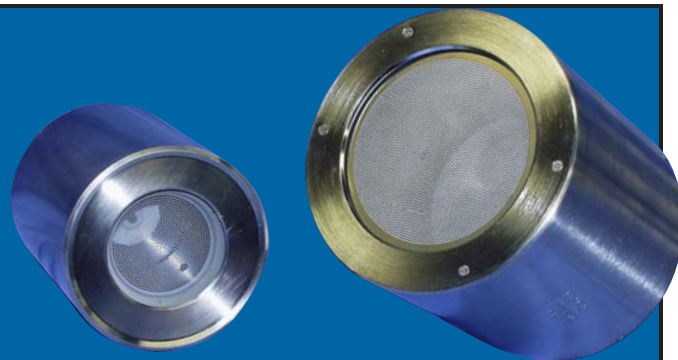
- Ion Assisted Deposition
- Plasma Cleaning
- Oxiding
- Nitriding
- Surface Modification

Features

- 3cm, 5cm, 10cm Models
- Filamentless
- Reactive Gas Compatible
- Internal or Flange Mount
- Collimated or Focused Grids
- UHV Compatible



Specifications for Filamentless Ion Sources



	3 CM	5 CM	10 CM
Filaments	None	None	None
Process Gas	Argon	Argon (std.), Oxygen (opt.)	Argon (std.), Oxygen (opt.)
Beam Currents	2mA @ 25 eV to 7mA @ 1000eV	2mA @ 25 eV to 35mA @ 1200eV	2mA @ 25 eV to 67mA @ 1200eV
Ion Optics	Moly Collimated (std.)	Moly Collimated (std.) Divergent, Convergent, or Graphite (opt.)	Moly Collimated (std.)
Beam Uniformity	+/- 10% in the Inner 75% of Beam Diameter at 13"		
Mounting Flange Mount (Opt.)	Remote Mount (std.) 6" CF (minimum)	Remote Mount (std.) 8" CF (minimum)	Remote Mount (std.) 10" CF (minimum)
Feedthrough	Dual 1" Gas and Electrical (std.), 2.75" CF Flange F/T (opt.)		
Source Material	300/400 Series Stainless Steel, High Purity, High Temp Fired Ceramic		
Emitter Power Supply (Constant Current)	0–225mA @100–475V	0–225mA @100–475V	0–225mA @100–525V
Anode Power Supply (Constant Voltage)	0V–1000V @ 2–15mA	0V–1000V @ 2–35mA	0V–1000V @ 2–67mA
Accelerator Power Supply	0V–100V @ 1–2mA	0V–100V @ 1–2mA	0V–100V @ 1–2mA
Required Gas Flow	7–15 sccm	7–15 sccm	7–15 sccm
Operating Pressure	$1.2 \times 10^{-4} - 4 \times 10^{-4}$ Torr	$9 \times 10^{-5} - 2 \times 10^{-4}$ Torr	$9 \times 10^{-5} - 2 \times 10^{-4}$ Torr
Nominal Pump Speed	1000 liters/second	2000 liters/second	2000 liters/second
Dimensions: Source	3" dia. x 5.26" length	5.5" dia. x 7.0" length	6.1" dia. x 8.45" length
DC Switching Power Supply	19" Rack Mount, 5 ¼" High and 18" Deep		