



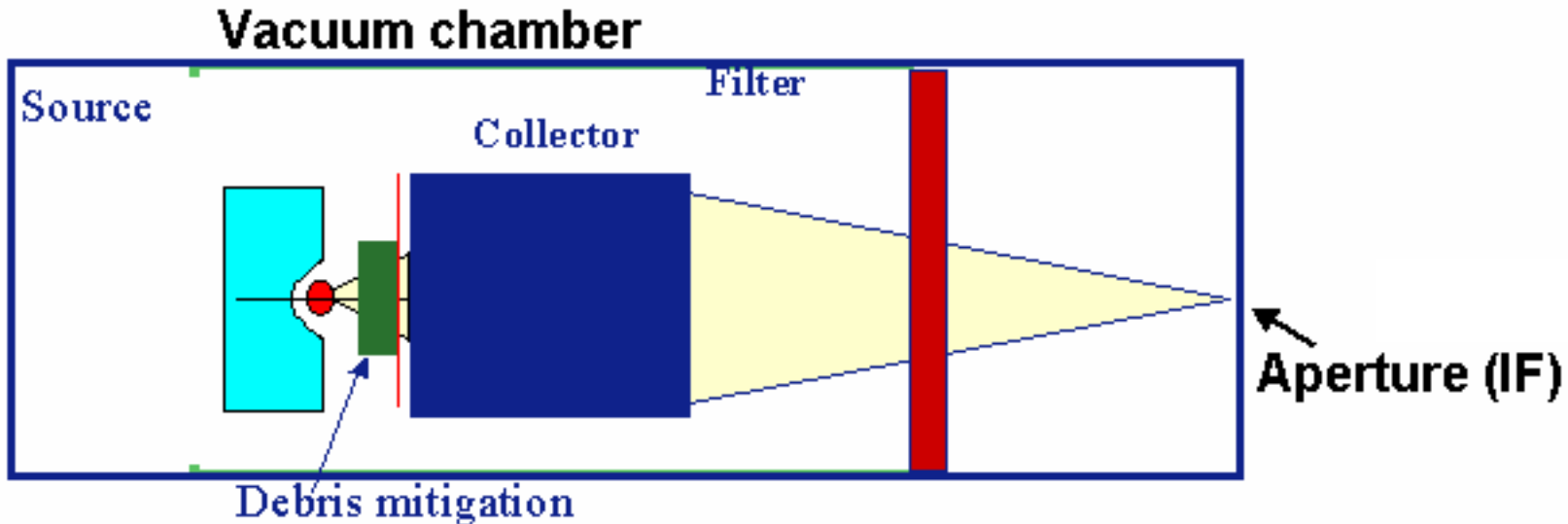
ASML

Source Collector Module – Variable CoO Parameters

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Noreen Harned

Source Collector CoO Variable Cost Parameters: 1 of 2



Consumables: 108 Billion pulses / yr (10 kHz). Do the following survive less than this? Equal to this? >> than this?

Collectors? Debris mitigation parts? Electrodes / trigger laser parts or droplet generator parts / drive laser parts / beam delivery parts?

Not to exceed cost target is \$400k per year if to be comparable to a 45W 193nm source (including beam delivery)

Source Collector CoO Variable Cost Parameters: 2 of 2

- Current 45W 193nm sources are mostly self contained in terms of gases / fab materials, but EUV will need:
 - Sn (or ???) – how much? impact on fab?
 - Debris mitigation / cleaning gases
- Tool electricity, based on input from source suppliers (assuming 115W at IF info from this summer) is mostly for the source

	Estimate [kVA]	
EUV HVM Tools	586 – 640	
193nm ArF Tools (45 W Laser)	80 -124	
Increase: EUV over 193nm	4 – 7 x	

Summary

- Consumables – must not exceed today's numbers for 45 W by more than 10% (expected increase for higher power 193nm sources)
- Gas utilization will be an additional cost
- Fuel delivery and maintenance will be an additional cost
- Electrical power will be an additional cost

Will the industry accept the increased cost?