



HS-Group GmbH
Innovative Vacuum Technology

Member of **V** VON ARDENNE Group



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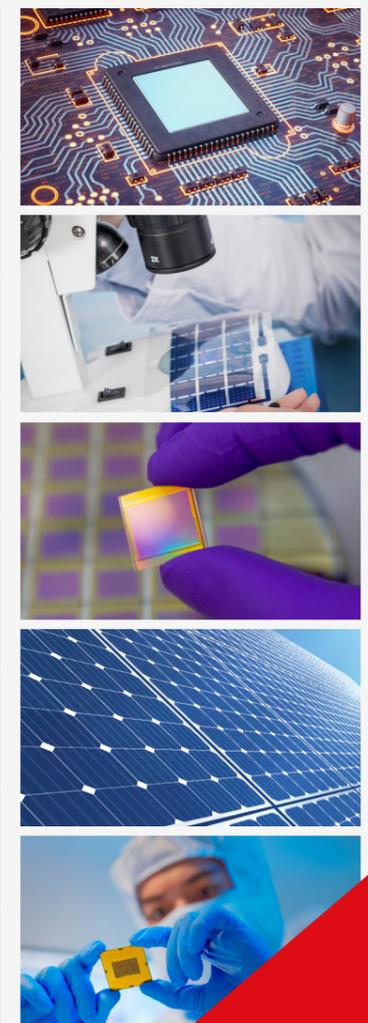
RF PLASMA BEAM SOURCES
QUATRON-SERIES



Technical Data / QUATRON®		L 400	L 600	L 800
Beam length / diameter	[mm]	400	600	800
Beam area, approx.	[cm ²]	400	600	800
RF-Power, max	[W]	3000	5000	5000
Current density @ 1000 eV	[mA/cm ²]		2.0	
Current density max.	[mA/cm ²]		3.6	
Energy max.	[eV]		1500	
Pressure range	[mbar]	2 x 10 ⁻³ – 1 x 10 ⁻⁵		
Gas		all gases		
Matching		manual, automatic		
Extraction grid material		tungsten, molybdenum, titanium, stainless steel, etc.		
Cooling medium		water		
Applications		PVD, PECVD, Etching, Cleaning, etc.		
More sizes available*		L 300, L1000, L1200, L1500		

R 200	R 300	R 450
200	300	450
314	706	1590
3000	5000	5000
	2.0	
	3.6	
	1500	
2 x 10 ⁻³ – 1 x 10 ⁻⁵		
all gases		
manual, automatic		
tungsten, molybdenum, titanium, stainless steel, etc.		
water		
PVD, PECVD, Etching, Cleaning, etc.		
R80, R160 (+built-in)		

- PRE-TREATMENT
PECVD, ETCHING,
CLEANING
- CAPACITIVELY
COUPLED
- NEUTRAL AND
PARALLEL BEAM
- ENERGY LEVELS
20...~1500 EV
- RESISTANT TO
PROCESS
CONTAMINATION
- EASY TO
SERVICE
- ONLY ONE LOW
COST CONSUMABLE
- UPSCALE
POSSIBILITIES



* further sizes upon request