

K1050X RF Plasma Etcher / Asher / Cleaner

plasma reactor with 110mm x 190mm chamber



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RF PLASMA BARREL REACTOR



modern, compact, fully automatic design



K1050X RF plasma reactor

The chamber drawer can be exchanged for a vacuum loading port for special cleaning applications in SEM/TEM. This usually employs an oxygen/argon mix of gases, the oxygen removing the organic material (hydrocarbons) and the argon giving a surface etching of the sample.

Key Features & Benefits

- Microprocessor control - automatic operation, fully programmable by the operator
- Drawer type sample stage - gives easy convenient sample access
- Modern solid state RF power supply - rugged and reliable
- Automatic tuning of forward and reflected power - ensures optimum power conditions at all times
- LCD display - all conditions visible (vacuum, RF power, elapsed time) during operation
- Two gas flow meters - allows precise control and mixing of process gases
- Vent control - minimal sample disturbance (especially useful for fine ashed samples)

K1050X RF Plasma Reactor

The K1050X plasma reactor is designed to meet the requirements of research and development and small-scale production for a wide and varied range of plasma etching, ashing and cleaning applications. Built to withstand heavy use (24 hours a day for some ashing schedules) the K1050X features microprocessor control with automatic operation and offers durability and simplicity of operation. Barrel systems plasma etch or plasma ash isotropically (in all directions) and are suitable for the majority of applications.

The K1050X is fitted with a solid state RF power supply (0-100W) and tuning circuits, dual process gas flow meters featuring full or restricted vent control. The chamber is cylindrical with a drawer system for ease of sample loading. The K1050X requires a separate rotary vacuum pump or optional turbo pump backed by a diaphragm pump.



chamber and sample drawer



control panel during operation

Options

- EK4221 Capacitance manometer (recommended for reactive gases – CF₄ etc)
- EK4222 Quartz chamber and door (replaces standard borosilicate)
- AL090243-1 Spares kit

Vacuum pumping

- E5005F / EK3175 50L/min rotary pump with oil mist filter
- E5005FZ / EK3176 50L/min fomblinised rotary pump with oil mist filter

Turbo and diaphragm pumping options are available

See: www.quorumtech.com for full technical specification and additional details.



PRODUCT SPECIFICATIONS

Supplied with	Exhaust and pump hoses with in-line filters, operating manual
Electrical	230V 50Hz (5A max including pump), 115V 60Hz (10A max including pump)
Weights & dimensions	450mm W x 350mm D x 300mm H. Weight: 25Kg. Barrel work chamber: 190mm x 110mm. (Borosilicate glass as standard - quartz as an option)
Plasma output	Solid state 100W RF power supply, normal operating range: 25 to 100W at 13.56MHz
Operating vacuum	Normal operating vacuum 0.5mbar to 1mbar
Pumping	Requires a rotary pump 50L/min ("Fomblinised" version recommend for oxygen gas)



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