

Microwave Systems for Processing CVD Diamond

DiamoTek 1200-ECR



The DiamoTek 1200-ECR is a fully integrated microwave plasma, ECR system for advanced etching and deposition processes

The DiamoTek 1200-ECR is a high density, low energy plasma system, electron cyclotron resonance (ECR) system. The reactor design incorporates the patented microwave plasma disc with internal tuning and permanent, multi-polar ECR magnets. This inherent performance provides the ultimate operating flexibility and control of gas plasma density and uniformity over a wide range of operating conditions and gasses. A primary application for the DiamoTek 1200-ECR is for etching diamond films for post processing, including stress relief.*

System Features

- 24 cm Plasma Discharge
- High Density Plasma
- Low Ion Energy
- Uniform Plasma Diffusion
- Confined ECR Magnetic Field
- Controlled Microwave Mode Operation
- Broad Operating Range
(1 - 10⁴ Torr)
- Magnetic Field Free Process Zone

 **Lambda
Technologies™**

Advanced Microwave Plasma Technologies

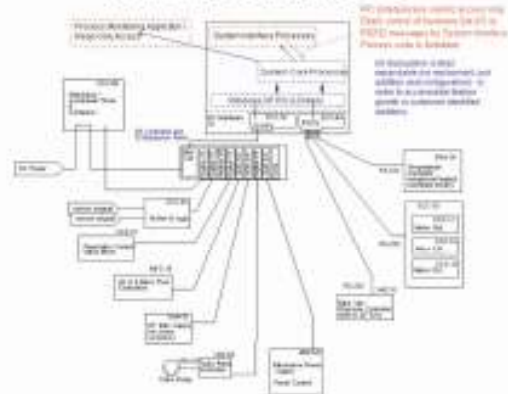


DiamoTek Series: Microwave Plasma Systems for CVD Diamond

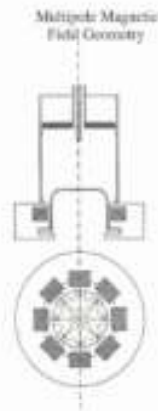
DiamoTek 1200-ECR Specifications

- Fully automated recipe control
- 2.45 GHz at 1.2kw - 6kw power
- 10 inch discharge diameter
- 6 to 8 inch uniformetch area
- 4 MFC standard
- Adjustable tuner plate
- Adjustable launch probe
- Adjustable stage height
- Permanent ECR magnets
- Turbo-pumping & hi-vac seals

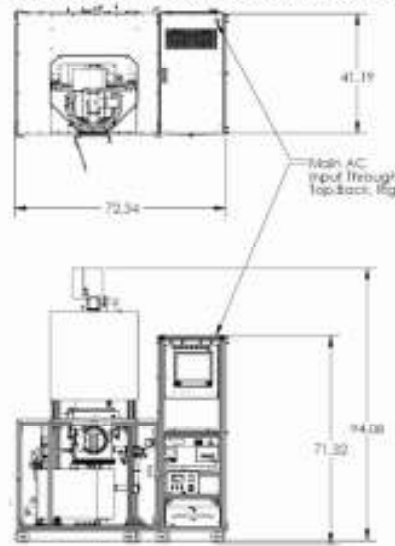
System Computer Controls provide turn-key operation with complete recipe control of the deposition process



Multi-polar permanent ECR magnets with plasma disc for uniform high density discharge



Modular System ... provides flexibility and cost effective packaging for variety of options and process applications



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