

220 SERIES MICRO
STRIPPERSPIE 30 SERIES ION
BEAM ETCHING400 SERIES MICRO
SPUTTERING

800 SERIES MICRO RIE

900 SERIES MICRO
PECVDD

SERIES 800 MICRO RIE

SERIES 800 MICRO RIE

The Technics Reactive Ion Etch system utilizes various components working in a specific sequence to etch a thin film from a substrate or work piece. Reactive Ion Etching (RIE) combine plasma and ion beam removal of the surface of a substrate. The etching gas (as in plasma etch) enters the reaction chamber and is ionized by the application of an electric field such as RF. Individual gas molecules are accelerated to the substrate surface. These charged particles remove the top layer of material by the combined efforts of mechanical and chemical reactions.



This combined action results in an etch process that is very controllable and much faster than either action by itself. Reactive ion etch is the preferred dry etch technique in use today. RIE provides a means of reliable production of sub-micron sized openings.

Uniform etching depends on a number of key parameters; the thickness and type of material being etched, the type and flow rate of the etching gas, chamber pressure and energy level of the plasma. Since all these parameters are under control of the user, precise results can be achieved.

The reactive ions created in the plasma impinge the top layer of the device being etched. This material is removed by physical and chemical reactions. DC Self-Bias

The 800 SERIES MICRO RIE can routinely etch sub-micron geometries and is ideally suited for etching the following materials:

- *Silicon Dioxide
- *Silicon Nitride
- *Silicon
- *Aluminum & Alloys
- *Refractory Metal Silicides
- *Chrome
- *Gallium Arsenide and Alloys
- *Indium Tin Oxide
- *Polyamides
- * Photoresist

The system's computer controls and displays all system functions (except safety interlocks). It is menu driven for ease of use and may store any number of recipes with any number of cycles. Automatic data logging and other operator convenience will maximize the accuracy and efficiency of your R&D or pilot line production.

The high precision 800 SERIES MICRO RIE system provides small and large wafer developmen capability comparable to high capacity systems. Additionally, the 800 SERIES MICRO RIE is ideal for analysis of IC and

hybrid circuit devices.

Paper--Technical analysis employing the methodology available via eMailed

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OTHER PRODUCTS:

[220 Micro Stripper](#) - [300 Ion Mill](#) - [400 Micro Sputtering](#) - [900 Micro PECVD](#)