



IBM

MAYER BURGER (Roth & Rau)



Description

Ion beam milling (IBM) technology allows thin films to be etched by the use of broad beams of positively charged ions in a high vacuum system. The beam is formed from gas plasma. Apart from DC source, the system is equipped by inductively coupled plasma source (ICP) which provides denser plasma.

Generally ion beam milling is applied for materials which may not be etched on a chemical basis.

Ion beam etching system IonSys 500 consists of cylinder shaped process chamber with one ion beam source.

Specifications / Capabilities

Beam content	Ar ⁺
Beam current	30 mA
Beam current density	Up to 200 $\mu\text{A}/\text{cm}^2$
Beam voltage	Up to 500 V
Acceleration voltage	300 V
RF power	130 W
Substrate sizes:	
Round samples for cooling option launching:	2 inches
Arbitrary form samples without cooling:	Up to 3 x 3 inch

Materials

Metals and ceramic materials.

Link

<http://www.meyerburger.com/en/products-systems/competences/plasma-ion-beam/semiconductor/ion-beam-etching-and-deposition/ionsys-500/>