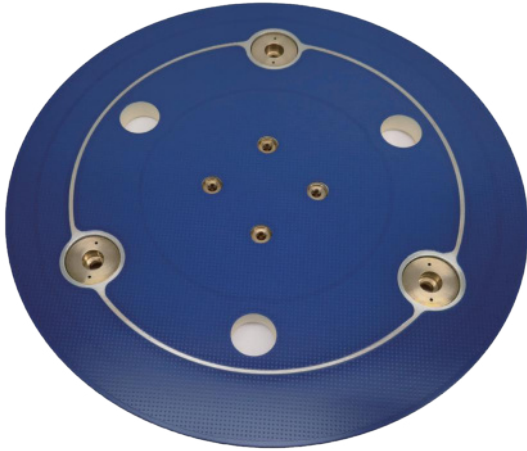




Features

- Coulomb's Law or Gradient Force electrostatic chuck
- Support Bi-polar, multi-polar electrode, interdigitated electrode design etc.
- Suitable for UHV environments up to 10^{-5} Pa
- High clamping force
- Typical global flatness: $5\mu\text{m PV}$ ($D = 300\text{ mm}$)
- Flexible surface pattern design
- Suitable for non-magnetic environment
- Substrates include wafer, dielectric materials such as sapphire, glass and more.

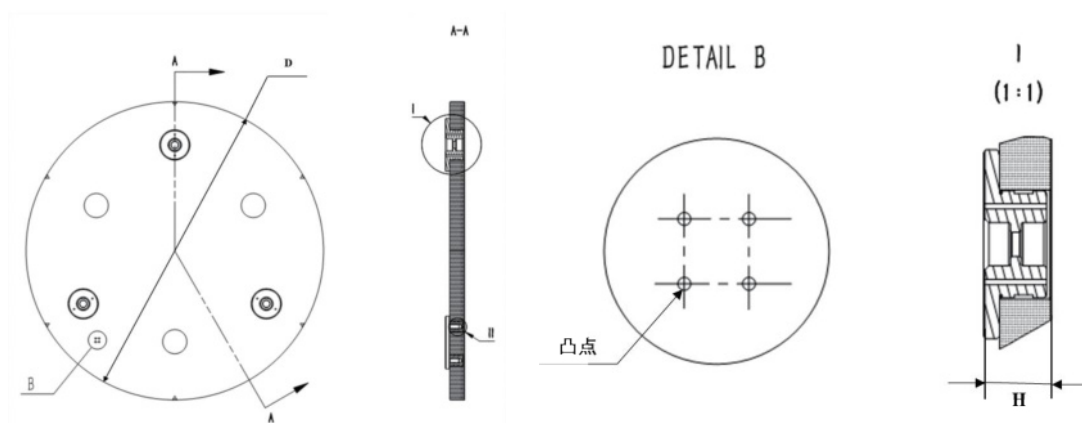
Description

The Electrostatic Chuck (E-Chuck) is a holding tool for substrates such as silicon wafers in semiconductor processes. Based on the principle of electrostatic adsorption, the E-Chuck fixes substrates like silicon wafers through Coulomb force or gradient force generated by the chuck after the application of an external high voltage.

Applications

- Wafer Metrology: EBI, CD-SEM, Review-SEM
- Thin Film Deposition (CVD, PVD etc.)
- Wafer Manufacturing

Interface Definition



General dimension, Unit: mm

Technical Specifications

6inch E-Chuck		8inch E-Chuck	12inch E-Chuck	Unit
Electrostatic type	Coulombic or Gradient	Coulombic or Gradient	Coulombic or Gradient	
Electrode type	Bi-polar or interdigitated electrode			
Accuracy				
Global flatness	≤3	≤3	≤3	μm
Parallelism	<30	<30	<30	μm
Electrical properties				
Standard clamping voltage	1000	1000	1000	V
Leakage current	<5	<5	<5	nA
Performance parameter				
Clamping force	≥8(Coulomb)	≥12(Coulomb)	≥30(Coulomb)	N
Dimensions				
Diameter	144	194	294	mm
Thickness	12.6	12.6	12.6	mm

*Customized requirements accepted