

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: $2\mu\text{m PV}$ ($D = 300\text{ mm}$)
- Flexible surface pattern design
- Suitable for non-magnetic environment
- Adsorption objects include wafer, dielectric material such as sapphire, glass and more.

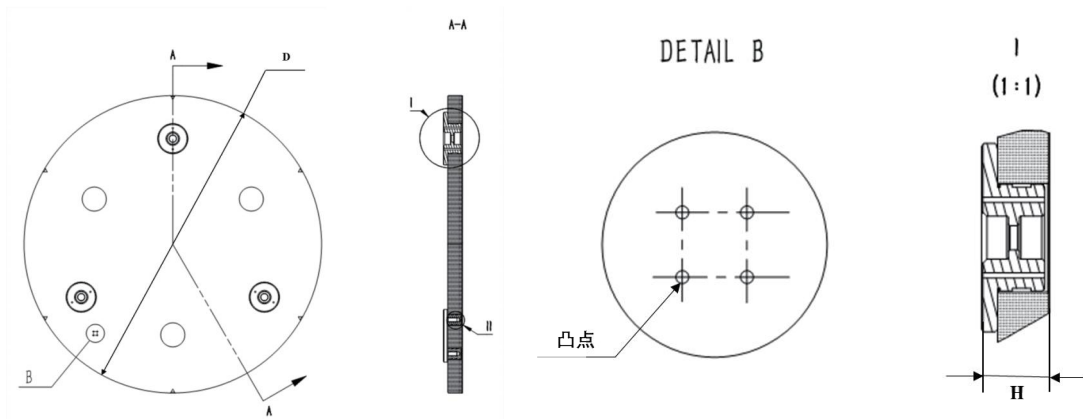
Description

Electrostatic chuck (ESC) is a silicon wafer clamping tool used in semiconductor processes. Based on the principle of electrostatic adhesion, ESC applies external high voltage to generate Coulomb adhesion force or J-R adhesion force to clamp the silicon wafer.

Applications

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

Interface Definition



General dimension, Unit: mm

Technical Specifications

	6inch ESC	8inch ESC	12inch ESC	Unit
Electrostatic type	Coulombic or Gradient	Coulombic or Gradient	Coulombic or Gradient	
Number of electrodes	Bi-polar	Bi-polar	Bi-polar	
Accuracy				
Global flatness	<1	<1	<2	μm
Parallelism	<5	<5	<5	μm
Electrical properties				
Standard clamping voltage	1000	1000	1000	V
Leakage current	<5	<5	<5	nA
Performance parameter				
Clamping force	≥10(Coulomb)	≥16(Coulomb)	≥40(Coulomb)	N
Dimensions				
Diameter	144	194	294	mm
Thickness	12.6	12.6	12.6	mm

*Customized requirements accepted