

EpiCentre Questionnaire

Contact Details

Establishment
Address

Contact Name
Email Address
Tel Number
Date

EpiCentre Series Selection

EC-I In-line design

Select EC-I

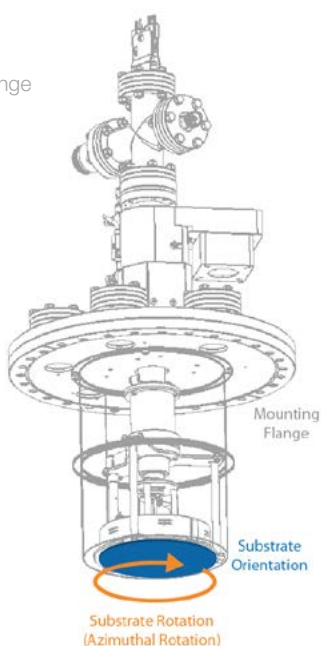
Insertion length (mounting flange to substrate centre)

Standard 240mm
Other (mm)
(please specify below)

Stage orientation

Vertical - substrate facing up
Vertical - substrate facing down
Other (non-standard option - please specify below)

Tick if you require
Glancing Angle Deposition



EC-I mounting flange required

CF200/10" OD
CF250/12" OD
CF300/14" OD
CF350/16.5" OD
Other (non-standard option - please specify below)

EC-I substrate size (check all that apply)

2"
100mm
150mm (CF250, CF300 & CF350 flanges only)
200mm (CF300 & CF350 flanges only)
Other (non-standard option - please specify below)

Substrate will be: bare wafer in a holder

EC-R Right-angled design

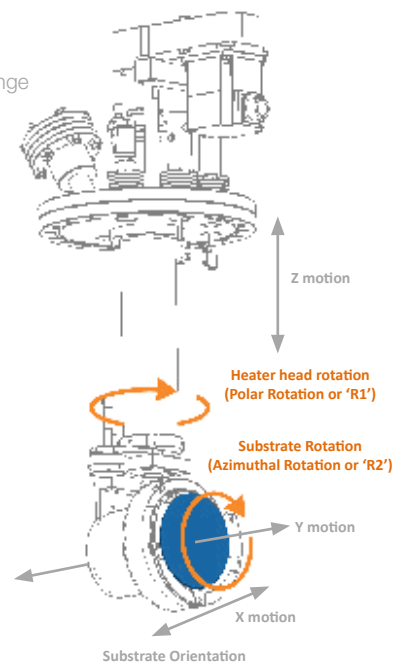
Select EC-R

Insertion length (mounting flange to substrate centre)

Standard 280mm
Other (mm)
(please specify below)

Stage orientation

Vertical
Horizontal
Other (non-standard option - please specify below)



EC-R mounting flange

CF150/8" OD
CF200/10" OD
CF250/12" OD
Other (non-standard option - please specify below)

EC-R substrate size (check all that apply)

2"
3"
100mm (CF200, & CF250 flanges only)
150mm (CF250 flange only)
Other (non-standard option - please specify below)

Substrate will be: bare wafer in a holder

EpiCentre Configuration & Options (see page 3 for heating element selection)

EC-I Configuration

Note: standard EC-I configuration selected - click options to select an alternative.

| | |
|--|---|
| Substrate biasing | None (substrate earthed) DC/RF biasing (option) |
| Substrate rotation | No rotation required Stepper motor 24V DC motor (option) SmartMotor™ (option) No motor (option) |
| Substrate rotation speed | 20rpm (recommended) Other (max 60rpm) rpm |
| Rotation controller | None Supplied (option) |
| Cradle lift/lower to aid sample transfer | 25mm pneumatic Manual hand wheel (option) |
| Cradle Rotation Home Sensor | Fitted (standard) Removed (option) |
| How will samples be transferred? | Manually at atmosphere Transfer arm under vacuum |
| Deposition height adjustment | None 50mm (option) 100mm (option) 150mm (option) Actuation Manual Motorised Motor controller None Supplied (option) |
| Substrate shutter | None (Dynamic option available with deposition height adjustment) Manual shutter (option) Motorised shutter (option) Pneumatic shutter (option) |
| Heater Shields | Molybdenum shields Inconel shields (option) |
| Deposition Shielding | None Supplied (recommended with bias option and CVD type applications) |

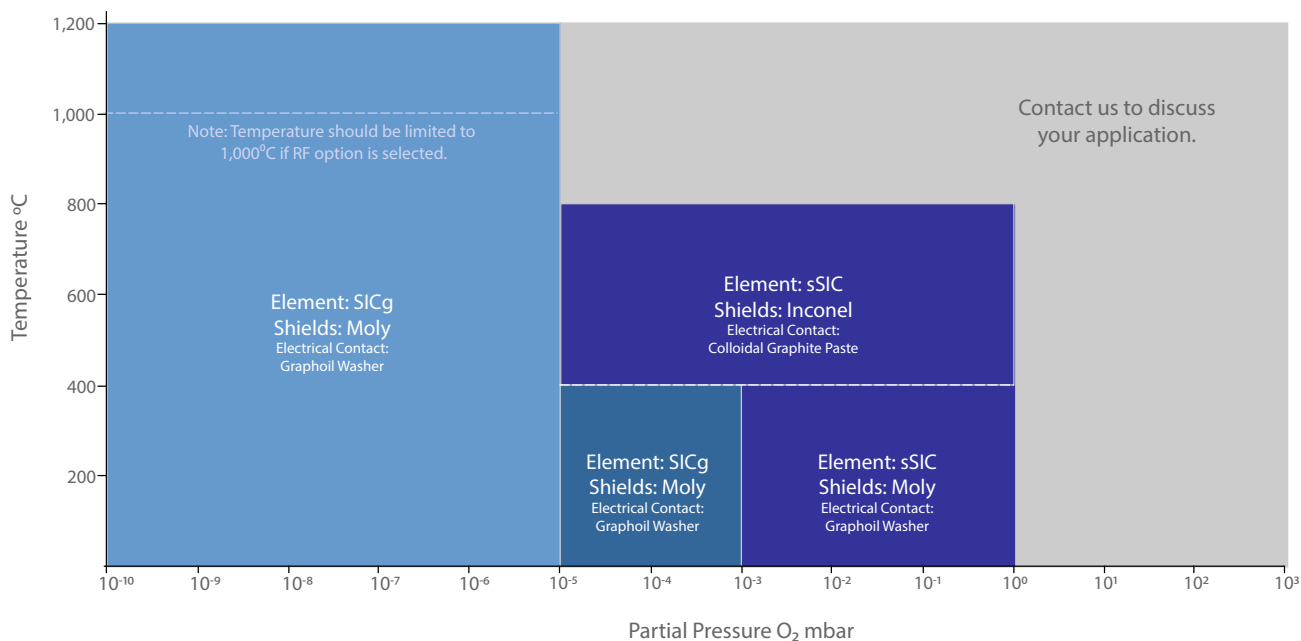
EC-R Configuration

Note: standard EC-R configuration selected - click options to select an alternative.

| | |
|--|--|
| Substrate biasing | None DC/RF biasing (option) |
| Polar (primary) rotation | Manual Stepper motor (option) No motor |
| Substrate (azimuthal) rotation | No rotation required Manual (option) Stepper motor (option) 24V DC motor (option) No motor (option) |
| Substrate rotation speed (if substrate rotation option selected) | 20rpm (recommended) Other - please specify rpm |
| Rotation controller(s) (tick if required) | Polar controller Azimuthal controller |
| Rotation Home Sensor (tick if required) | Polar home sensor Azimuthal home sensor |
| How will samples be transferred? | Manually at atmosphere Transfer arm under vacuum |
| Z-shift adjustment | None Required (option) mm Actuation Manual Motorised Motor controller None Supplied (option) |
| XY motion | None Required (option) mm Actuation Manual Motorised Motor controller None Supplied (option) |

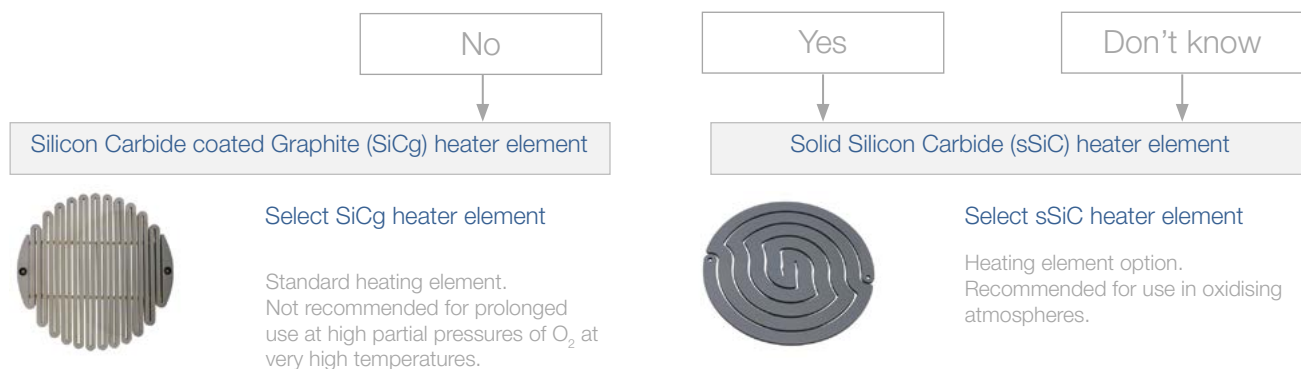
EpiCentre Heater Selection (required for both EC-I and EC-R series)

Element & Shield Material Recommendations



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Does the intended process involve the use of high partial pressures of O₂?



Thermocouple choice

| | |
|--------|-------------------|
| Type K | Quantity required |
| Type C | One Two |

Temperature controller & power supply

None required
Supplied (option)

Application Details (required for both EC-I and EC-R series)

To ensure that you receive the correct configuration of EpiCentre it is essential to provide as much information on the potential applications as possible.

What is the application?

What substrate materials will you be using?

What is the process chamber's ultimate (base) pressure?

What maximum temperature at base pressure do you wish to heat the substrate?

How long do you need to maintain this temperature?

If gases or vapours are involved in your process please complete the information below:

| | GAS | PARTIAL PRESSURE | | MAXIMUM SUBSTRATE TEMPERATURE | DURATION |
|---|-----|------------------|------|-------------------------------|----------|
| | | mbar | torr | | |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |
| 6 | | | | | |

Are any of the following materials incompatible with your process? (please tick all that apply)

Tantalum
Copper

Molybdenum
Aluminium

Stainless Steel
Inconel

Additional Comments

How we use this information

We use the information you provide in this questionnaire to evaluate your application before quoting an appropriate product specification. As all applications vary and have factors outside of our control, we are not in a position to offer any performance guarantees outside of our standard final test procedures.