

Sample Manipulators



Standard 3" Stage, Filament, and Integrated Shutter

Features

- Magnetically Coupled Rotation
- High Resolution Rotation
- Oxygen Compatible Option Available
- Ammonia Compatible Option Available
- Up to 1,400 °C Substrate Temperature



Description

UHV compatible Growth Manipulators and Preparation Stages are available for 1" to larger than 8" samples. An optional integrated Master Shutter is available upon request. Up to three way direction motion provides flexibility. The integrated wafer clamp allows for simple sample mounting. Material specific design increases longevity in corrosive environments such as oxygen or ammonia background.

Specifications

Substrate Size	Up to 8"
Mounting Flange	4.5" to 10.0" CF
Temperature Range	Up to 1,400 °C
Thermocouple	Type C or K
Temperature Uniformity	+/- 1%
Filament Material	Graphite <i>(Others Available Upon Request)</i>
Azimuthal Rotation with Motor	0 – 60 rpm
Bakeout Maximum Temperature	200 °C
Power Supply	1kW up to 5kW

X-Y Translation

- Resolution 0.001
- Repeatability 0.001
- Backlash 0
- Travel +/- 0.5"

Z Translation

- Resolution
- 1 mm or 1/32 scale
- Repeatability 1/32 or 1 mm
- Backlash 0
- Travel 4.0"

Azimuthal Rotation

- Resolution 1.25°
- Backlash < 1°
- Rotation 360° Continuous

