

# Sample Manipulators

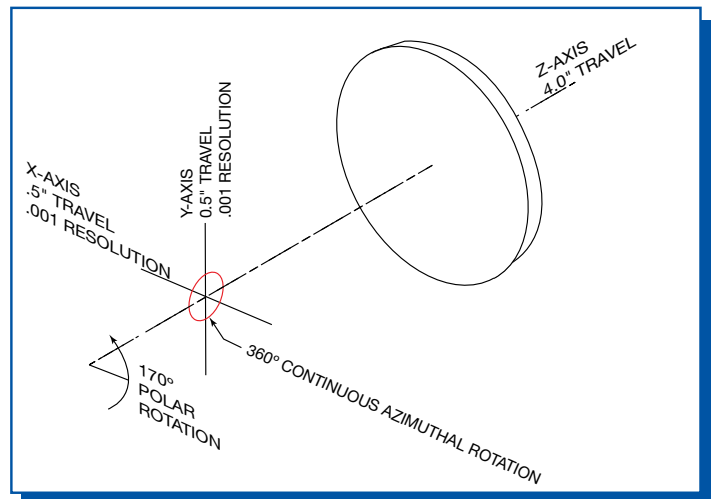
## Description

UHV Sample Manipulators with polar rotation are available for sample sizes from 1" up to 3". All magnetically coupled rotations provide long service life and protects against leaks. The 170° of polar rotation allows for simple sample transfer and compatibility with multiple MBE system designs. Contact SVT Associates for details on system model compatibility.



## Features

- High Resolution Rotation
- Oxygen Compatible Option Available
- Ammonia Compatible Option Available
- Up to 1,000 °C Substrate Temperature
- 170° Polar Rotation for Sample Transfer



## Specifications

Substrate Size	Up to 3"
Mounting Flange	4.5" to 10.0" CF
Temperature Range	Up to 1,000 °C
Thermocouple	Type C
Temperature Uniformity	+/- 1%
Filament Material	Graphite (Others Available Upon Request)
Azimuthal Rotation with Motor	0 – 15 rpm
Bakeout Maximum Temperature	200 °C
Power Supply	1kW up to 5kW
Options	Substrate Biasing Motorized Azimuthal Rotation Custom Lengths

## Motion

### X-Y TRANSLATION

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

### Z TRANSLATION

- Resolution  $\frac{1}{32}$  or 1 mm scale
- Repeatability  $\frac{1}{32}$  or 1 mm
- Backlash 0
- Travel 4.0"

### AZIMUTHAL ROTATION

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

### POLAR ROTATION

- 170°

