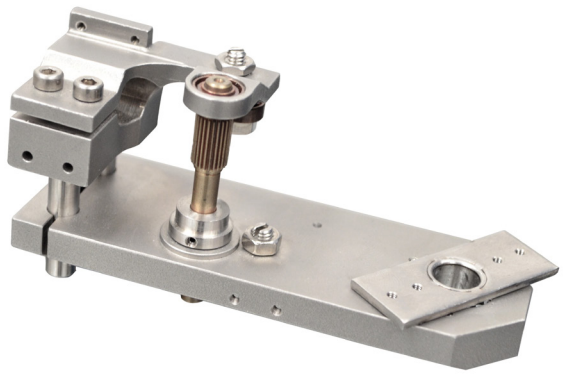
SH2 Sample Holder

The standard SH1 sample mounting module has a relative magnetic permeability of <1.005, making the ideal choice for low energy experimentation.



The SH2 provides one axis of rotation about the centre of the manipulator and the second at 90° known as azimuthal rotation.

Two different offset positions available;

- a) The SH2E50 will provide move the sample away from the centre axis,
- b) The SH2R64 moves the sample position 64mm above the central axis.
- As with all the manipulation range, this module is fully compatible for both the heating and cooling modules making it the perfect multidiscipline two axis sample mounting module.

Note: totally non-magnetic version are available

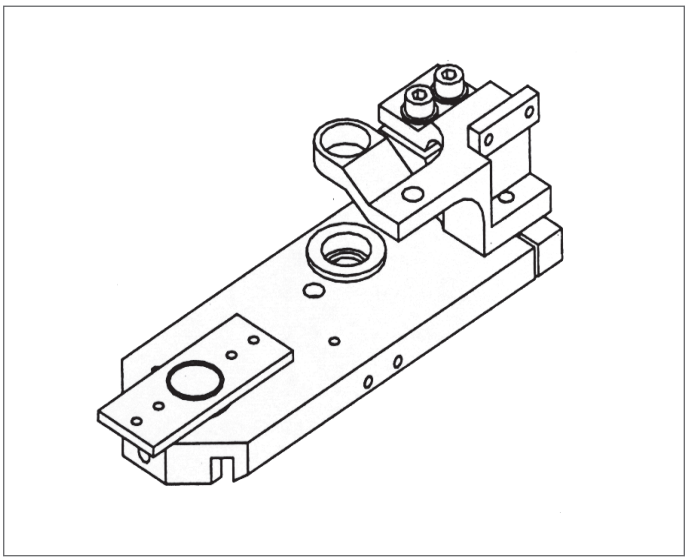
Product Overview

- Relative permeability is <1.005
- Low swept volume
- Samples of varying thickness can be rotated on axis
- Standard Sample axial Offset, 9 to 12mm (without heater)
- Sample axial offset with SH1E50 option 9 to 50mm (without heater)
- Primary (R1) Rotation with no services 360°
- Primary (R1) Rotation With services i.e.heating and cooling ±180°
- Swept Radius from 25mm to 38mm depending on additional modules being selected
- Residual Magnetism 10 milli Gauss
- Azimuthal (R2) rotation ±110°

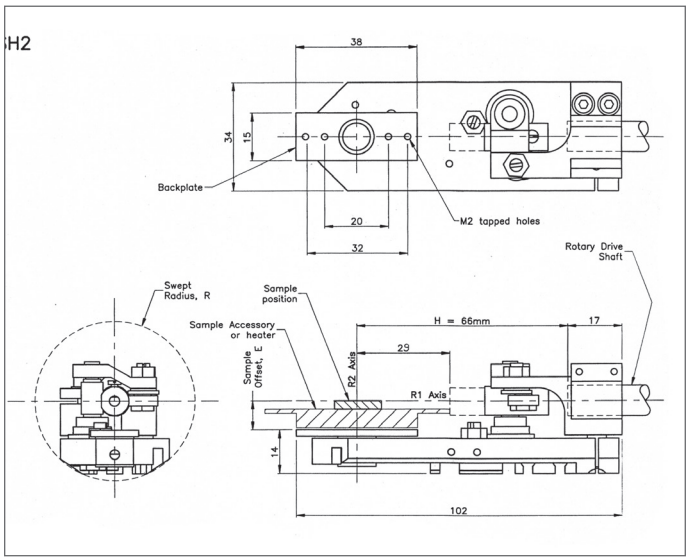
Accepts the following options

- Resistive heater (HST) 950°C option
- EB heater (EBH) 1200°C option
- Cooling (ZLN) -160°C option
- 14mm plain accesory where heating/cooling is not required
- 25mm plain accesory where heating/cooling is not required

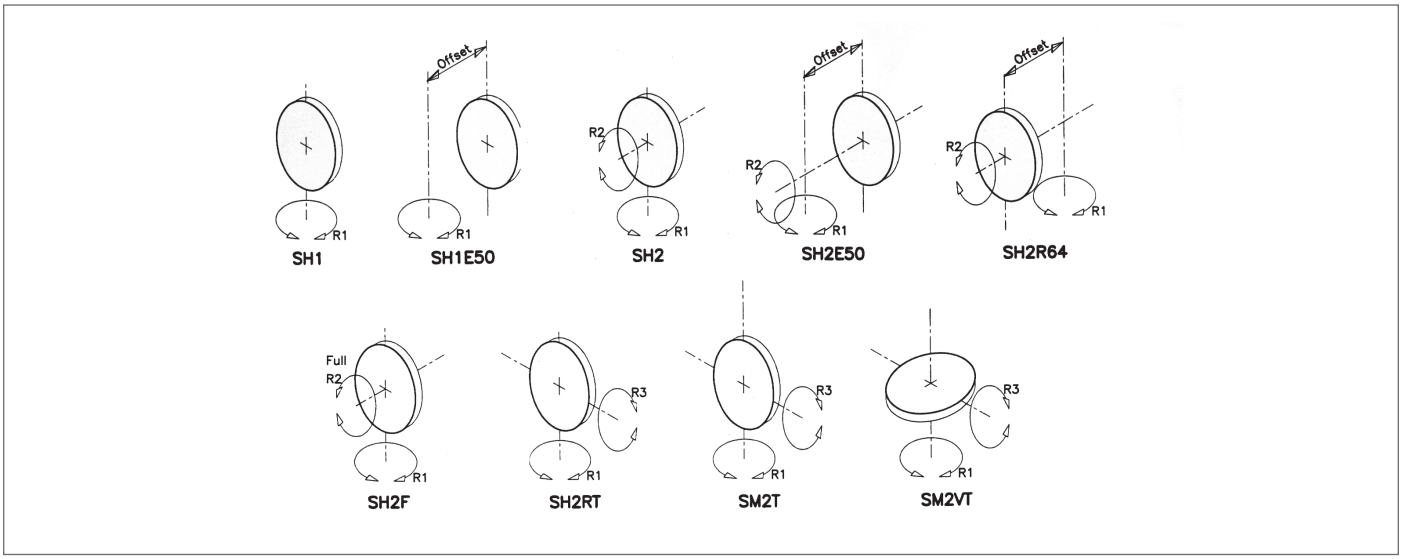
SH2 Sample Holder



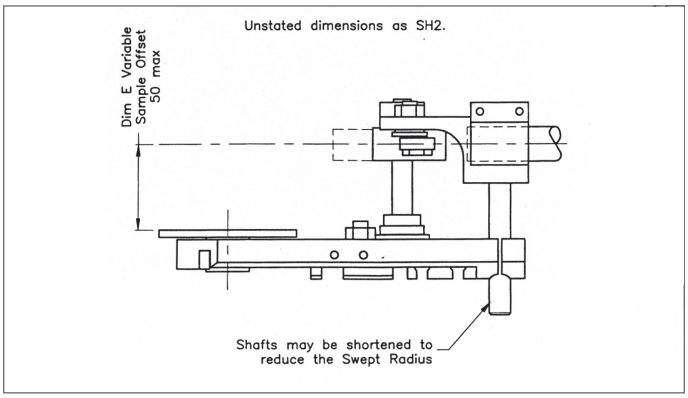
SH2



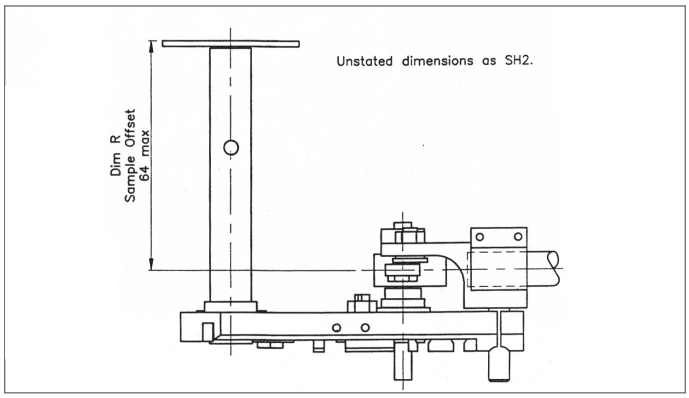
SH2



SH Rotation options



SH2E50



SH2R64

SH2 Sample Holder

Sample Holders - Basic Specifications									
Part code	SH1	SH1E50	SH2	SH2E50	SH2R64	SH2F	SH2RT	SM2T	SM2VT
Rotary Drive Required	RD1	RD1	RD2	RD2	RD2	RD224	RD2	RD2	RD2
Primary (R1) Rotation									
No services	360°	360°	360°	360°	360°	360°	360°	360°	360°
With services	±180°	±180°	±180°	±180°	±180°	±180°	±180°	±180°	±180°
Azimuthal (R2) Rotation									
Preset	±180°	±180°							
Variable			±110°	±110°	±110°	±180°			
Tilt (R3) Rotation							±110°	±10°	±10°
Sample Offset	E	E	E	E	R	E	E	E	E
Bare backplate (mm)	9 to 12	9 to 50	9 to 12	9 to 50	54 to 64	9 to 12	5.5 to 9.5	5.5 to 7.5	5.5 to 7.5
Plain or heater unit (mm)	0 to 3	0 to 41	0 to 3	0 to 41	60 to 66	0 to 3	0 to 2.5	0 to 2.5	0 to 2.5
Swept Radius		From		From					
No services (mm)	25	25 (min)	25	25 (min)	54 to 64	25	31	35	24
With all services (mm)	38	38 (min)	38	38 (min)	54 to 64	38	44	Variable	Variable
Magnetic Permeability	Low	Low	Low	Low	Low	Low	Low	Normal	Normal
'H' dimension (mm)	66	66	66	66	66	103	66	66	66
Temperature Ranges									
Resistive heater (HST)	950°C	950°C	950°C	950°C	950°C	950°C	950°C	950°C	950°C
EB heater (EBH)	1200°C	1200°C	1200°C	1200°C	1200°C	1200°C	1200°C	1200°C	1200°C
Cooling (LN)	-160°C	-160°C	-160°C	-160°C	-140°C	-160°C	-160°C	-160°C	-160°C
Approx. resolution per halfstep of RD motor									
R1 rotation (stepper)	0.01°	0.01°	0.01°	0.01°	0.01°	0.01°	0.01°	0.01°	0.01°
R2 rotation (stepper)	-	-	0.001°	0.001°	0.001°	0.001°	-	-	-
R3 rotation (stepper)	-	-	-	-	-	-	0.001°	0.0001°	0.0001°