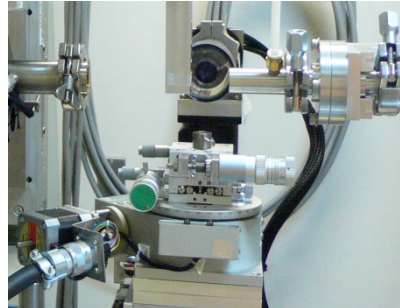


High Precision Rotation Stage <SPU-1A>

This device is primarily used for X-ray CT.

Therefore, we have an eccentricity less than $1 \mu\text{m}$.



Features

◆ Less than $1 \mu\text{m}$ Eccentricity due to special customization

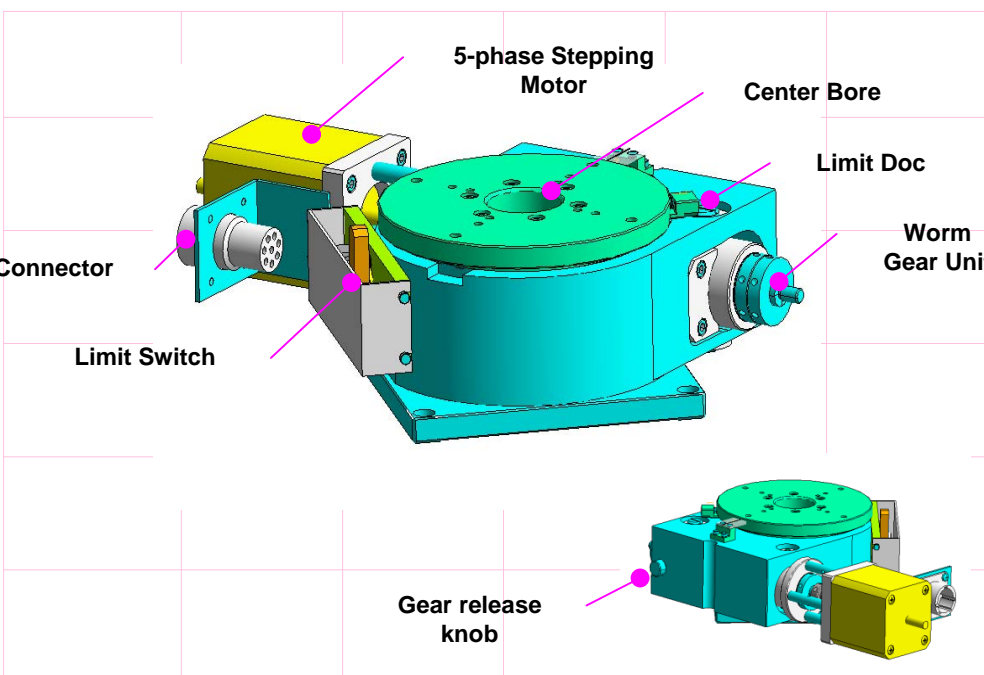
◆ This device must be placed at the horizontal position (the rotational axis should be vertical) because of the sliding guide system.

◆ The load capacity is 3 kg.

◆ Cheaper & more robust than a air-bearing system, but the quality is still guaranteed.

◆ The gear release knob allows free rotation by hand

◆ The big enough center bore is useful for a slip-ring.



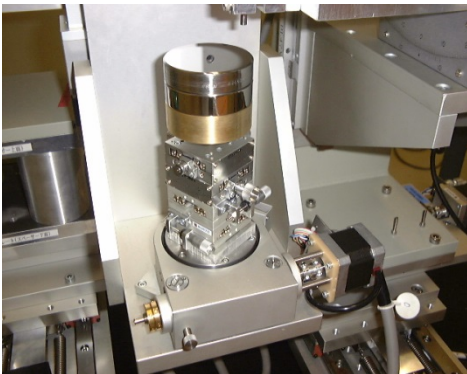
Specifications

Model	SPU-1A
Table Size	$\Phi 98 \text{ mm}$
Center Bore Size	$\Phi 25 \text{ mm}$
Weight	3.0 kg
Maximum Load Capacity	3 kg
Guidance Mechanism	Slide Guide
Resolution (Half-step)	0.002 degree / step
Stroke	360°
Accuracy (Lead Error)	0.01°
Repeatability	0.01°
Backlash	0.005°
Eccentricity	$< 1 \mu\text{m}$



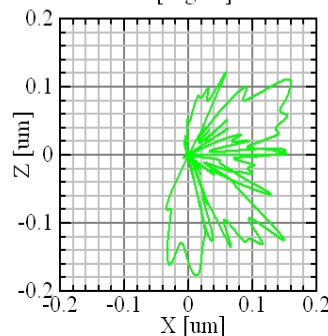
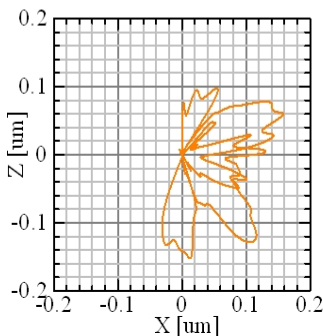
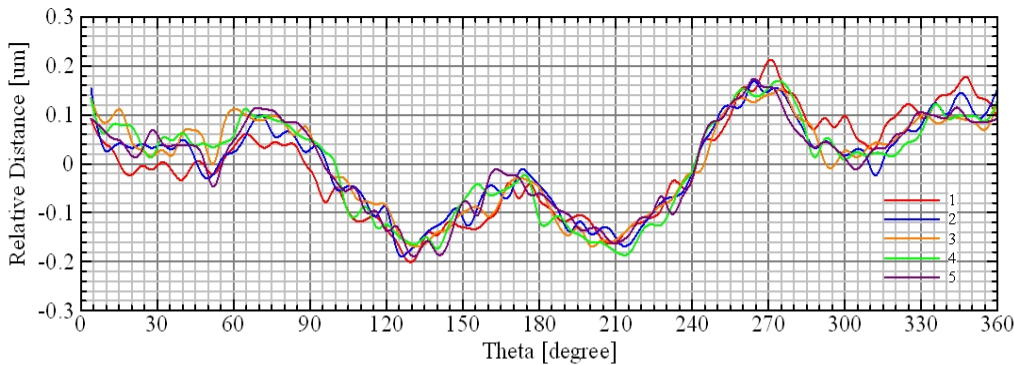
High Precision Rotation Stage <SPU-1A> Continued

The prototype of SPU-1A.
These photos show a measurement and an inspection in SP-8.



Here is a real data for the eccentricity.

22-JAN, 2008



Capacitive Sensor System
 Probe: LION C3-D (061242-01)
 Driver: LION CPL290
 Sensitivity: Low

Control System
 Controller: KOHZU SC-200T (0702300-006)
 AD Converter: KOHZU DL-100 (0502092)

Scan Speed: 4.0 [degree/sec]
 Scale: 10V = 250um

KOHZU Precision Co., Ltd.

Features

- ◆ Less than 1um Eccentricity due to special customization
- ◆ This device must be placed at the horizontal position (the rotational axis should be vertical) because of the sliding guide system.
- ◆ The load capacity is 3 kg.

◆Cheaper & more robust than a air-bearing system, but the quality is still guaranteed.

◆The gear release knob allows free rotation by hand

◆ The big enough center bore is useful for a slip-ring.