

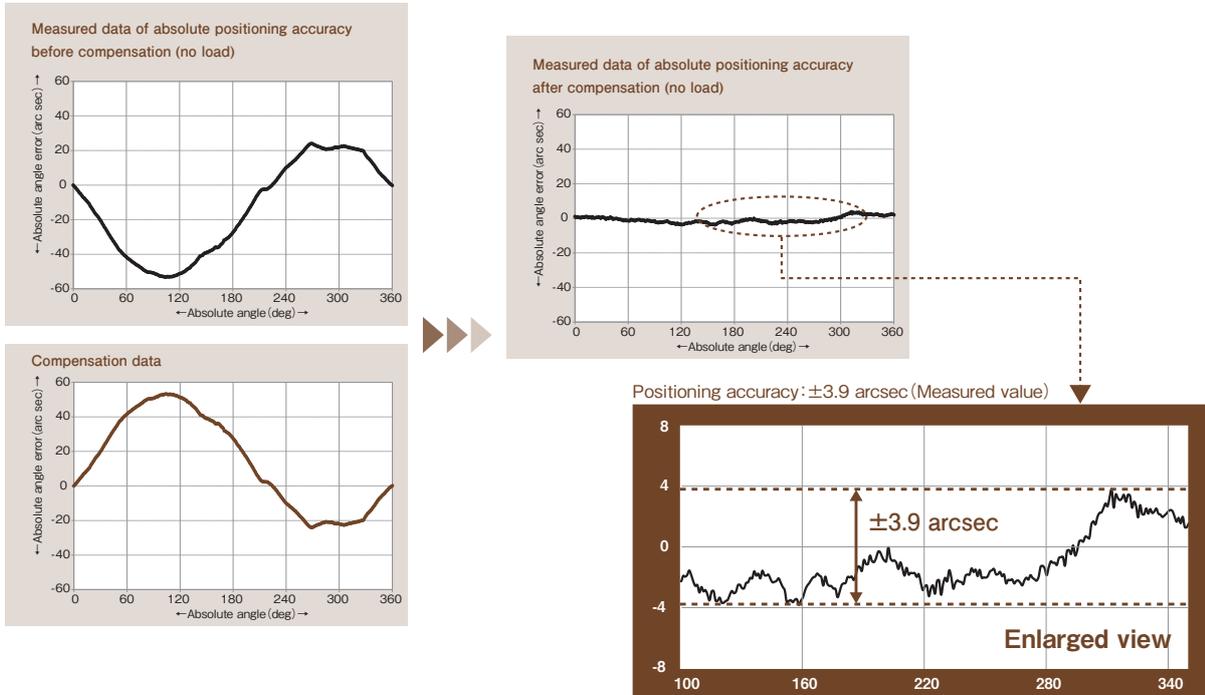
τ DISC Absolute position compensation function option

This is an option that guarantees the absolute Positioning accuracy of τ DISC.

Accuracy guaranteed by the Absolute position compensation function option (no load)

τ DISC Series	Guaranteed absolute Positioning accuracy
ND-s/ND-s HS/HD-s	±15 arcsec
DD-s	±10 arcsec

Examples of Positioning accuracy measurements before and after compensation



Absolute position compensation function option system table

τ DISC		Ordered product model	
		Compensation data to be measured by us and to be transferred by the user *2 *3	
Motor type	Encoder type	τ DISC	Servo driver (VPH Series *4)
ND-s	Absolute/ Incremental *1	ND-s SeriesModel+ NMR-X00 (Option)	NCR-H□□□□□A-A-□ 0 □
ND-s HS HD-s	Incremental	ND-s HS/HD-s SeriesModel+ NMR-X00 (Option)	NCR-H□□□□□A-A-□ 0 □
DD-s	Absolute/ Incremental *1	DD□□-□□□□□□□□□□- 0	NCR-H□□□□□A-A-□ 0 □

*1 The incremental encoder type of the ND-s and DD-s Series is available on request.

*2 When the encoder type is absolute, it is not necessary to transfer the compensation data to the servo driver (the same also applies when the servo driver is replaced).

*3 We can ship the VPH Series with compensation data built in it. In that case, the ordered product model shown in red in the system table is different. Contact our sales staff.

*4 To enable the absolute position compensation function, you need to change the setting described on p.104 of the VPH series to "Correction effective" (which is set to "Ineffective" by default).

■ τ DISC High accuracy type option for table surface rotation accuracy

This is an option that guarantees the rotation accuracy (radial run out and axial run out) of the τ DISC table surface as shown below.

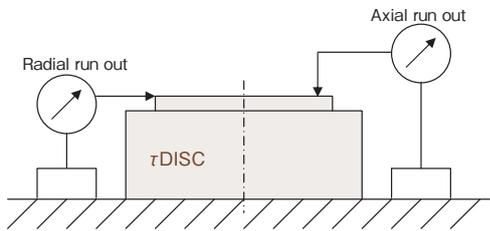
◎ Radial run out and axial run out accuracy guaranteed by the high accuracy type option

The accuracy guaranteed for the standard specification differs depending on the motor type. For details, refer to the individual specifications of the relevant Series.

τ DISC Series		Guaranteed radial run out and axial run out accuracy
ND-s		10 μm
ND-s HS		10 μm
DD-s	DD160 / 250 / 400 Type	5 μm / 3 μm
	DD630 Type	10 μm / 5 μm
HD-s		10 μm

* Note that the spigot joint of the table surface is shorter than the that of the standard specification.

◎ Table surface rotation accuracy measurement method



■ τ DISC Parallelization processing specification option

This is an option that guarantees that the parallelism accuracy of the τ DISC DD-s Series (excluding the DD630 Type) is 20 μm. The option is added to the high accuracy type option for table surface rotation accuracy.

◎ Parallelism measurement method

For the standard specification, measure the height from the motor base or surface plate to the rotary table at 4 points (0, 90, 180, and 270 degrees) by using a height gauge, with the output axis rotary table stopped at the origin position. The parallelism is the difference between the maximum and minimum values.

For the parallelization processing specification, use a 3D measuring instrument for measurement.

