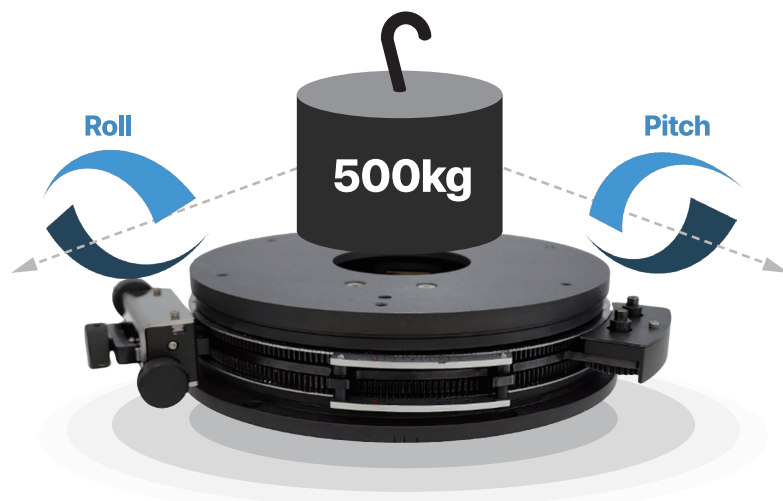
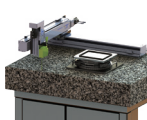


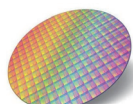
# Innovative Parallel Setting Solution



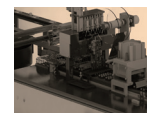
## Applications



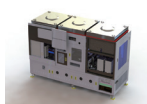
Dispensing Process  
Display Manufacturing  
**Adv. Parallel Precision**



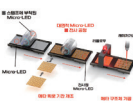
Bonding Process  
Semiconductor Manufacturing  
**Adv. High Load, Parallel Precision**



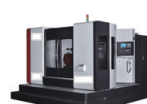
FA  
Punching Press Sealin  
**Adv. High Load, Parallel Precision**



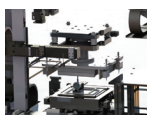
Thermal Conductivity Process  
Semiconductor,  
Display Manufacturing  
**Adv. Parallel Precision**



Micro LED Manufacturing Process  
Display Manufacturing  
**Adv. High Load, Parallel Precision**



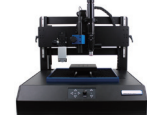
Precision Machining/  
Manufacturing  
**Adv. High Load, Parallel Precision**



Bonding Process  
Semiconductor, Display  
Manufacturing  
**Adv. Parallel Precision**



Industrial Robots  
**Adv. Parallel Precision**



Precision Measuring  
Instrument  
**Adv. Parallel Precision**

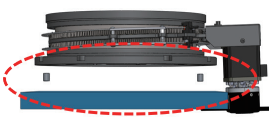
## Product Specifications

	BA275SC05	BA213SC05	BN275SC05	BN213SC05	BS212SC05	BS131SC05
Size	270Ø / H70mm	210Ø / H52mm	270Ø / H70mm	210Ø / H52mm	210Ø / H45mm	130Ø / H32mm
Stroke	±1.0°	±1.0°	±1.0°	±1.0°	±1.0°	±1.0°
Accuracy	8μrad (=0.001)°	8μrad (=0.001)°	8μrad (=0.001)°	8μrad (=0.001)°	43μrad(=0.005)°	43μrad (=0.005)°
Repeatability	less than ±2μm	less than ±2μm	less than ±2μm	less than ±2μm	less than ±2μm	less than ±2μm
Load Capacity *max	500kg	300kg	500kg	300kg	200kg	100kg
Weight	12kg	6kg	12kg	6kg	3.5kg	1.8kg
Material	Steel	Steel	Steel	Steel	Steel	Steel
Motor Type	Servo Motor Step Motor	Servo Motor Step Motor				
Encoder Resolution	PLC/PC	PLC/PC				
Stroke *absolute	31,000ppr	31,000ppr				

\* Custom specifications available upon request.

## Installation Method

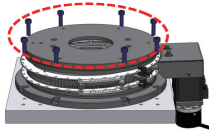
1



**Align the stage's bottom positioning pin grooves with the installation surface for secure placement**

Ensure precise center alignment along the X and Y axes.

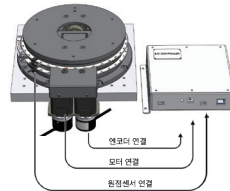
2



**Fix the stage to the installation surface**

Tighten the bolts in a '+' pattern, ensuring uniform pressure is applied.

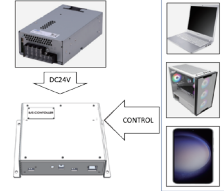
3



**Connect the stage to the controller.**

Encoder's cable → Controller's port  
Both ends of the motor cable → Motor of the stage and the controller's port  
Origin sensor's cable → Controller's port

4



**Connect to the main controller and power supply**

Compatible Devices: PC, Tablet, Mobile Phone  
Communication Types: RS232, RS485, WIFI  
Operating Voltage: DC24V

## How to Use

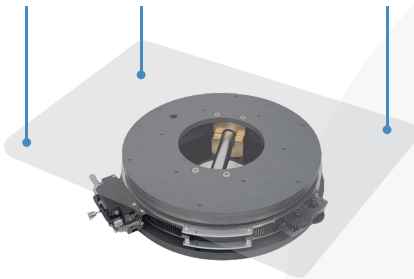
## User-Friendly, Fast and Highly Precise

Achieve 5μm precision in under 1 minute

P1

P2

P3



1

### Measurement

Measure the heights(Z) of three points, P1, P2, and P3, on the reference surface to check the slope.

2

### Calculate the precise position value

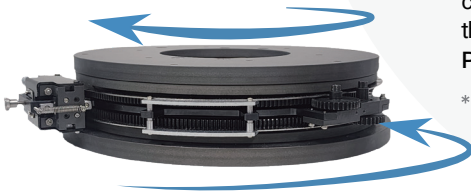
Input the measured height values(Z) of the three points into the app or PC program to calculate the position to move.

3

### Adjust the Wheel Position

Move the two wheels to the calculated positions. Measure the heights(Z) of the three points, P1, P2, P3, again to verify the results.

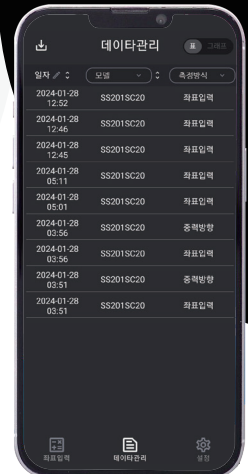
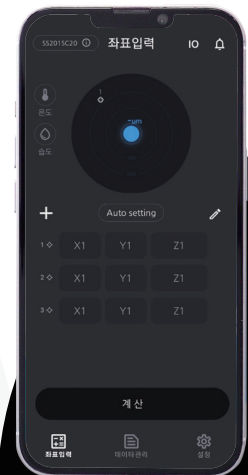
\*manual/automatic



4

### History Management

History can be managed by period or date.



## Patent

Patent Registration	11.02.18	Casting Roll Alignment Adjustment Device and Its Adjustment Method	10-1071624
	14.03.19	Automated Dimension Measuring Device and Method for Molded Products	10-1378587
	22.07.13	Balance Stage	10-2422225
	22.10.11	Automatic Adjustment Balance Stage for Enhanced Stability	10-2454629
	22.11.02	Manual Adjustment Balance Stage	10-2463976
	23.07.14	Balance Stage	10-2557173
	23.10.23	Rotational Support Structure of the Balance Stage	10-259468

International Application	23.08.10	BALANCE STAGE(Taiwan)	BPP2023-0219TW
	24.05.13	BALANCE STAGE(USA)	18709018
	24.05.28	BALANCE STAGE(Japan)	100121728
	24.07.31	BALANCE STAGE(Germany)	112022005748.3
	24.08.02	BALANCE STAGE(China)	202280084332.5

Copyright	Balance Stage Setting Value Calculation Program (3P2W)	C-2023-026700
	Surface-Support Balance Stage Dedicated Alignment Application	C-2024-015426
	PC Program for Manual/Automatic Control of Balance Stage	C-2024-016414

Trademark	BALANCE STAGE(KOR)	40-2133759	Web. bluerobot.co.kr
	BALANCE STAGE(ENG)	40-2149717	Tel. 044-905-2327