

8.4 Parameter of the Robot

1st parameter	2nd parameter	3rd parameter
(1) RUN MODE		Random Test
(2) WF MODE		Vac sensor No sensor
(3) POSITIONS	Home	R 1 T Z
	Max	R 1 T Z
(4) CASSETTE	Cass 1	Count Pitch R 1 T Z Stroke Offset
	Cass 2	Same as Cass1
	Cass 24	Same as Cass1
(5) SCROLL CASSETTE	Cass 1	Pos 1 Pos 2 Pos 3 Pos 4
	Cass 2	Same as Cass1
	Cass 24	Same as Cass1
(6) STAGE	Stage1	R 1 T Z Stroke1 Stroke2 Offset
	Stage2	Same as Stage1
	Stage8	Same as Stage1
(7) SCROLL STAGE	Stage 1	Pos 1 Pos 2 Pos 3 Pos 4 Pos 5 Pos 6
	Stage 2	Same as Stage1
	Stage 8	Same as Stage1
(8) SPEED	Cass, T 1	R 1 Min R 1 Max R 1 Acc Z Min Z Max Z Acc
	Cass, T 2	Same as Cass, T 1
	Cass, T 3	Same as Cass, T 1
	Cass, Up	Same as Cass, T 1
	Stage, T 1	R 1 Min R 1 Max R 1 Acc Z Min Z Max Z Acc
	Stage, T 2	Same as Stage, T 1
	Stage, T 3	Same as Stage, T 1
	Stage, Up	Same as Stage, T 1
	Theta, Z, T 1	T Min T Max T Acc Z Min Z Max Z Acc
	Theta, Z, T 2	Same as Theta, Z, T 1
	Theta, Z, T 3	Same as Theta, Z, T 1
	Theta, Z, Up	Same as Theta, Z, T 1

The first parameter

The first parameter consists of (1)-(9) described below. The contents of the first parameter can be switched with [PAR -] / [PAR +] key on the teach pendant.

(1) RUN MODE

Shows the robot operation mode.

(2) WF SENSOR

Select "Vac sensor".

(3) POSITIONS

Shows the original point of the robot arm.

<Example>

Given condition: "Home" is set: R=0, T=700, Z=0.

The robot arm moves to the position R=0, T=700, Z=0 when initial reset is performed.

"Max": Maximum range of the robot arm.

In the case R=8,500 is input, the robot arm moves between 0-8,500 in R-axis to "Max".

(4) CASSETTE

The position data to "GET" / "PUT" the wafer from / to the cassette is stored.

(5) SCROLL CASSETTE

Simulates the robot arm operation to "GET" / "PUT" the wafer from / to the cassette using the data of "CASSETTE".

(6) STAGE

The position data to "GET" / "PUT" the wafer from / to the aligner and "GET" / "PUT" the wafer from / to the chuck table are stored.

(7) SCROLL STAGE

Simulates the robot arm operation to "GET" / "PUT" the wafer from / to the aligner and "PUT" the wafer to the chuck table using the data of "STAGE".

(8) SPEED

The data for the robot arm speed during chucking the wafer is stored.

8.4 Parameter of the Robot (Continued)

The second parameter

Refer to the data sheet delivered with the machine for further information.

Parameter	Wafer size	Cassette table	Pcs*	Mode
CASS 1	4-inch	Right	25	T/1
CASS 2	5-inch			
CASS 3	6-inch			
CASS 4	8-inch			
CASS 5	4-inch	Left		
CASS 6	5-inch			
CASS 7	6-inch			
CASS 8	8-inch			
CASS 9	4-inch	Right	12	T/2
CASS 10	5-inch			
CASS 11	6-inch			
CASS 12	8-inch			
CASS 13	4-inch	Left		
CASS 14	5-inch			
CASS 15	6-inch			
CASS 16	8-inch			
CASS 17	4-inch	Right	12	T/3
CASS 18	5-inch			
CASS 19	6-inch			
CASS 20	8-inch			
CASS 21	4-inch	Left		
CASS 22	5-inch			
CASS 23	6-inch			
CASS 24	8-inch			

(*) We prepare the teaching data according to your requirements in the number of slots.

STAGE #	STAGE POSITION
STAGE 1	Aligner GET / PUT
STAGE 2	Chuck table PUT
STAGE 3	CASSETTE WAITING POINT
STAGE 4	UV irradiation (option)
STAGE 5	ALIGNER WAITING POINT
STAGE 6	CHUCK TABLE GET
STAGE 7	CHUCK TABLE WAITING POSITION (DOWN)
STAGE 8	CHUCK TABLE WAITING POSITION (UP)
STAGE 9	PRESS DOWN PLATE
STAGE 10	ROTATING POINT (LEFT)
STAGE 11	UV TABLE GET DOWN POSITION (after rotating)

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	Theta, Z, T 1	T Min T Max T Acc Z Min Z Max Z Acc
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The third parameter

(1) Random: Shows the auto operation mode.
Test: Shows the test mode. (Nonuse)

(2) Vac sensor: Use chuck sensor of the robot arm.
No sensor: (Nonuse)

(3), (4), (5), (6), (7)

Count: The number of processed wafers (number of slots) in the 1 cassette.

Pitch: The difference in height between two slots.

R 1: Robot arm extension and contraction. (R-axis)

T: Robot arm rotation. (Theta-axis)

Z: The height of the robot arm to "GET" / "PUT" the wafer. (Z-axis)

For Cass.:The height is for 1st slot.

Stroke, Stroke 1:

The difference in Z-axis height between "GET" the wafer and vacuum the wafers with robot arm.

Stroke 2: Nonuse.

Offset: The difference in Z-axis height between vacuuming the wafer with the robot arm and getting the wafer with robot arm.

Pos 1-Pos 5: Simulate each operation separately.

(8)

R 1 Min: Low speed of the robot arm extension and contraction.

R 1 Max: High speed of the robot arm extension and contraction.

R 1 Acc: Acceleration of the robot arm extension and contraction.

T Min: Low speed of the robot rotation.

T Max: High speed of the robot rotation.

T Acc: Acceleration of the robot rotation.

Z Min: Low speed of the robot arm when the robot arm get a wafer.

Z Max: High speed of the robot arm when the robot arm get a wafer.

Z Acc: Acceleration of the robot arm when the robot arm get a wafer.