8.8 Create new data and changes of the robot teaching

<Input items of the robot teaching data>

- Count: Shows the total number of the slots of the cassette.
- Pitch: Shows the difference in height between two slots.
- R 1: Shows the value in R-axis in the position where the robot arm gets a wafer from the cassette.
- T: Shows the robot arm rotation to get a wafer from the cassette. (Theta-axis)
- Z: Shows the value in Z-axis in the position where the robot arm turns on the vacuum for the wafer.
- Stroke: Shows the difference in Z-axis between the inserting height and getting height.
- Offset: Shows the difference in Z-axis between vacuuming height and getting height.

Refer to the data sheet for further information.

8.8 Create new data and changes of the robot teaching (Continued)

<To create new robot teaching data >

Perform 8.2 Preparation for robot teaching before starting the procedure shown below.
Do not change T(Theta-axis) and R(R-axis) data for correct operation.

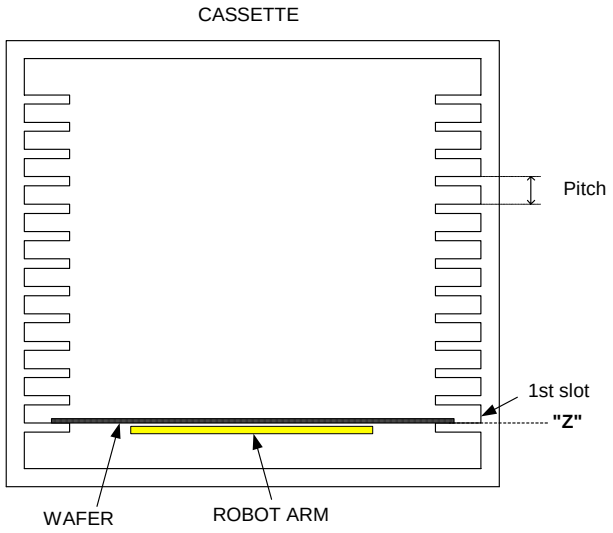
(1) Input the value of "Count"
(2) Input the value of "Pitch". (1 pulse = 0.0025mm)
<Example> 200mm cassette (SEMI standard): Pitch = 6.35 / 0.0025 = 2540

Each cassette pitch is defined as below table in SEMI standard.

Cassette	Pitch	Pulse of the pitch
4"	6.35 +/- 0.38mm	3,175 +/-190
5"	4.76 +/- 0.25mm	1,904 +/- 100
6"	4.76 +/- 0.25mm	1,904 +/- 100

(3) Input fixed data of T (Theta-axis) and R (R-axis).
(4) Perform robot teaching for Z-axis.
1. Place the wafer into the lowest slot (1st slot) of the cassette. Set the cassette on the cassette table.
2. Insert the robot arm beneath the wafer in the lowest slot.
3. Press [VAC ON] key on the teach pendant.
4. Press [SET] key on MAIN SCREEN to indicate "INDIVIDUAL OPERATION PANEL".
5. Enter "746", and press [ON] key to turn on the vacuum of the robot arm.
6. Move up the robot arm gradually with checking the value shown by the pressure switch.
7. Input the value of Stroke and Offset as below.
- For 4", 5", 6": Stroke = 80, Offset = 30
- For 8": Stroke = 140, Offset = 40
8. Press [SHIFT] + [TEMP] key to save the data.

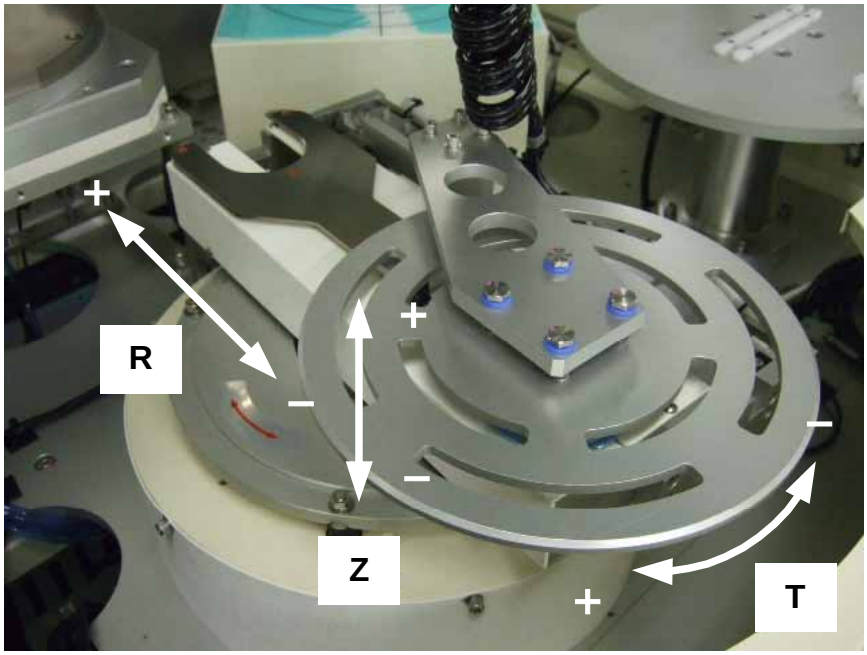
Do fine adjustment the Stroke and Offset using "GET" and "PUT".



8.8 Create new data and changes of the robot teaching (Continued)

<To change robot teaching data>

Perform 8.2 Preparation for robot teaching before starting the procedure shown below.
Do not change T(Theta-axis) and R(R-axis) data for correct operation.



To change the Z-axis value of the robot teaching data, calculate the appropriate value with the formula shown below. Input the value and press [SHIFT] + [TEMP] keys to save the data.
* Refer to the data sheet for each axis pulse value.

(Moving distance mm / 1 pulse) + Current position value

<Example> Move the robot 1.00mm to "+" direction in Z-axis.

Z-axis: 1 pulse = 0.025mm
Current value of "Z" = 800

(1.00 mm / 0.025 mm) + 800 = 840

Input "Z" = "840" to the teach pendant.
To save the value, press [SHIFT] key with [TEMP] key.