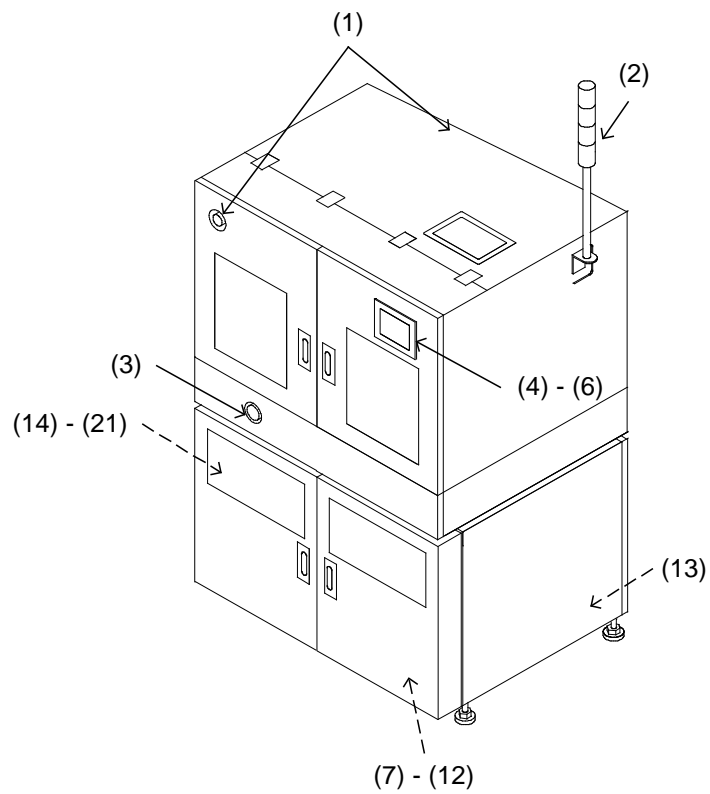
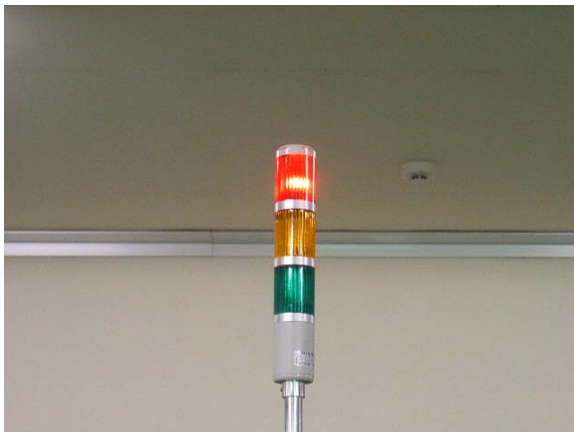


3. Switches and indicators



(1) EMO switch:
Shuts off the power promptly in an emergency.



(2) Signal tower:
Indicates the machine status using three-color light.

3. Switches and indicators (Continued)



- (3) Main switch:
Supplies power to the machine.



- (4) Operation panel:
Starts / stops the auto operation and changes the settings with touch panel operation.

- (5) Q. STOP switch:
Stops the machine promptly.

- (6) PANEL RESET switch:
Pressing the key recovers the communication line when the communication line is interrupted.
*This function is not equipped with this machine.



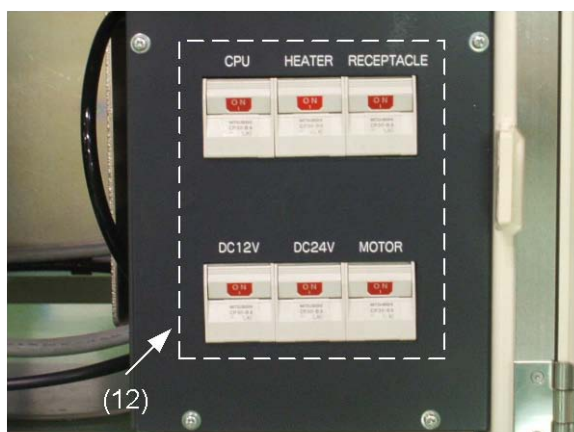
- (7) POWER lamp:
Lights the lamp during supplying power to the control box.

- (8) MAIN POWER switch:
Turn on/off the power.

- (9) POWER On button:
Provides power to the each part from the control box.

- (10) CP1:
It is the circuit-protector for POWER lamp.

- (11) CP2:
It is the circuit-protector for power provided each part.



- (12) Circuit-protector:
Shuts off the power for each part when over current is happened.

3. Switches and indicators (Continued)



(13) MAIN REGULATOR:

Control the pressure of air supplied from the factory. To adjust the pressure, pull up the dial and turn it.

Standard setting value:0.5Mpa



(14) UV power supply:

Supplies power to the UV irradiation unit.

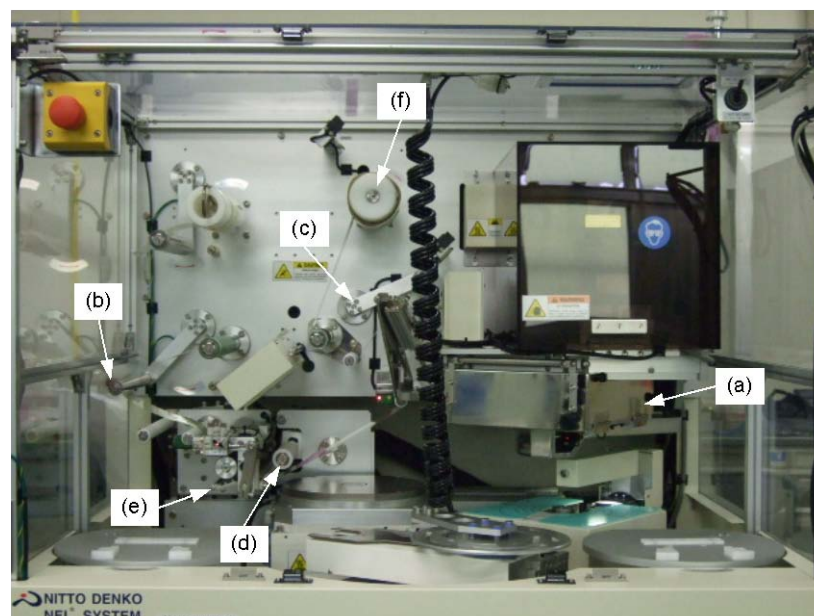
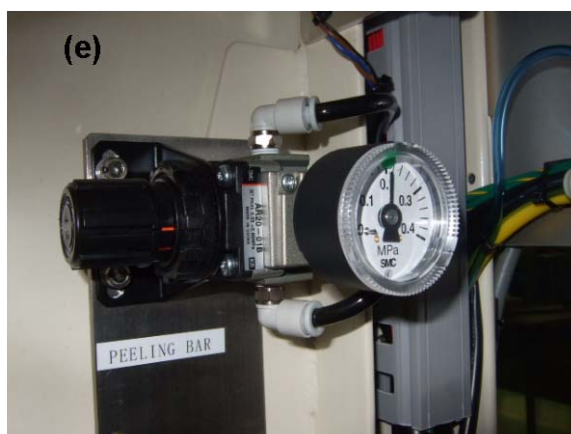
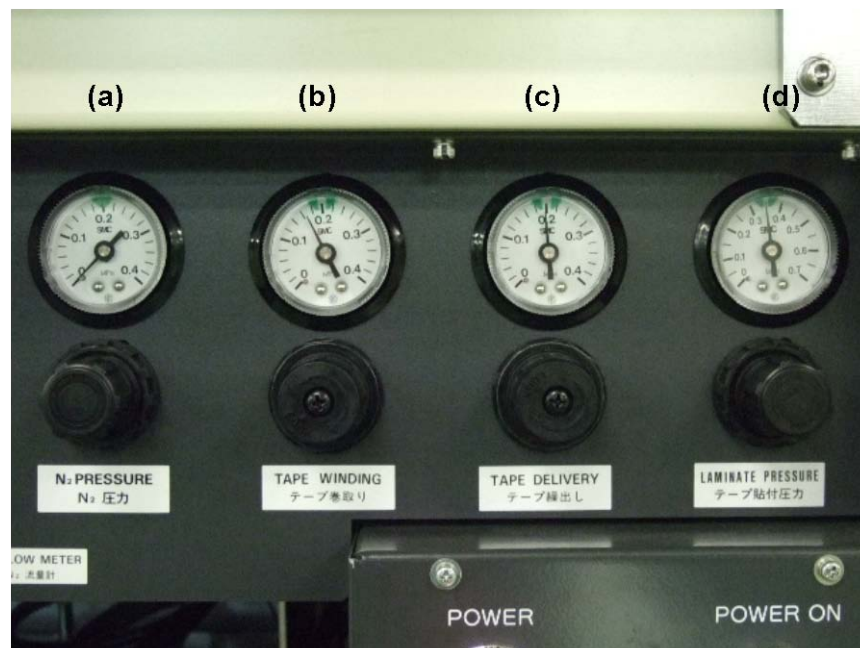


(15) N₂ flow meter:

Adjusts the N₂ flow volume. O₂ is replaced to N₂ to reduce the concentration of O₂ in UV chamber when UV irradiates.

3. Switches and indicators (Continued)

(16) Pressure regulator: The pressure regulators (a)-(f) controls the pressure for each part.



3. Switches and indicators (Continued)

(a) N₂ Pressure

Controls the pressure of N₂.

Standard setting value: 0.2Mpa

(b) TAPE WINDING

Controls the pressure for the swing roller (winding).

If the pressure is excessively high, the peeling tape would be cut.

If the pressure is excessively low, the peeling tape would wind around the peeling roller (lower).

Adjust the pressure so that the peeling tape may not wind around the peeling roller.

Standard setting value: 0. 18Mpa

(c) TAPE DELIVERY

Controls the pressure for the swing roller (delivery).

If the pressure is excessively high, the peeling tape sags, and it may cause failure for tape applying.

If the pressure is excessively low, the peeling tape wind around the static eliminator or rollers.

Also, sagged peeling tape may contact the chuck table when the applying / peeling unit moves to the original point.

Standard setting value: 0.12Mpa

(d) LAMINATE PRESSURE

Controls the pressure of the applying roller. And the pressure would have an adhesive effect on the wafer such as warpage.

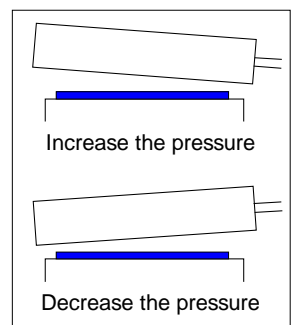
If the pressure is excessively high, the wafer may be broken.

If the pressure is excessively low, it may cause failure for tape peeling.

Adjusting the regulator pressure changes the parallelism of the roller for the table as shown right figure.

It requires degree of the parallelization with the maintenance engineers.

Standard setting value: 0.35Mpa



(e) PEELING BAR

Controls the pressure of the peeling bar to press the wafer surface. (T3 mode only)

If the pressure is excessively high, the wafer may have stress.

If the pressure is excessively low, the wafer vacuumed to the chuck table may be displaced.

Standard setting value: 0. 2Mpa

(f) TAPE SET

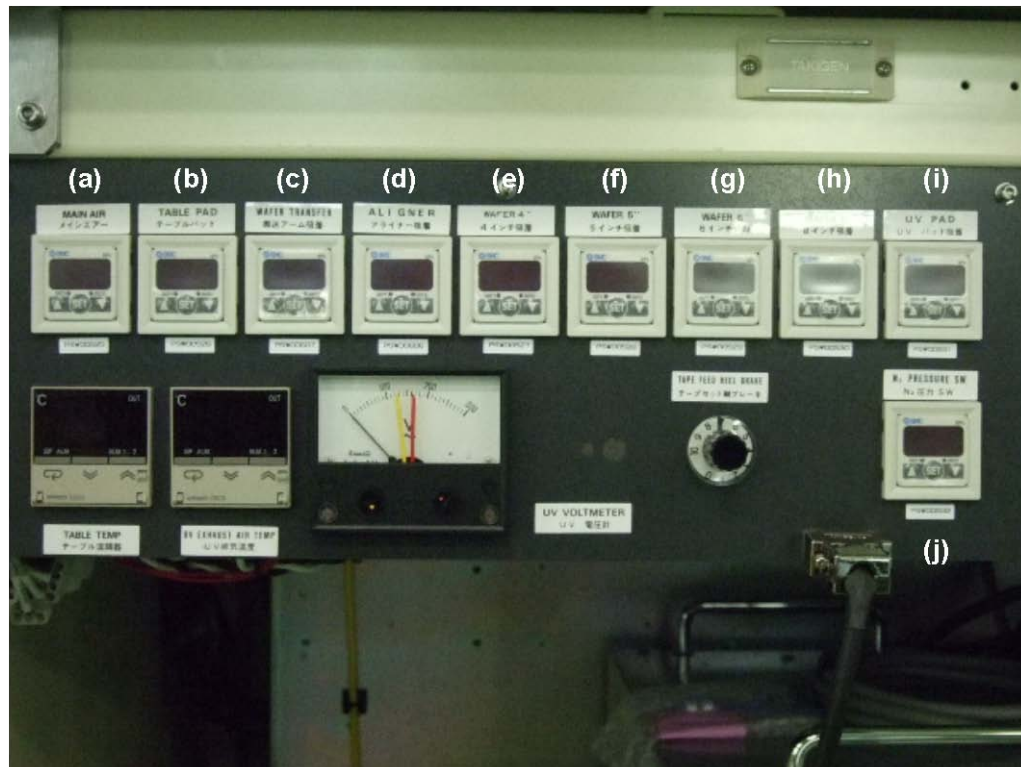
Controls the pressure for tape delivery shaft.

Standard setting value: 0.15Mpa

* The numerical values shown above may different depending the machine conditions.

3. Switches and indicators (Continued)

(17) Pressure switch:



- | | |
|---------------------------------|---|
| (a) MAIN AIR: | Indicates the pressure supplied from the main regulator. |
| (b) TABLE PAD: | Indicates the wafer vacuum pressure with the table pad. |
| (c) WAFER TRANSFER: | Indicates the wafer vacuum pressure with the robot arm. |
| (d) ALIGNER: | Indicates the wafer vacuum pressure with the aligner pad. |
| (e) WAFER 4": | Indicates the vacuum pressure for 4" wafer. |
| (f) WAFER 5": | Indicates the vacuum pressure for 5" wafer. |
| (g) WAFER 6": | Indicates the vacuum pressure for 6" wafer. |
| (h) WAFER 8": | Indicates the vacuum pressure for 8" wafer. |
| (i) UVPAD: | Indicates the UV pad vacuum pressure. |
| (j) N ₂ PRESSURE SW: | Indicates the N ₂ pressure supplied to the UV chamber. |

The functions of the pressure switch are as below.

- Indicates actual pressure.
- Checks whether the vacuum works correctly.
- Checks whether the vacuum is released correctly.

<Example>

	Robot	Aligner	Table pad	Vacuumping for each size	Main	N ₂	UV pad
P ₁	- 47kPa	- 47kPa	- 80kPa	- 67kPa	0.39Mpa	0.15Mpa	80kPa
P ₂	- 40kPa	- 40kPa	- 70kPa	- 60kPa	0.34Mpa	0.09Mpa	70kPa
P ₃ =0	0	0	0	0	0	0	0
P ₄ =0	0	0	0	0	0	0	0

3. Switches and indicators (Continued)

P₁: The pressure reaches -47kPa is normal status during vacuuming a wafer.
An error occurs if it does not reach -47kPa.

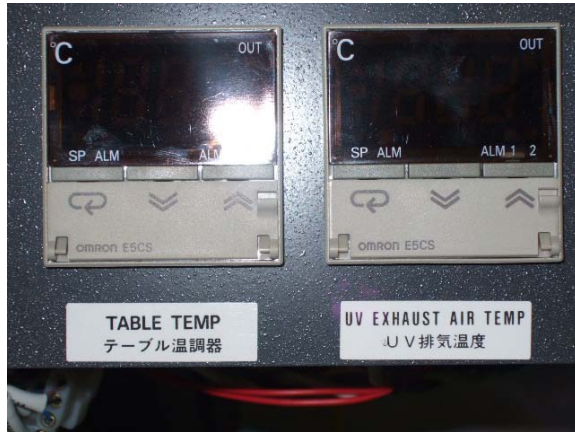
P₂: After the wafer is released, the pressure exceeded higher than -47kPa is normal state.
An error occurs if the pressure is -47kPa or less.

Notice

- P₃ and P₄ are unused.

- P₁ and P₂ values can be changed however guaranteed performances are the value shown above.

3. Switches and indicators (Continued)



(18) TABLE TEMP:

Indicates the chuck table current temperature. If the current temperature is out of the setting range, informs to the operator with alarm.

Standard setting value: 45 +/- 10 degrees C

(19) UVEXHAUST AIR TEMP:

Indicates the temperature of the exhaust air from UV chamber. If the current temperature is out of the setting range, informs to the operator with alarm.

Standard setting value: 50 +/- 10 degrees C



(20) UV VOLT METER:

Indicates the UV lamp voltage.

Low: 110V

High: 150V



(21) TAPE FEED REEL BRAKE:

Controls the braking pressure of the powder brake for tape delivery shaft.

Standard setting value: 7