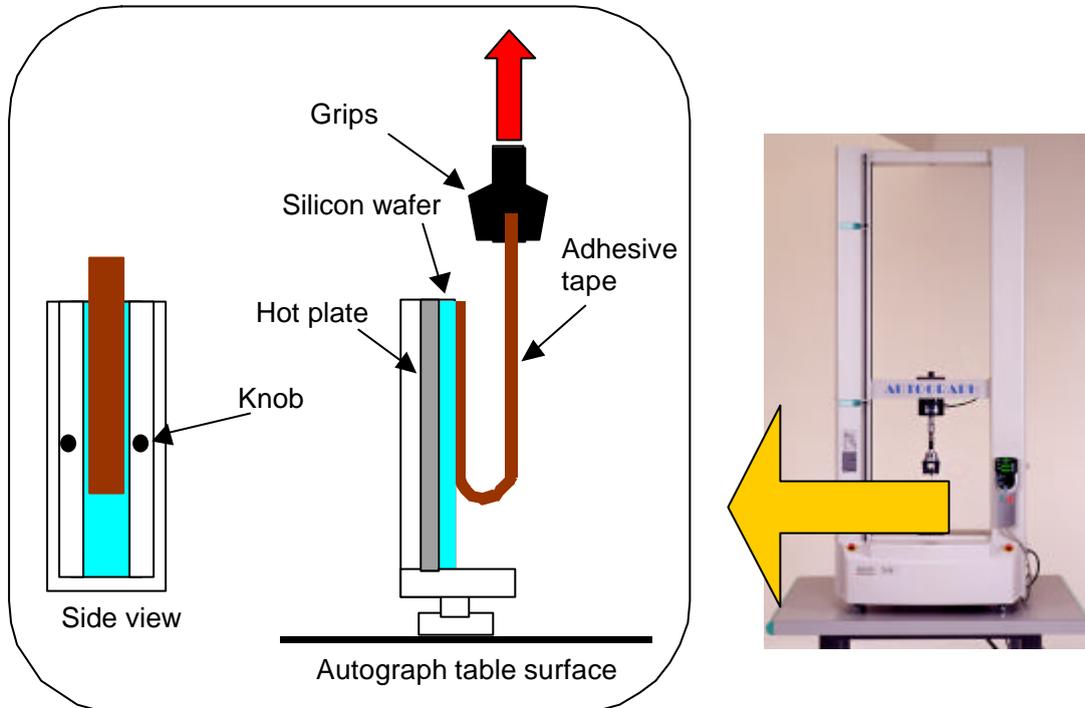


Peeling Tests on Heated Adhesive Tape



In the semiconductor industry, with the increase in the demand, improvements in production efficiency and the quality of products are becoming more and more important. To produce small semiconductor chips, which are the major products in the semiconductor industry, multiple copies are created on a silicon wafer and the wafer is finally cut into individual chips. Recently, to create thinner chips, various types of tape are used at various stages of production to protect wafers and chips.

These tapes are peeled off the wafers and chips in production processes. The strength properties of these tapes are evaluated based on JIS Z 0237 “Adhesive Tape and Adhesive Sheet Testing Methods”.

This testing system peels adhesive tapes from a hotplate while applying heat, reproducing the conditions in production processes. The TRAPEZIUM2 software is used for testing control and data processing.

>> Features

1. Performs peeling tests while applying a **high temperature** to the adhesive tape.
2. The tensile strength and elongation in accordance with **JIS Z 0237** can be obtained using **TRAPEZIUM2**.
3. The **hotplate temperature signals** can be **loaded together with test force data**, allowing unified control of environmental conditions.
4. **Easy attachment and removal** of the specimen by simply turning two knobs.
5. The insulating board **prevents heat escaping** from the specimen.

>> Applicable Specimens

Adhesive tape and sheet

>> Specifications

Applicable machines	AGS-J and AG-IS. EZGraph and EZTest can be also used when the tensile stroke is small.
Hotplate	Maximum temp. 100°C with heating time 5 min or less. PID control for accuracy within $\pm 5^{\circ}\text{C}$.
Control	Test speeds are 0.5 to 500 mm/min for AGS-J and EZTest, 0.0005 to 1000 mm/min for AG-IS and EZGraph. Testing can be terminated when complete tape removal is detected or when a specified displacement is reached.
Software	Data processing software TRAPEZIUM2 (single) is used for setting control conditions, as well as determining tensile strength and elongation. During testing, graphs can be displayed with freely selected parameters such as test force, stroke and temperature.

* The software and test machines are standard products.

>> Grips

The upper part of the specimen is held by grips. Grips available include pneumatic flat grips and various other types to meet test requirements.

Screw type flat grips	Pneumatic flat grips
50N, 1kN, 5kN	20kN, 50kN, 100kN, 250kN
For simple tests with low capacities	Effective for repeated testing
	

- System for 90-degree peeling tests is also available. Please inquire for details.