

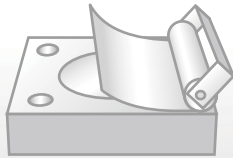
Pressure Measurement Film

PRESCALE

Application Examples

[No.8]

Measured Object



Backgrid tape lamination roller

Uses

Verifying backgrid tape lamination pressure uniformity

Benefits

Adjustment time savings

Higher quality

Loss reduction

Industry

Semiconductor Production

Applications

Verifying backgrid tape lamination pressure uniformity

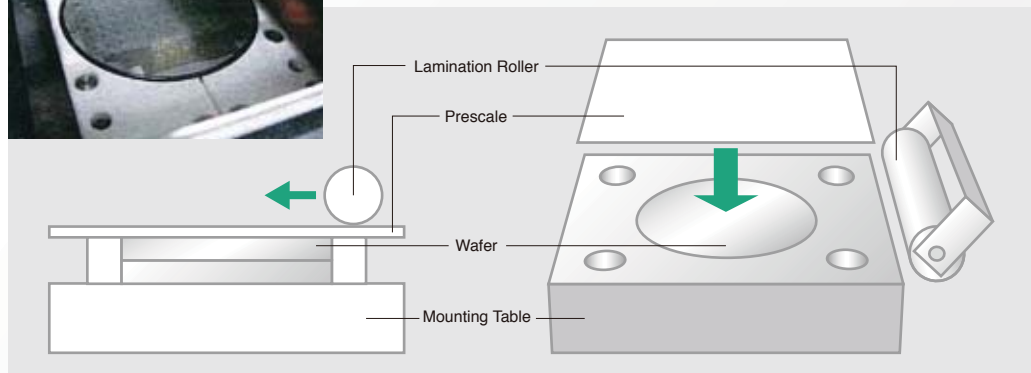
Challenges

The process for laminating backgrid tape (protective film) precedes grinding. If the lamination roller pressure distribution is not uniform, the backgrid tape can become wrinkled. If the height of the wafer and the surrounding mounting table are not optimal, wafer cracking and poor backgrid tape lamination occurs. Previously, only trial and error adjustment methods had been available to prevent this.

Measurement

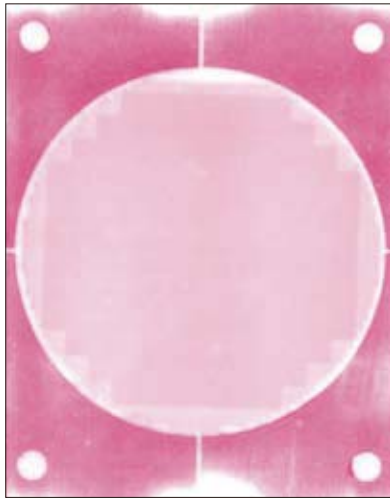
Product used: Prescale (Extreme low pressure 4LW)

Prescale is placed on the wafer and the surrounding mounting table, after which the lamination roller is operated at the usual pressure. The Prescale is then removed and its color is examined to determine whether pressure had been uniformly applied.



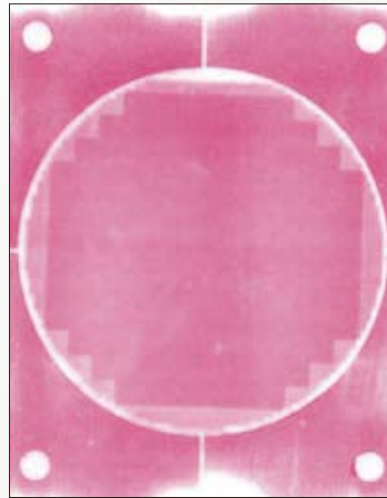
Results (images)

[Not Good]



Insufficient pressure was applied to wafer area.

[Good]



Uniform pressure was applied.

Benefits of Prescale

● Time Savings

Substantial improvements in equipment adjustment work efficiency.

● Quality improvement

The ability to verify pressure uniformity in advance reduces losses resulting from poor quality. Wafer cracking is eliminated.

Without using Prescale

Wrinkles may cause loss of backgrind tape, and wafer cracking may occur if the height adjustment of the wafer and the surrounding mounting table area is poor. The recovery process requires trial and error adjustments using actual lamination results. Tape, wafer and other **losses occur, and time is required for adjustments, etc.**

Using Prescale

Using Prescale, it is possible to verify the amount of pressure applied to the silicon wafer by the lamination roller under actual usage conditions. Only Prescale can show the pressure distribution under such conditions. Furthermore, the ability to periodically check the uniformity of pressure results in **adjustment time and material loss savings.**

*Note that the specifications and performance data described in this catalog are subject to change without notice for the purpose of improvement. Since the images provided are used for illustration purposes only, they may differ slightly from the actual product.

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<http://www.fujifilm.com/products/prescale/>