

gL2000

Processing Guidelines

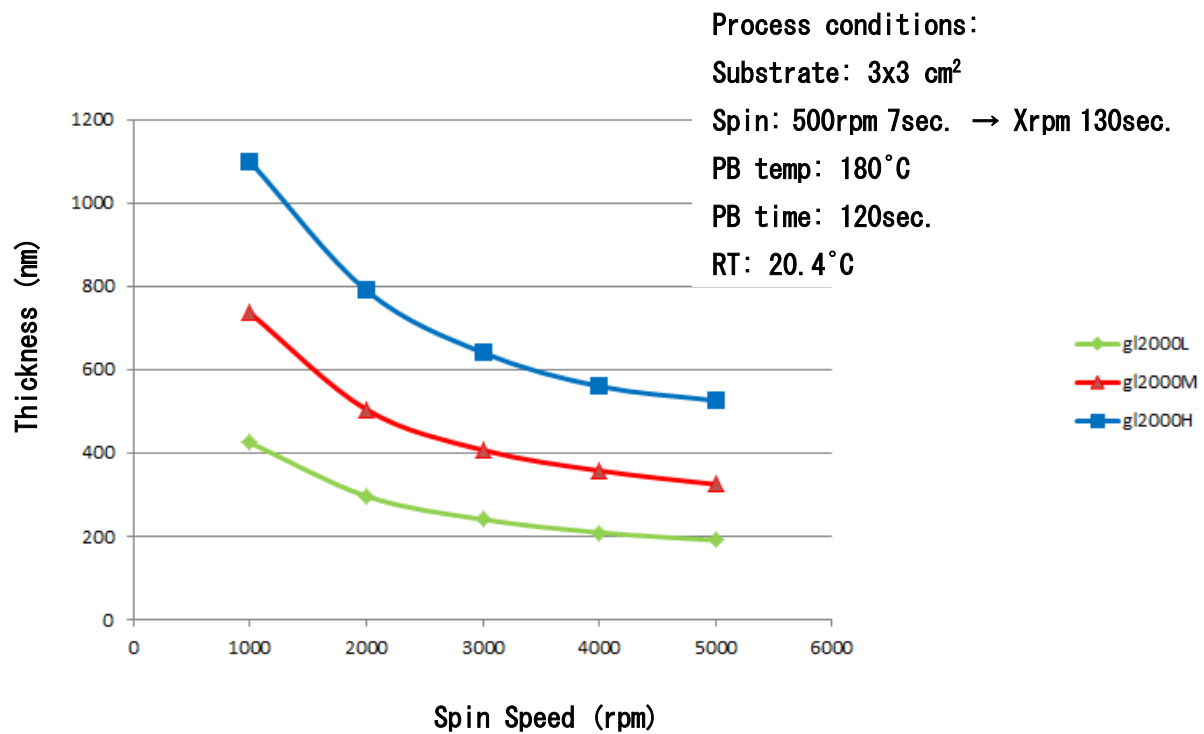
1. Substrate Preparation

The substrate should be clean and dry. Solvent or O₂ plasma are recommended.

Use of ozone will be detrimental to adhesion

2. Coat

gL2000 can accommodate a wide range of film thickness. Please refer to the spin curve.



3. Pre Bake

Hot Plate 170–200°C 120–300sec.

Oven 170–200°C 20–30 min.

4. Expose

Exposure conditions will vary depending on process requirements.

Examples: 0.1 micron line space pairs with 50KV acceleration voltage will require approximately 140-180 $\mu\text{C}/\text{cm}^2$ and a 30 second development in gL Developer.

Higher resolution can be obtained with higher acceleration voltage. For a 100Kv acceleration voltage the dose is approximately twice as high or 280-360 $\mu\text{C}/\text{cm}^2$.

5. Develop

The Standard gL developer can be used in immersion, spray, or spray puddle applications. Typical development time is 30-300 seconds at room temperature. Higher dosage and shorter development times are used for increased resolution. A high resolution developer is also available.

Optimized development times will depend on film thickness, exposure dose and resolution requirements. Lower developer temperatures result in higher resolution while higher developer temperatures increase throughput.

6. Rinse and Dry

gL2000 resists can be rinsed with gL Rinse for 10-60 seconds.

Post bake for wet etch 100-140°C for 2-3 minutes on a hotplate is recommended on hotplate 100-140°C for 20-30 min in oven.

De Scum- O₂ plasma.

8. Remove

Removal is accomplished by immersion in Remover A at 40-50°C for approximately 20 - 30 minutes.