Wafer maker | **Semiconductor maker**

Wafer Manufacturing Process

Manufacturing process for silicon wafers, the substrate material used for semiconductors

Wafer Fabrication (Front-end Process)

Process for making semiconductor die by forming circuits on the substrate wafer

Assembly & Packaging (Back-end Process)

Processes for assembling semiconductor die. After being cut into individual die, the die are wired and encapsulated in resin

Complection

POINT 1 — Grind

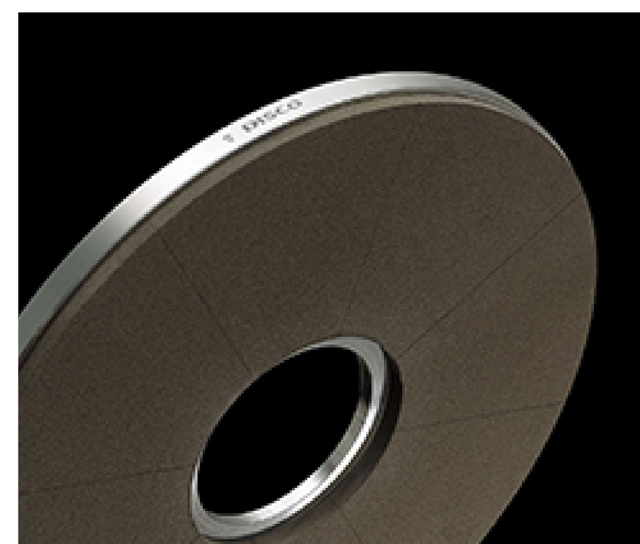
DISCO grinders are used to thin wafers that are cut from silicon ingots.
As semiconductors have become thinner and even more highly functional, the precision of flatness in the thinning process has become important.

POINT 2 — Grind

The backside of the wafer is ground (in a process called backgrinding) in order to thin it while protecting the circuit on the front side. End products like cell phones and computers have become even thinner thanks to this process.

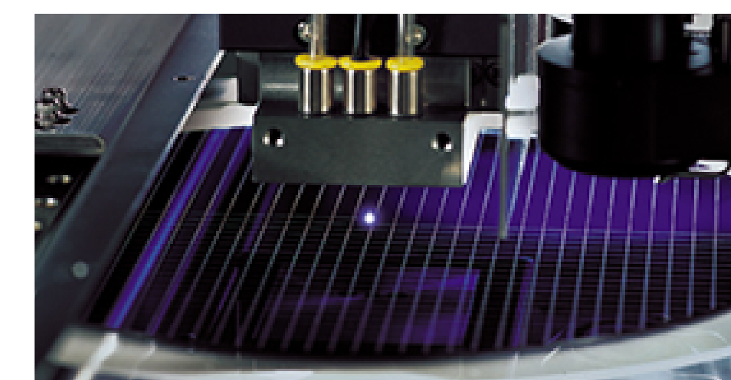
POINT 3 — Polish

Damaged layers may be removed by polishing in order to improve the strength of the thinned wafers. DISCO polishers are used in this process.



POINT 4 — Cut

Semiconductor die are cut from the thinned wafers in the process called dicing. In addition to conventional blade dicing, dicing technologies that use lasers have been increasingly utilized in recent years.



POINT 5 — Cut

DISCO machines are also used in the package singulation process after the die have been encapsulated in resin.