TAIKO thin wafers

The TAIKO process is the name of a wafer back grinding process that uses a new grinding method. This method is different to conventional back grinding. When grinding the wafer, the TAIKO process leaves an edge (approx. 3 mm) on the outer most circumference of the wafer and thin grinds only the inner circumference.

LMJ used for:
• Ring cutting

Perfect for Taiko ring removal

Thin wafers are a challenging material to manipulate and to process due to its high flexibility and fragility.

Main processing criteria:
• Adapted to thin wafers
• Round cutting
• No chipping
• Clean surfaces
• Straight walls
• Narrow tolerances
• Fast process

Machining technologies able to reach the following criteria:
• Diamond blade saw
• Laser MicroJet (LMJ) - water jet guided laser technology

Fast and stable cutting by the wet laser

LMJ advantages versus dicing blade:
• Better adapted to thin wafers
• High tact time
• High chip yield
• 300 mm wafer capable

Installed machine type:
• 5 x Sanwa RCM with LMJ inside + Takatori Dicing Tape Mounter
• Total integration
• 50 W green laser

Sources: Sanwa, Synova, Internet