

“WE ARE ADVANCING ONE STEP AHEAD”



Sophisticated IC Backside Preparation System

MICRO SHINER BA101

*Patent applied for. (3 matters)
*Design registration applied for. (1 matter)

MICRO SHINER BA101

System has Sophisticated Features for Milling, Grinding and Polishing to make IC Backside Analysis smoothly.

Milling by End-mill to remove resin, accurate Grinding by Diamond-bit and finally get Flat & Mirror surface by Polishing for IC Backside with less than $50\mu\text{m}$ of sample thickness.

- Automatic detection for Sample and Edge of tool with $1\mu\text{m}$ accuracy to make sample less than $50\mu\text{m}$ thickness.

- Automatic measuring for height distribution on the sample surface. Leaning surface is also available by this function and can be processed along its leaning.

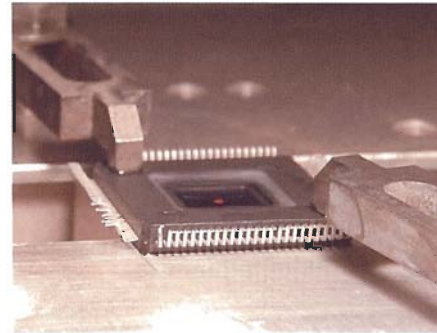
- Grinding with the grinding-fluid. It makes high-speed processing without heating up the sample.

- It takes only 1-hour approx. for over all processing on sample.

- Operation Chuck can be exchanged with just a single touch!

Automatic detection for Sample and Edge of Tool with $1\mu\text{m}$ accuracy to achieve sample thickness of less than $50\mu\text{m}$.

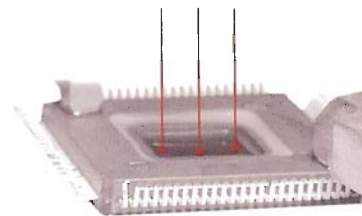
Available to measure by $1\mu\text{m}$ accuracy for the height by the laser variation sensor.



Processing tool can be exchanged with a single touch without any adjustment, because edge of tool is automatically measured. Accurate processing is always available.



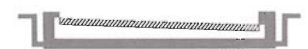
Automatic measuring for the height distribution on the processing surface of the sample. It is available to process along with the leaning of the surface.



Automatic measuring for the height-distribution.

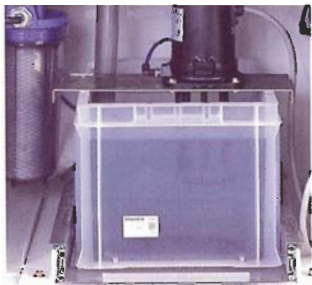
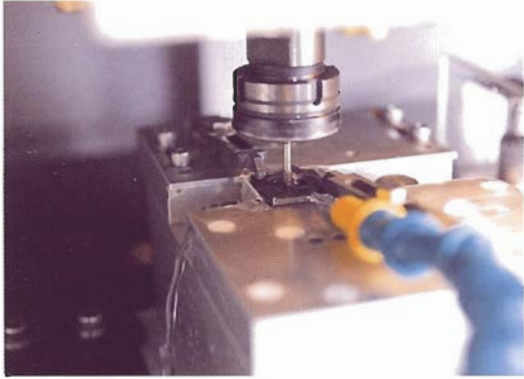


In case-Sample is set inclined to the stage



In case-Die is located inclined in the package

Grinding with fluid-based. It makes high-speed process without heating up the sample. Grinding fluid usage is recycled by a filtration system with filter.



It takes only 1-hour approx. for the overall process. You can select the processing method accordingly for the process object.

Plastic Resin-Milling

By End-mill to remove the resin rapidly & smoothly.



Silicon Layer-Grinding

High speed Grinding by Diamond-bit with Cyclic Fluid.

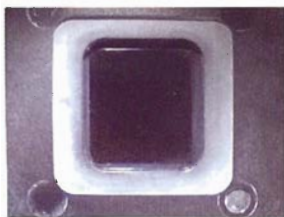


Silicon Layer-Polishing

Buff-finishing with Diamond abrasive compound etc.



Fine Mirror Surface is available with W-Buffer (Patent & Design Registration applied for.) promptly.



micrograph x 10



micrograph x 60

User-friendly system

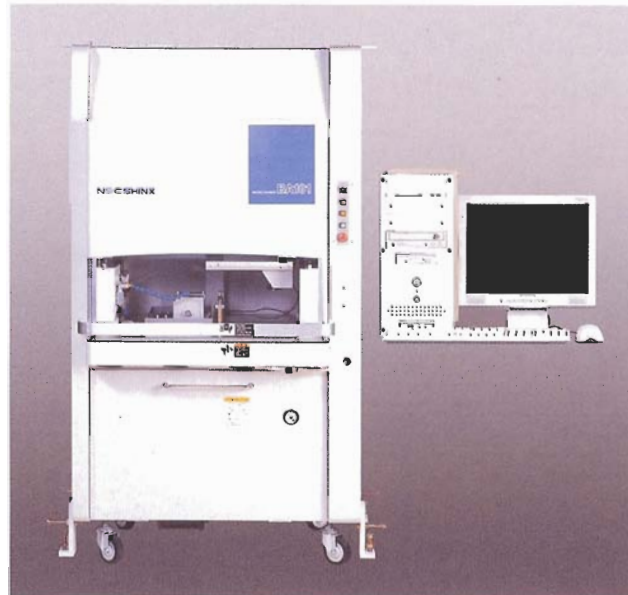
- Operation Chuck can be exchanged pneumatically with just a single touch.
- Processing condition can be set through PC and you can store it in PC to make easier for same kind of samples.
- You can select either way:
Specified for the processing volume from the surface
Specified for the remaining volume from the bottom
- You can confirm the result on the PC screen anytime.
- Aspirator for cleaning the waste after processing, is built-in.
- Safety design with Emergency Switch, Door-Interlocked etc.

Specification

Outer size	width: 836mm depth:876mm height:1750mm
Weight	500kg approx.
Power usage	
Power supply	3phase 200V 13A
High-pressure Air	0.6MPa 100Litre/min.
Exhaust duct	φ 150mm short pipe
Axis Max transfer distance	
X	80mm
Y	240mm
Z	200mm
Processed Area	
X	64mm
Y	64mm
Processing resolution	0.1μm
Main shaft Rotating Speed	1000~20000rpm
Chuck size	φ 3mm
Safety	Emergency switch, Interlocked door etc.
Requirement of PC	Windows XP
	USB: 1
	Necessary PCI slot: 1

*Windows is the registered trademark of Microsoft Corporation in USA.

*Specifications might be modified without any notice for the improvement.



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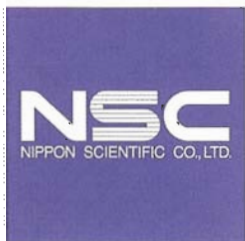
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