



High volume **FabSCIL tool**

SCIL Nanoimprint solutions offers NIL manufacturing solutions in a large variety. From manual R&D tools to fully automatic cassette-to-cassette systems and from 3" up to 300 mm wafers.

The FabSCIL module can imprint 200 and 300mm wafers and has automatic stamp loading and positioning. It is designed to be connected to a cluster system that takes care of wafer handling, spin-coating, spin-coating, baking, cooling and other processes.



Key features

- Designed to be connected to a cluster system that takes care of wafer handling, aligning, spin-coating, baking, cooling and other processes.
- Automatic stamp loading and positioning.
- Tri-layer stamp construction allows conformal contact printing even on nonflat and bowed surfaces.
- Unique SCIL imprint process ensures sub 10 nm resolution with low pattern deformation and no stamp damage by particles.
- The excellent etch properties of the sol-gel resist result in high etch rates.
- The thermal stability, optical transparency and (UV)stability of the sol-gel makes it suitable as functional layer.
- Use of thermal sol-gel increases stamp lifetime.
- Overall combining highest imprint quality and yield with high throughput and low total cost of ownership.

Specifications

Operation	20—40 wafers/hour depending on wafers size, wafer material, pattern dimensions and material process
Wafer sizes	150, 200 and 300 mm
Wafer thickness	0.3 - 2.5 mm
Wafer handling	Connected to cluster tool / EFEM
Resist types	Thermal sol-gel UV sol-gel UV organic
Imprinting	SCIL low pressure softstamp NIL
Dimensions (WxLxH)	3.0 x 4.0 x 2.5 m
Overlay alignment	Full wafer < 1µm

