

NX-2000

Versatile
Thermoplastic or
Photocurable
Nanoimprinter

Nanoimprint Solutions

Machines Masks Resists Process



Engine for Nanotechnology™

Innovative
Versatile
Fast
Proven

A whole-wafer nanoimprinter for all forms of imprint: thermal, photocurable, and embossing. Based on unique patented Nanonex technology, the NX-2000 offers excellent uniformity regardless of the roughness of the backside of the wafer and mold and can correct for waviness or bowing surfaces. It eliminates relative lateral shifting between wafer and mold that affects mold life time. A very small thermal mass ensures rapid heating and cooling, hence a fast cycle time.

Key Features

- Nanoimprinter for All Forms of Imprint
 - Thermoplastic
 - Photocurable
 - Embossing
- Air Cushion Press (ACP) Guarantees Excellent Uniformity Over Entire Substrate
- Sub-10 nm Resolution
- Fast Cycle Time (Sub-60 sec)
- Automatic Imprint Operation
- 4" Wafer Substrate with Options for 6", 8"
- Ability to Handle Irregular Shapes and Sizes
- Based on 7 Years, 15 Generations Development



System Specifications

Thermoplastic Imprint Module

- Temperature Range of 0 to 300°C
- Heating Rate >300°C/minute
- Cooling Rate >300°C/minute
- Pressure Range of 0 to 4 MPa (~600 psi)
- Higher Pressure Range Possible

Photocuring Module:

- 200 W UV Lamp Standard
- 25 mW/cm² Intensity for 4" Imprint Field
- Automatic Control

Mask Loading Capabilities

- 4, 5, and 6 Inch Masks for Standard System
- 8 inch Masks Optional

Other Important Features

- Vacuum and Pneumatic Control
- Control Electronics
- PC with Microsoft Windows
- Manual Load/unload of Substrates
- Control Software
- Programmable Temperature, Pressure, and Time Duration
- Automatic Execution
- Footprint Size: 31" by 44"
- Applications Includes: Nanophotonics, Displays, Data Storage, Advanced Materials, Biotechnology, Nano-fluidics, etc.

Substrate Handling

- Maximum 4 Inch Diameter Standard
- 6 Inch and 8 Inch Optional
- Unique Ability to Handle Irregular Shapes and Sizes

LEARN MORE AT

<http://www.nanonex.com>

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The specifications may be updated without notice.