

| NANO PATTERNING · LITHOGRAPHY

# Nano Imprinting Machine

## UV & Thermal Nano-Imprint Lithography

Nano-imprint lithography (NIL) creates nanoscale surface structures at a fraction of photolithography cost. Sub-100nm pattern transfer using precision-engineered molds and servo-controlled uniform pressure. Both UV-cure and thermal imprinting modes supported.

**Sub-100 nm**

PATTERN RESOLUTION

**1 ~ 6 inch**

WAFER SIZE

**UV · Thermal**

CURING MODES

### KEY FEATURES

- 01 Sub-100 nm pattern transfer**  
using precision-engineered molds and uniform servo-controlled pressure
- 02 UV and thermal imprinting**  
single & hybrid mode for various photoresist & curing requirements
- 03 Multi-layer / multi-step**  
imprinting capability for complex 3D nanostructures

**TECHNICAL SPECIFICATIONS — Nano Imprinting Machine** · *Standard specs · custom design available*

ANT-4 — UV PHOTO-CURING NANO IMPRINTING	
Curing Type	UV (Ultra-Violet)
Stamp	Quartz · Si · PFPE · PDMS · PC
Wafer Size	1 ~ 4 inch
Imprinting Pressure	≤ 2 bar · Room Temperature
Imprinting Mode	Single Layer / Single Step
Imprinting Head	Chip-size Multi-Head · Multiple Fixturing / Air Chucking
XYZ Stage	Stroke 250 × 120 × 25 mm · Z Sliding Unit
UV System	40 mW/cm <sup>2</sup> (2 kW)
Anti-Vibration	Cut-off 1 ~ 1.5 Hz
Controller	UMAC-2
ANT-6H — THERMAL & UV HYBRID NANO IMPRINTING	
Curing Type	UV · Thermal · UV+Thermal hybrid
Stamp	Quartz · Si · Ni
Wafer Size	1 ~ 6 inch
Imprinting Mode	Multi-Layer / Multi-Step
Patent	KR 0585951 · US 7,202,935 B2 · PCT/KR2006/002230 (Patent pending: 0043670)

**ABOUT SAEHAN NANOTECH**

**Precision machining equipment for hard & brittle materials — built in Korea, delivered worldwide**

Korean manufacturer of precision machining equipment for hard & brittle materials, serving the **semiconductor, display, defense, rare earth permanent magnet, and battery** industries. Manufactured in **Changwon, Korea**, exported to **USA, China, Vietnam, and Malaysia**. Full lifecycle support — from independent R&D and custom design through installation, training, and after-sales service.

READY TO TALK? | **Request a Quote or Machining Test**

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