

NXQ4000 MASK ALIGNER

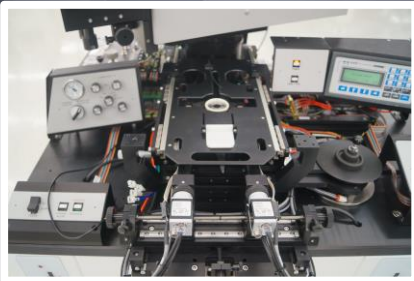
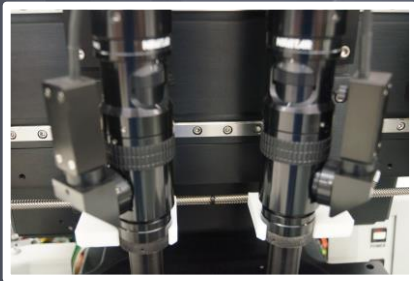
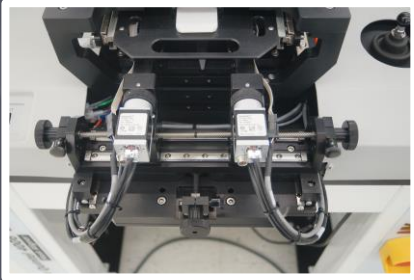


Microelectronics
LED/HB LED
3D IC
WLP
2.5D Interposer
MEMS
BioMEMS
Microfluidics
Compound Semi
Solar (HCPV)
Optoelectronics



- The **NXQ4000 Series Semi-Automatic Mask Aligner** combines innovative design with precision alignment and exposure features. The automatic sequencing makes the system very easy to learn and use and is well suited for Multi User labs.
- The system is extremely reliable and the Cost of Ownership is minimal.
- The versatility of the NXQ4000 has made it the choice of manufacturing facilities, R&D Centers and University around the world, for a wide range of technologies.
- It supports Soft/Hard pressure contact and Vacuum contact printing. The system can also print in Manual Proximity mode. It can process partial and whole substrates up to 200mm (8") diameter and can be optionally equipped with Backside Alignment and UV Nano Imprint Lithography.

NXQ4000 Series MASK ALIGNER



Technical Data

Print Modes

- Soft, Pressure, Vacuum Contact and Proximity Printing Modes
- **Print Resolution**
- \approx 0.6 microns (with vacuum contact-)*
- **Substrate Size / Mask Size**
- From pieces up to 200mm Round. Up to 10mm Thick. / 3"x3" up to 9"x9"

Alignment Stage

- Alignment Travel X-Y +/- 3.8mm
- Alignment Travel Theta +/- 7 degrees
- Mask/ Wafer separation 0 – 180 microns
- Top Side Alignment Overlay* < 1 micron
- Bottom Side Alignment Overlay* < 1.5 microns
*Operator / process Dependent < 3 Microns (IR)

Video View Microscope

- Left Microscope Travel X - 22mm to Wafer Edge
* With Offset Objectives -5.5mm to Wafer Edge
- Right Microscope Travel X +22mm to Wafer Edge
* With Offset Objectives +5.5mm to Wafer Edge
- R/L Microscope Travel in Y +/- 12.7mm
*Optional Extended Y Travel Microscope +12.7mm to -88mm

UV Lamphouse / UV Exposure Optics

- UV Lamphouse 350/500W or 500/1KW
- Exposure Optics UV (350-450) standard
 - *NUV (280-350nm) Optional
 - *MID UV (280-450nm) Optional
- UV Uniformity +/- 4%, 6" diameter field
+/- 5%, 8" diameter field

Electronics/Control

- Programming & Control
- PLC with LCD Display
- Intuitive operator interface with menu-driven operation

System Requirements

- Voltage 115VAC 60Hz or 240VAC 50Hz
- Compressed Air 5.4 bar (80 PSI)
- Vacuum -0.7 bar (21"hg)
- Nitrogen (or CDA) 3 bar (40 PSI)

System / Module Data

- W x D x H ~.1220mm x 915mm x 1423 mm
(48" x 36" x 56")
- Weight 217Kg (480 Lb)