



ArF Immersion Scanner

# NSR-S62ID

Proven Solutions Through Evolution



# NSR-S621D with *Streamalign* platform enables $\leq 2$ nm overlay accuracy. ArF immersion scanner delivers industry-leading performance and productivity.

The NSR-S621D builds upon the well-known *Streamalign* platform and incorporates further hardware and software developments to deliver industry-leading overlay accuracy and throughput, as well as exceptional system stability and matching capabilities. The advanced NSR-S621D immersion scanner fully satisfies the aggressive high-volume requirements of 20 nm technology and beyond.

## NSR-S621D

### Performance

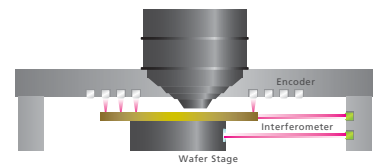
Resolution	$\leq 38$ nm
NA	1.35
Exposure light source	ArF excimer laser (193 nm wavelength)
Reduction ratio	1:4
Maximum exposure field	26 mm $\times$ 33 mm
Overlay	$\leq 2$ nm
Throughput	$\geq 200$ wafers/hour (300 mm wafer, 125 shots)

### Main Characteristics of the *Streamalign* Platform

#### • Bird's Eye Control

##### Enabling superior yield

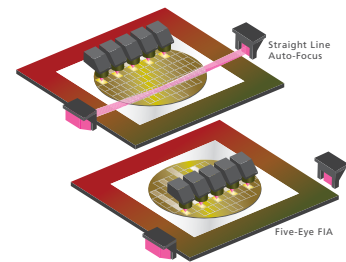
- Hybrid encoder/interferometer system delivers optimal stage performance.
- Dramatically improves accuracy and stability.
- Provides superior focus control.
- Overlay capabilities down to 2 nm



#### • Stream Alignment

##### Enabling optimal affordability

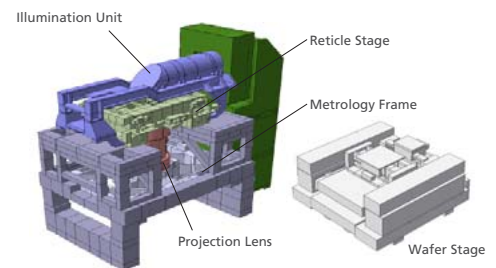
- Straight Line Auto-Focus generates dense map of the wafer surface to enhance focus control (using a wide AF beam span).
- Enables increased alignment sites with minimal productivity impact using Five-Eye FIA.
- Greatly reduces wafer overhead time.
- Throughput capabilities up to 200 WPH



#### • Modular<sup>2</sup> Structure

##### Enabling rapid production ramps

- Modular design enables efficient installations and simplifies maintenance.
- Provides optimal uptime with modular design and replacement of individual components.
- Extendible platform enables multigenerational use.



**CLASS 1 LASER PRODUCT**



**WARNING**

TO ENSURE CORRECT USAGE, READ MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT.

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<http://www.nikon.co.jp/pec>

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ISO 9001  
BUREAU VERITAS  
Certification



This product was developed and manufactured in the factory certified under ISO 9001.