

ArF Immersion Scanner

NSR-5636E

Proven Solutions Through Evolution



ArF Immersion Scanner for Critical Layers That Delivers Superior Overlay Accuracy and Ultra-high Throughput

The NSR-S636E utilizes an enhanced inline Alignment Station (iAS), that has been incorporated in previous models, enabling high-precision measurement, and extensive wafer warpage and distortion correction capabilities, all while maintaining maximum scanner throughput.

Through daily productivity optimization, the NSR-S636E boosts overall output, achieving the highest level of productivity across the entire history of Nikon semiconductor lithography systems.

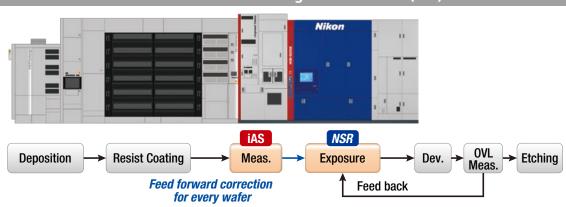
NSR-S636E

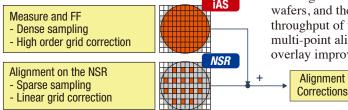
Performance

Resolution	≦ 38 nm
NA	1.35
Exposure light source	ArF excimer laser (193 nm wavelength)
Reduction ratio	1:4
Maximum exposure field	26 mm × 33 mm
Overlay	$\leq 2.1 \text{ nm (MMO}^{*1})$
Throughput	≥ 280 wafers/hour (96 shots)

^{*1} Mix and Match Overlay: machine-to-machine overlay accuracy (NSR-S636E#1 to S636E#2)

Features of the inline Alignment Station (iAS)





The alignment station performs high-speed, ultra-precise measurement of all wafers, and then corrects problematic grid errors without reducing the throughput of the lithography system. The iAS enables comprehensive, multi-point alignment for all shots on the wafer, realizing remarkable overlay improvements, as well as maximized scanner throughput.

CLASS 1 LASER PRODUCT



WARNING

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

The export of this product is controlled by Japanese Foreign Exchange and Foreign Trade Law and International export control regime. It shall not be exported without authorization from the appropriate governmental authorities.

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