i-line Scan Field Stepper

NSR-SF155

Throughput Greater than 200 Wafers per Hour
Greater Throughput with Skyhook Structure and Higher Speed Wafer Stage

i-line Scan Field Stepper NSR-SF155

The NSR-SF155 i-line scan field stepper delivers powerful performance for non-critical layers in mass production of next-generation memory and microprocessors. Like the SF150, the NSR-SF155 utilizes Skyhook Technology, which enables the projection lens to be suspended from the body and away from the floor, greatly reducing vibration levels. Furthermore, the NSR-SF155 boasts increased wafer stage speed and improved chamber temperature stability through heat countermeasures. The NSR-SF155 delivers a throughput of 200 wafers or more per hour for 300 mm wafers.

Key Features

- **Superior Throughput**
  Combining the optimal stepper platform, Skyhook Technology, and a faster wafer stage has greatly reduced vibration and increased throughput. The NSR-SF155 boasts superior throughput of 200 or more 300 mm wafers per hour.

- **High Overlay Accuracy Maintained**
  As with the NSR-SF150, the NSR-SF155 employs the Skyhook platform and a stage countermass, and heat countermeasures in the chamber achieved by revising the air conditioning duct layout, to maintain an overlay accuracy of 25 nm or better.

- **Low Total Cost of Ownership**
  Nikon has developed a system that enables customers to upgrade the NSR-SF150 on their production lines to the NSR-SF155. Furthermore, improved yield through heat countermeasures in the chamber coupled with high throughput gives the NSR-SF155 the lowest total cost of ownership.

### Performance

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td>≦ 280 nm</td>
</tr>
<tr>
<td>NA</td>
<td>0.62</td>
</tr>
<tr>
<td>Exposure light source</td>
<td>i-line (365 nm wavelength)</td>
</tr>
<tr>
<td>Reduction ratio</td>
<td>1:4</td>
</tr>
<tr>
<td>Maximum exposure field</td>
<td>26 mm × 33 mm</td>
</tr>
<tr>
<td>Overlay</td>
<td>≦ 25 nm</td>
</tr>
<tr>
<td>Throughput</td>
<td>≧ 200 wafers/hour (76 shots)</td>
</tr>
</tbody>
</table>

⚠️ WARNING ⚠️

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

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