FPD Lithography System

**FX-68S**

Gen 6 Plate FPD Lithography System
Delivering a High Resolution of 1.5 μm
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The FX-68S supports the production of leading edge high-resolution small- and medium-sized panels from Gen 6 plates. The scanner method enables improved productivity, excellent resolution and high overlay accuracy.

Key Features

• Multi-lens System
  The FX-68S features the multi-lens system consisting of multiple projection lenses. This design enables a wide exposure field and excellent resolution.

• High Resolution
  While succeeding our well-known multi-lens system, Nikon has developed a new i-line projection lens that enables higher resolution. In addition, we developed an innovative correction system that takes advantage of our multi-lens system in large plate exposure. In this correction system, the focal surface follows inclination changes in a plate. This enables the high volume production of panels with a high resolution of 1.5 μm (L/S) in Gen 6 plates.

• High Overlay Accuracy
  The new interferometer system for position measurement is designed to realize high overlay accuracy by enhancing measurement accuracy and position control performance.

• High Throughput
  With the new projection lens and stage, the FX-68S achieves high throughput of 78 plates per hour by enabling 4-scan on a Gen 6 plate.

• Improved Exposure Performance
  The FX-68S employs a variety of calibration functions developed utilizing our unique technology and provides enhanced exposure performance stability.

Performance

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Resolution (L/S)</td>
<td>1.5 μm (i-line)</td>
</tr>
<tr>
<td>Projection magnification</td>
<td>1:1</td>
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<tr>
<td>Overlay</td>
<td>±0.35 μm</td>
</tr>
<tr>
<td>Maximum plate size</td>
<td>1,500 mm × 1,850 mm</td>
</tr>
<tr>
<td>Takt time</td>
<td>46 sec./plate</td>
</tr>
<tr>
<td></td>
<td>Conditions: 1,500 mm × 1,850 mm, 4 scans, 30 mJ/cm²</td>
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</tbody>
</table>

CAUTION

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

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

NIKON CORPORATION
FPD Lithography Business Unit
Sales Department
Shinagawa Intercity Tower C, 2-15-3, Konan, Minato-ku, Tokyo 108-6290, Japan
Tel: +81-3-6433-3641 Fax: +81-3-6433-3758

NIKON PRECISION INC.
1399 Shoreway Road, Belmont, CA 94002-4107, U.S.A.
Tel: +1-(650)-508-4674 Fax: +1-(650)-508-4600

NIKON PRECISION EUROPE GmbH
Robert-Bosch-Strasse 11, D-63225 Langen, Germany
Tel: +49-6103-973-0 Fax: +49-6103-973-333

NIKON PRECISION KOREA LTD.
2, Singal-ro 124beon-gil, Gilheung-gu, Yongin-si, Gyeonggi-do, 16968 Korea
Tel: +82-31-288-5601 Fax: +82-31-288-5609

NIKON PRECISION TAIWAN LTD.
3F No. 28, Tai Yuen Street, Chu Pin City, Hsin Chu Hsien, Taiwan
Tel: +886-3-552-5888 Fax: +886-3-552-5888

NIKON SINGAPORE PTE LTD.
Precision Division
60 Anson Road, #09-01 Mapletree Anson, Singapore 079914
Tel: +65-6559-3618 Fax: +65-6559-3665

NIKON PRECISION SHANGHAI CO., LTD.
RM. 601 Xin Jin Qiao Tower, No. 28 Xin Jin Qiao Road, Pudong New District, Shanghai 201206, China
Tel: +8621-5899-0266 Fax: +86-21-5899-1660