Precision Equipment Business

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Vision

Continue delivery of innovative solutions to customers and support a digital society

Major products & Services

Lithography systems, Measuring & Inspection systems, Digital lithography, Services



Financial target

	FY2023/3	FY2026/3
Revenue	¥240.0B	¥260.0B
Operating profit	¥35.0B	¥36.0B
OPM	15%	14%

(※1) Operating profit ratio in FY2022/3 is shown before deduction of corporate P/L non-attributable to any reportable segments

(X2) "Next Generation Project Div." transfers from Precision Equipment Business to Corporate P/L non-attributable to any reportable segments

Precision Equipment Business

Redisplaying of Medium-Term Management Plan (FY2022-FY2025) announced in April 2022

Vision

Continue delivery of innovative solutions to customers and support a digital society

<u>FPD</u>

• Advance technology development to support next-generation panels (Pursue higher resolution and productivity)

Semiconductor

- On-the-mark support for customer plans (Secure production capacity)
- Strengthen initiatives toward expanding new accounts (Support individual customer needs such as 3D)
- Expand sales in peripheral equipment (inspection and measurement)

<u>Services</u>

• Support demand to relocate existing lines or modify equipment (Includes maintenance and parts supply)

Earnings plan

Operational

direction

Secure stable operating profit of ¥30.0B+ (Operate across both FPD and Semiconductor)

Direction for Precision Equipment Business



*Effective April 1, 2022, the Next-generation Projects Division will be transferred from Precision Equipment to Corporate P/L non-attributable to any reportable segments.

Precision Equipment: Business Environment

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FPD



Semiconductor

Semiconductor market



Source : Gartner21Q4

- Market to grow 4% YoY (by area base) mainly in OLED, driven by larger display for TVs and mobile phones
- The number of exposure processes increases with the increasing functionality of the panel

Market scale for FPD lithography systems holds steady to a certain degree, despite decline in large-scale investments

Growth in both miniaturized logic and memory as well as non-miniaturized analog and power devices, driven by AI, 5G & 6G, IoT, autonomous driving and various other fields

Market for semiconductor lithography systems continues to grow

Precision Equipment: Primary Measures

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Precision Equipment: FPD Primary Measures

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Small and mid-size panels

- Pursue even higher resolution for VR and AR applications
- Differentiate through enhanced CoO

Large panels

- In March 2022, release FX-88S with high resolution support for G8 sizes manufacturing IT panels
- Drive further productivity gains in G8 systems and improve CoO
- Improve productivity in G10.5 systems, too

Provide on-target support for customer needs by pursuing higher resolution and productivity

Precision Equipment: Semiconductor Primary Measures

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- Expand product lineup with new product launches and grow sales, i-line/KrF given broader adoption of semiconductors
 - Return to market where there are lithography system shortages (mainly 200mm wafer systems)

ArF Dry/ Immersion

- Leverage alignment station to achieve higher precision and productivity
- Expand customer base targeting device markets where ArF immersion systems will continue to be mainstream (3D-NAND memory, CIS, etc.)

Prepare production infrastructure and accurately support customer needs and investment plans

Precision Equipment: Semiconductor Supporting 3D Semiconductors

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Precision Equipment: Primary Measures in Service Business

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Deliver Products that fulfill customer needs Enhance customer Deliver high value-added	Deliver high value-added Services	
Satistaction	Working with 4,000+ install base	
FPD	 Propose lens refurbishment and the like for installed systems Provide Fab Solutions such as preventive maintenance Expand modification items that improve performance (precision, productivity, etc.) 	
Semiconductor	Bolster support for replacement of and service-life extension on installed systems Provide on-target support for needs to enhance performance or make modifications to move lines Provide solutions for manufacturing processes that leverage measurement instruments	

Accurately grasp and respond to the needs associated with customer equipment wear and tear, changes in production items, etc.

Precision Equipment: Semiconductor Service Business

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(Until Now) Buy back systems we sold in the past and modify or refurbish for used system sales

> Buy back Modify Refurbish

> > Refurbished market depressed due to brisk production activity at semiconductor makers

[Future]

In addition to refurbished business, launch new products that meet the needs of a refurbished market that is drying up





Active demand for i-line and KrF production equipment for non-miniaturized semiconductors coupled with recent

semiconductors for IoT and EV, etc.

semiconductor shortage

Growth Drivers: Digital Lithography

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Deliver new value for diversifying device production



Expect profit contribution by 2030 as a long-term growth driver

Growth Drivers: Semiconductor Digital Lithography

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Digital lithography core technologies Data conversion systems High-speed conversion to SLM pixel data **SLM (Spatial Light Modulator)** System **Micromirror device** controls **High-speed mirror drive** Solid-state laser (Nikon proprietary development) Wavelengths (λ) 193nm, 248nm **High-repeat frequency (No. Of MHz)**

Data conversion systems High-speed data transmission systems SLM Illumination Optical svstem Projection optical system Solidstate laser Body Platform

180nm node Logic IC Pattern example





Growth Drivers: Semiconductor Digital Lithography Target



Precision Equipment: Earnings Plan

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Secure stable operating profit of ¥30.0B+ (Operate across both FPD and Semiconductor)