

Optical Components for Semiconductor Manufacturing Equipment

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Create value to support evolution of the entire value chain by strategically expanding upstream

Enhancing wave optics on top of geometrical optics

FY21-22

- Prioritized as focus area

FY22-25

- Facility investment
- Technology adoption

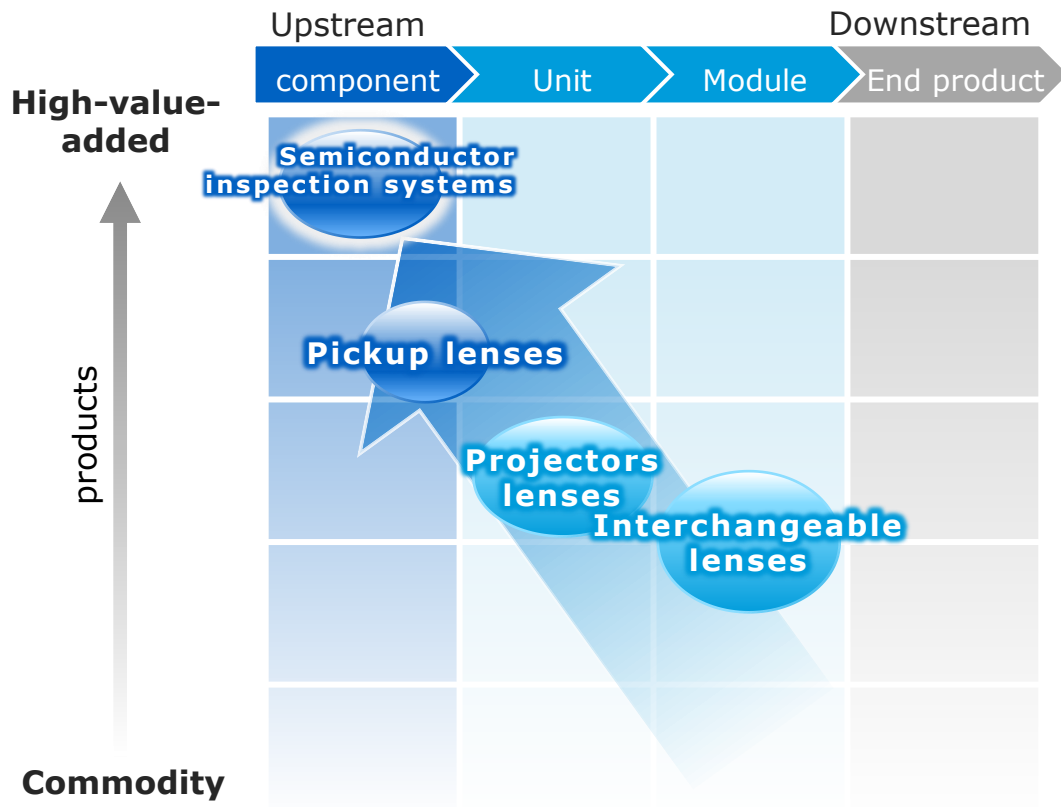
FY25-

- **Scaling the business**

Profitability improvement through:

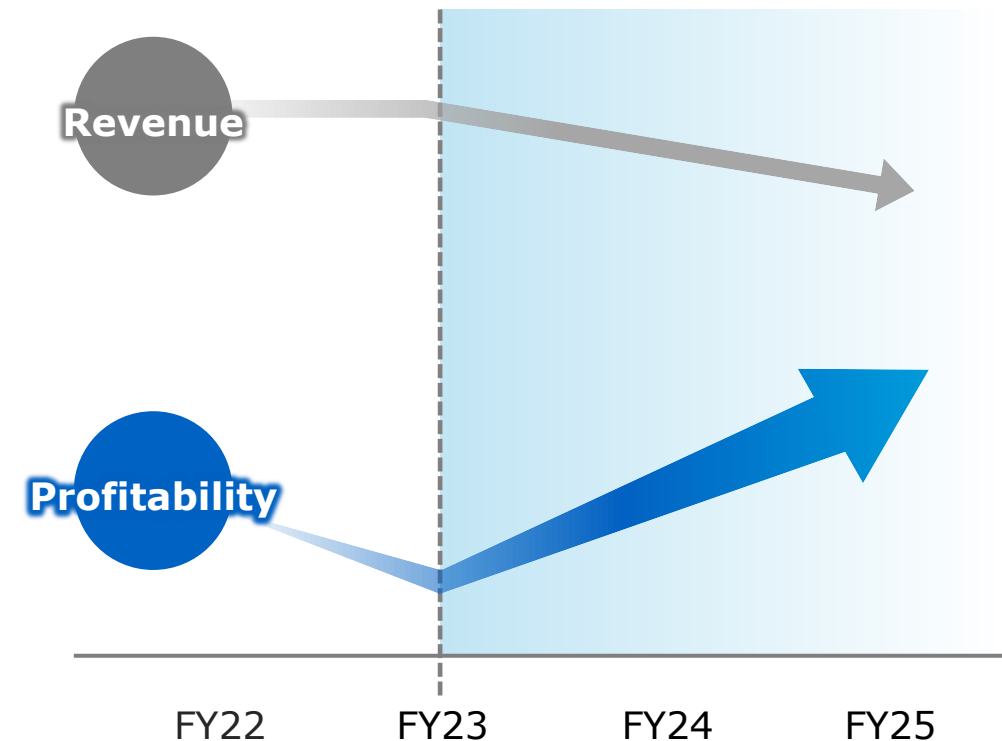
- Focus on semiconductor inspection system
- Equity transfer in non-industrial applications* partially

Portfolio of Product



*Optical units for projectors, interchangeable lenses etc.

Revenue and Profitability Trends



Since the 1900s

1980s

1990s

2010s



Cameras



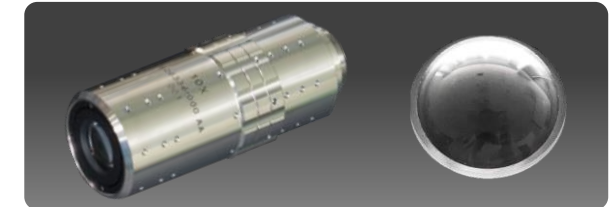
Interchangeable lenses for cameras



Pickup lenses for optical disks



Optical units for projectors



Optical components for semiconductor inspection systems

Strong foundation

High-precision spherical lens processing



- $\lambda/40$ -level high precision polishing
- Centering processing to maintain optical axis alignment

Thin-film coating



- Thin-film coating for enhanced performance of optical components

High-end optical design



- Virtual design and simulation of optical performance
- Achieving required performance through correlation with evaluation results

Evaluation & alignment



- Design and evaluation integration with proprietary inspection systems
- High-precision alignment capability

Optical Components for Semiconductor Inspection Systems

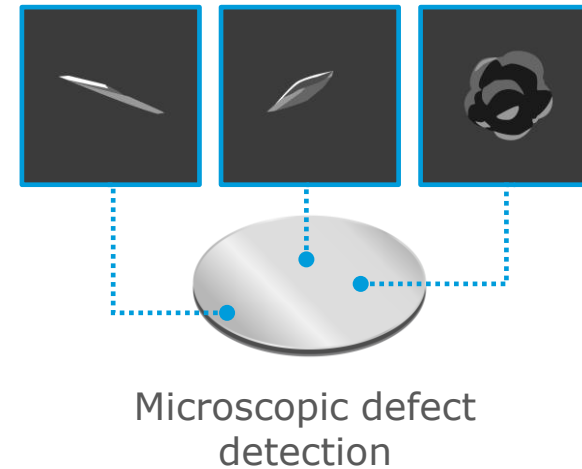
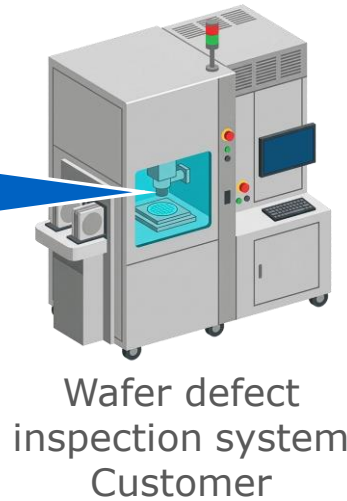
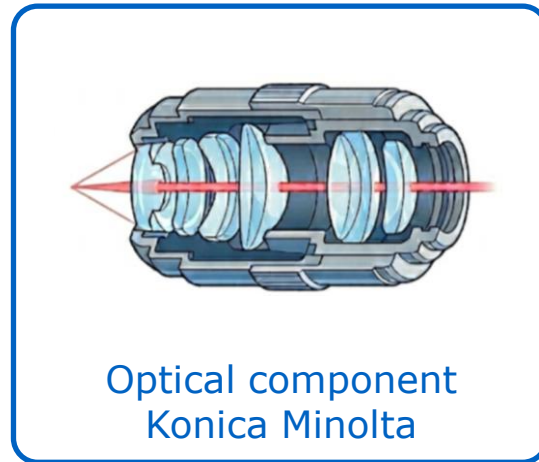


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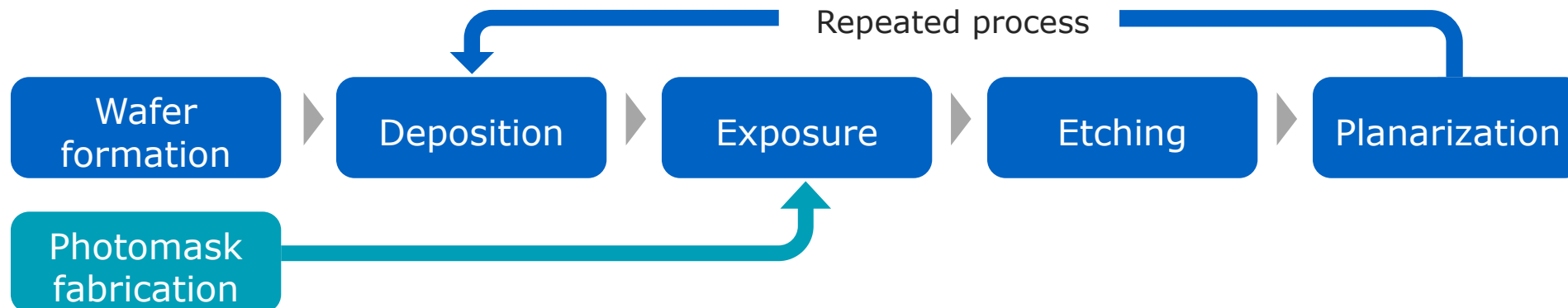


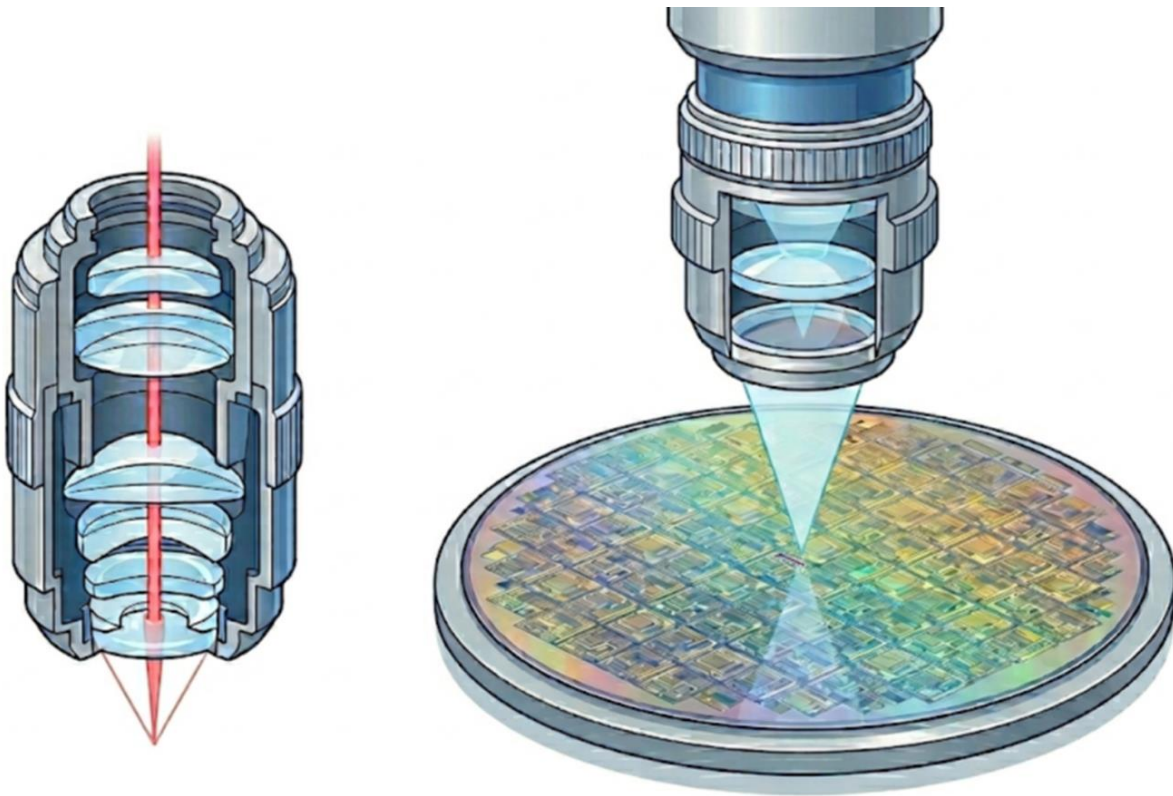
Front-end process

Supporting inspection process through collaboration with partner



Back-end
process





Demanding performance requirements

- High resolution, high NA
- Ultra low aberration
- High transmittance

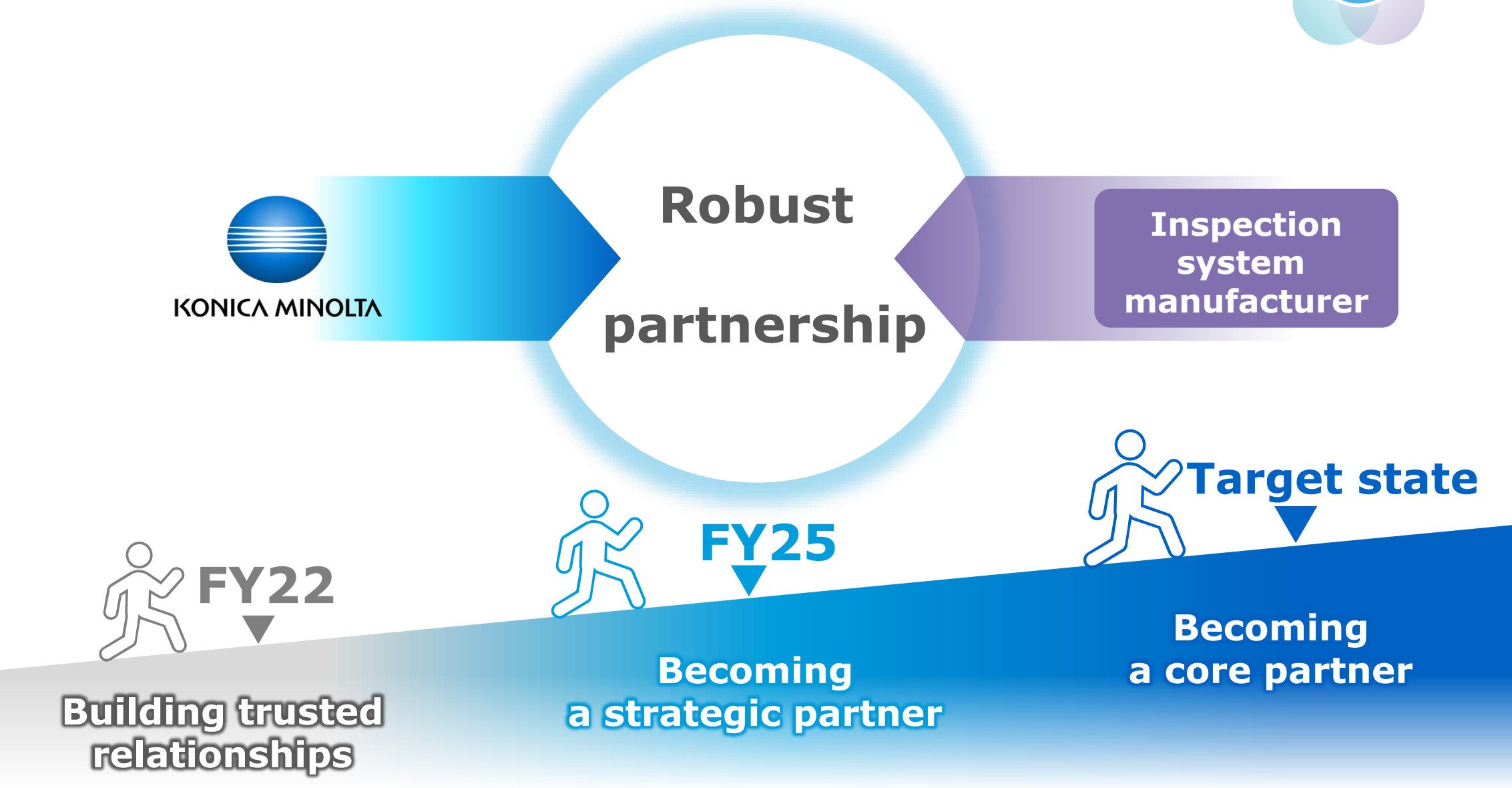
Core technologies

- Optical design and simulation
- High-precision lens manufacturing
- Optical coating
- Precise alignment and adjustment
- Evaluation technology

Our Growth Opportunities

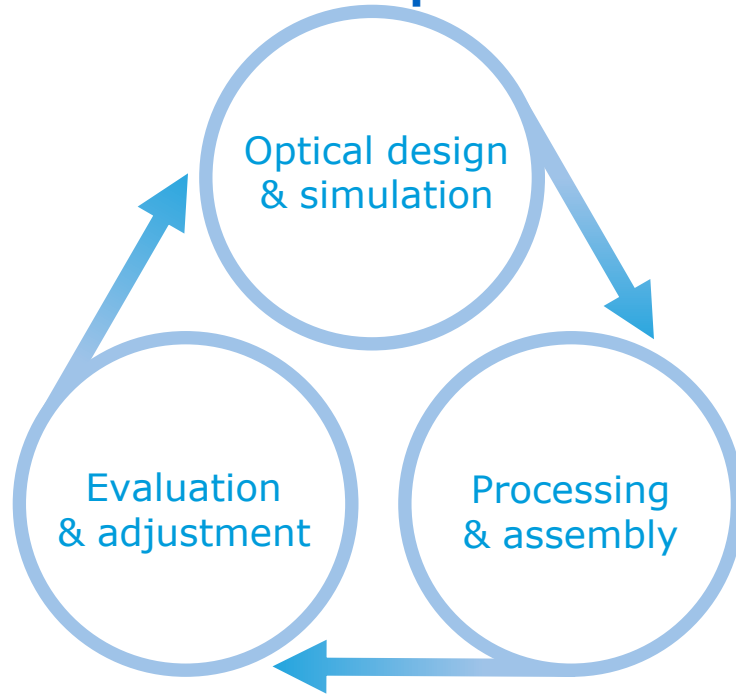


Becoming a Core Partner through Strengthened Collaboration



We are a trusted strategic partner, developing products to meet the customer requirements

Development meeting customer requirements



Deep customer engagement

Development: Harmonization with customers' business processes

Production: Vertically integrated in house end-to-end system

Marketing/Sales: Customer-first proposals

Service: Co-development partnerships to support customers' executing their roadmaps

Market Structure: Optical Components as Key Parts Supporting Semiconductor Sector



Semiconductors

AI-driven demand

Chiplet integration

Semiconductor inspection systems

Diversification with chiplet integration

Optical components for inspection systems

Supply aligned with industry expansion

Customization

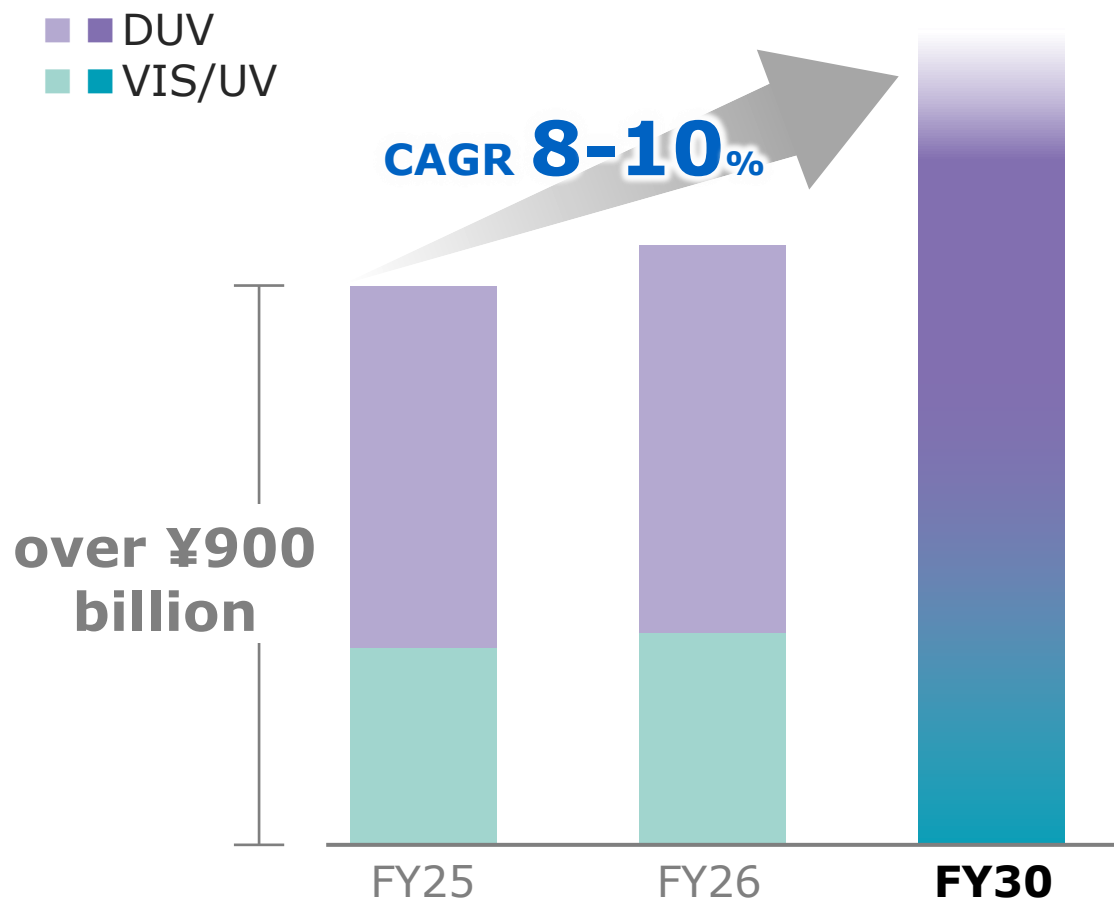
SAM
About ¥200 billion
Konica Minolta estimate

Growth in Wafer Defect Inspection Systems and Optical Components

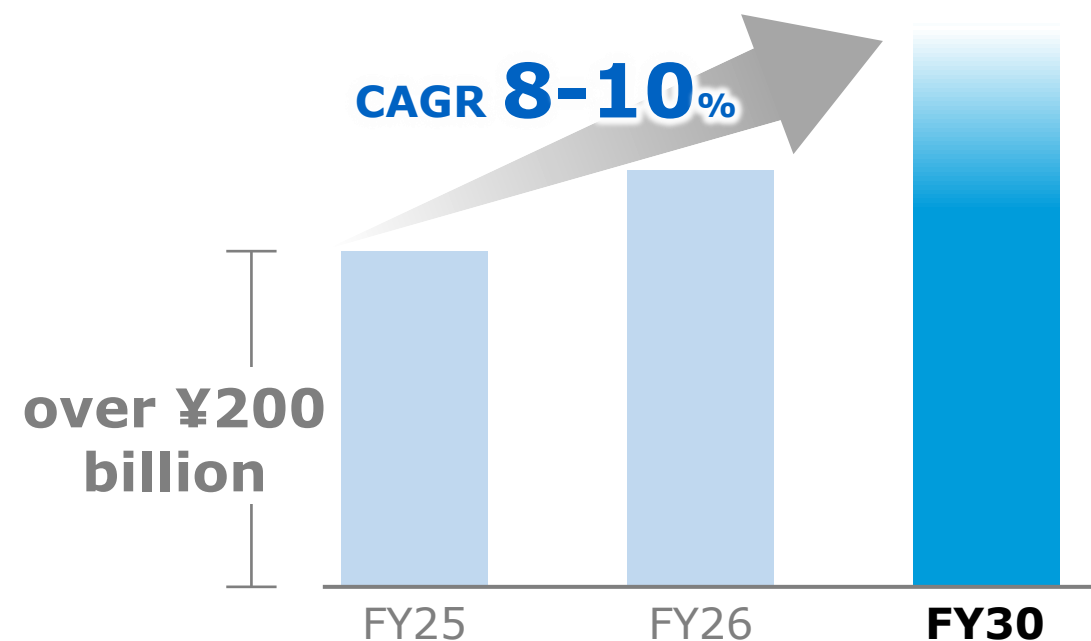


Driver: AI including logic and memory

Wafer defect inspection systems



Optical components for inspection systems



Targets in Wavelength



Step1

VIS/UV

**Our core expertise built
by optical units for projectors
and related products**

Wavelengths

EUUV	DUV	UV	VIS	NIR/IR
13.5nm	193nm	350nm	450nm	1000nm
1nm	2nm	4nm	5nm	10nm

Surface precision

Step2

DUV

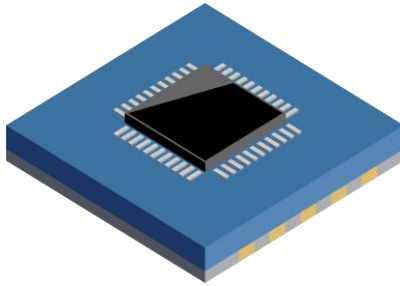
**Next target for technology acquisition
and business expansion**

High growth potential for AI-oriented semiconductors

Front-end process

Back-end process/Advanced packaging

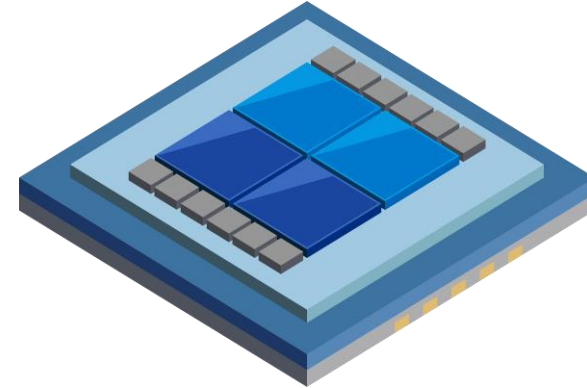
Monolithic



- Different circuits integrated on a wafer
- Higher performance with advanced miniaturization

DUV-based inspection required for AI logic semiconductors

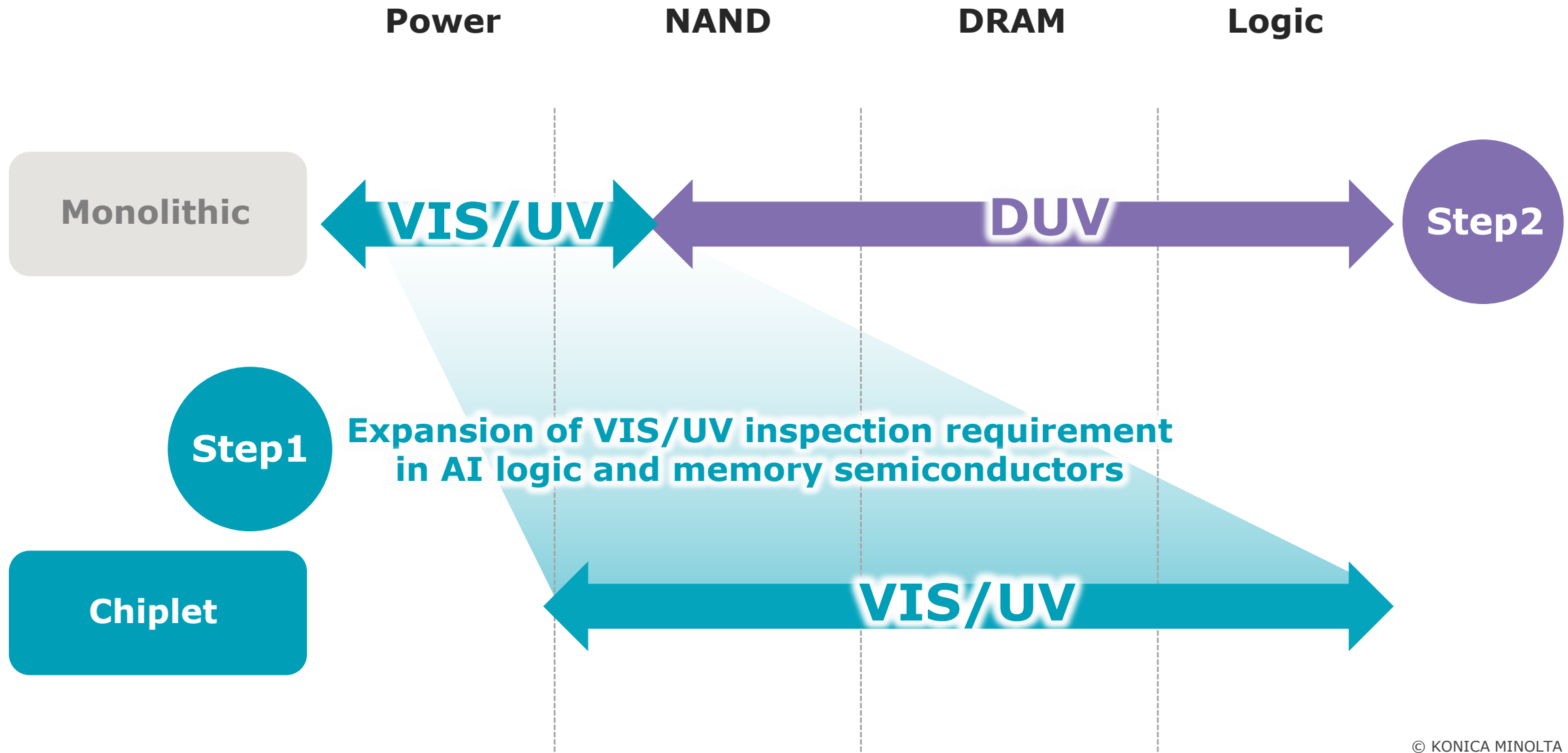
Chiplet packaging



- Performance enhancement with connected chips with different precision levels
- Lower precision level than for monolithic for certain types
- Diversification of inspection items

Growth of VIS/UV inspection needs in AI logic semiconductors

Multi-chip Integration Drives Expansion of VIS/UV Inspection in AI/logic and Memory



Rising Expectations for Konica Minolta amid Competitors' Withdrawals and Shift in Focus



VIS/UV

Company A



**Partial
withdrawal**

Focus on lenses
for other applications

Company B



**Shift in
focus**

Focus on lenses
for other applications

Company C



**Limited
supply**

VIS/UV lenses with limited
production capacity

and others



Entry Difficulty:
High

DUV

Supply instability due to withdrawal and shift in focus

Future Strategy



Step1

Market share increase in VIS/UV

- Growth in semiconductor demand
- AI logic semiconductors with multi-chip integration
- Increasing demand for stable supply

Step2

Mid- to long-term: Expansion into DUV

- Growth in semiconductor demand
– especially dramatic growth in DUV
- Increasing demand for stable supply

Increasing production
capacity

Improving production
efficiency

Our strategy

Next-generation
processing equipment

Chemical
contamination control

Growing Together with Strategic Partner

Increasing Production capacity

Mother factory at Osaka Sayama

Expanding production lines

**Second factory at Hachioji, Tokyo**

Start of new production lines in March 2026



Improving production efficiency

DX-driven processing standardization with NC machine

- Enhanced quality with process data visualization
- Standardization with quantification of expert skills

**FY26**Capacity expansion **2.6x**
(vs FY24)

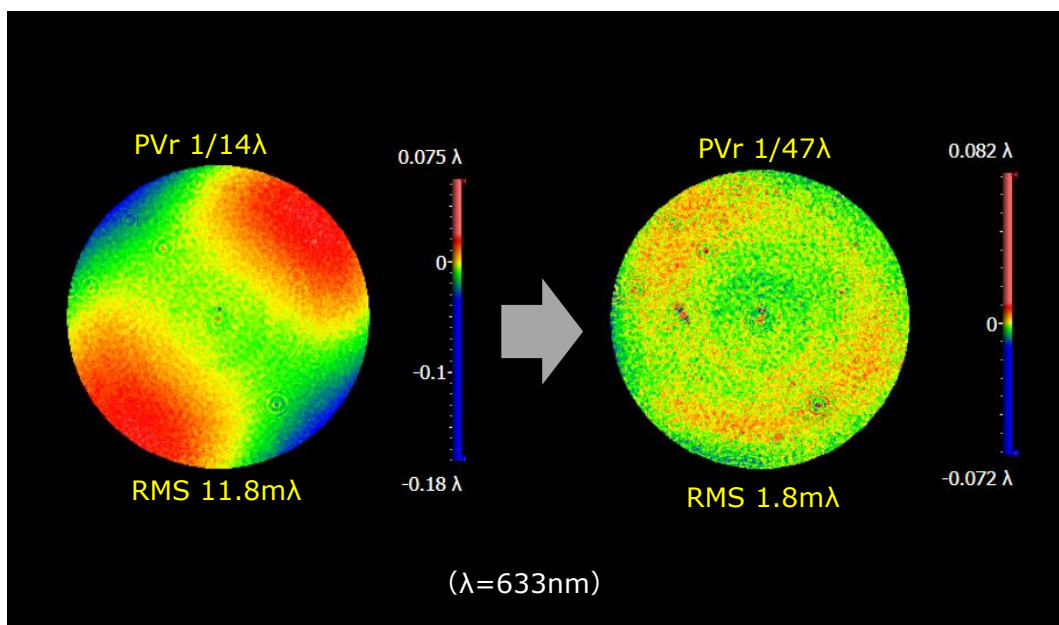
Strengthening DUV technologies through strategic partnerships

To now

Ion Beam Figuring (IBF)

Next-generation processing equipment

High-precision polishing for DUV-wavelength inspection



Ongoing

Clean technology enhancement

Chemical contamination control

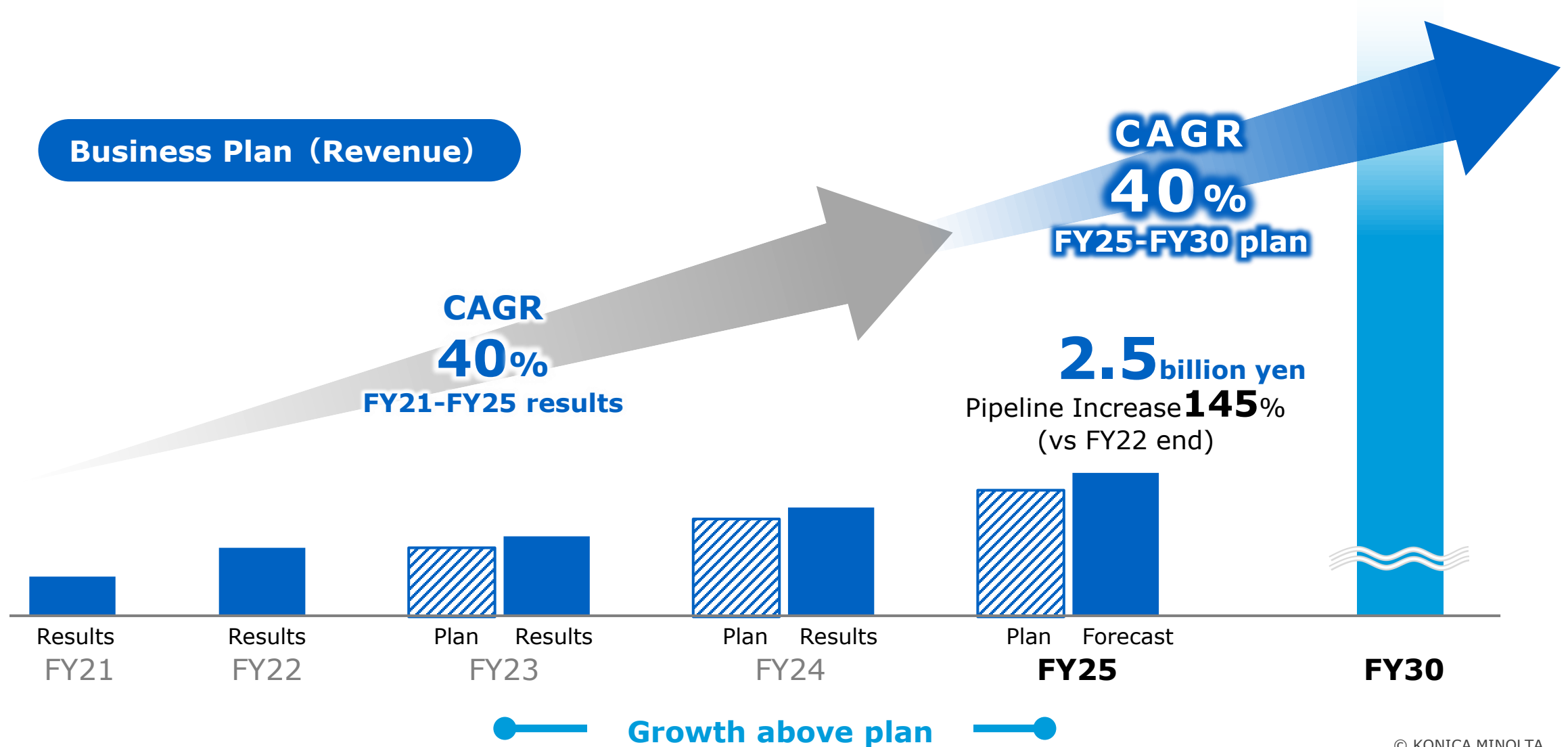
Technologies for clean environment management, specialized cleaning, material selection, and packing





Outlook for Optical Components for Semiconductor Inspection Systems

- One year ahead of plan with strong performance in VIS/UV
- Expansion into DUV, aiming to become a top in-house supplier for major manufacture





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Cautionary Statement:

The forecasts mentioned in this material are the results of estimations based on currently available information, and accordingly, contain risks and uncertainties. The actual results of business performance may sometimes differ from those forecasts due to various factors.

Remarks:

Yen amounts are rounded to the nearest 100 million.