

Company Profile

August 17th, 2011

Lasertec Corporation

(6920 JASDAQ)

-R&D and FabLite Oriented Enterprise-

Foundation	Establishment of Tokyo ITV Laboratory in 1960 Corporate name was changed to Lasertec Corporation in 1986
Locations	Head Quarters: 2-10-1 Shin-yokohama, Kohoku-ku Yokohama, Japan Subsidiaries: US, Korea, Taiwan
Description of business	Development, manufacturing and service of Semiconductor related systems, LCD/PV cell related systems and Laser Microscopes
Capital	931 Million Yen
Sales	12,722 million yen for the term ended June 2011 (sales ratio of overseas; 75%)
Payroll	233 (at the end of December 2010)
Listing	Over-the-Counter Issues in 1990, JASDAQ listing in 2003 (Code 6920)



R&D Center and Head Quarters at Shin-yokohama



Subsidiary in USA



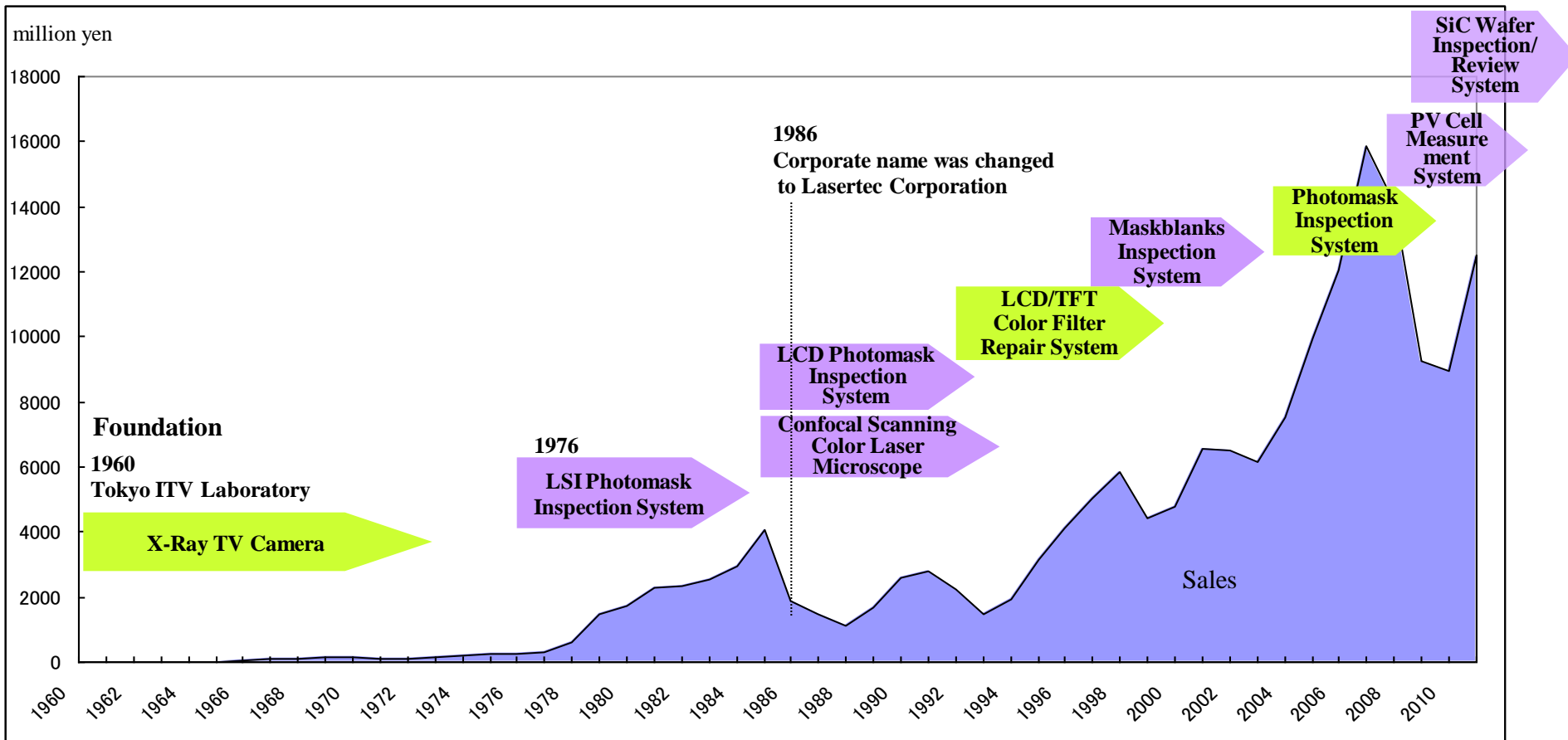
Subsidiary in Korea



Subsidiary in Taiwan

Progress of sales, and products developed and put to market first in the world by Lasertec

After the development of LSI photomask inspection system in 1976, Lasertec has been creating numerous innovative products.

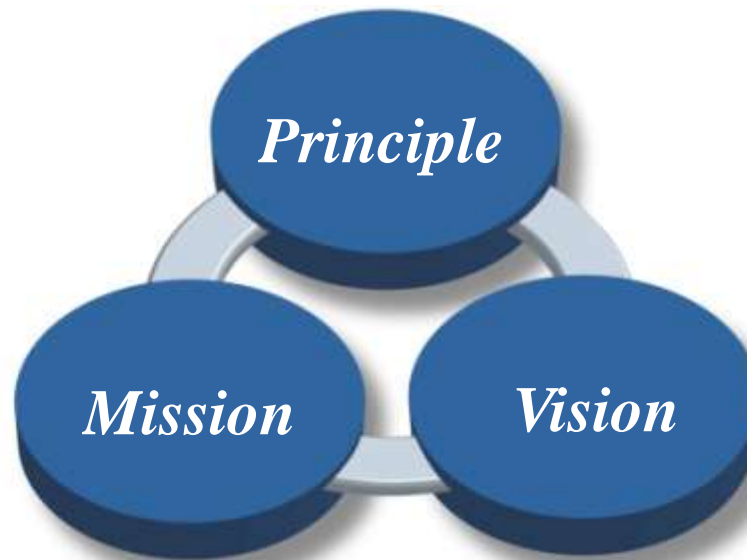


Think from the viewpoint of customers and contribute to customers and society

**Create what does not exist in the world and
what is beneficial to the world**

“Let’s develop one new product every year, a new product first in the world.”

(Development spirit from the foundation of the company)

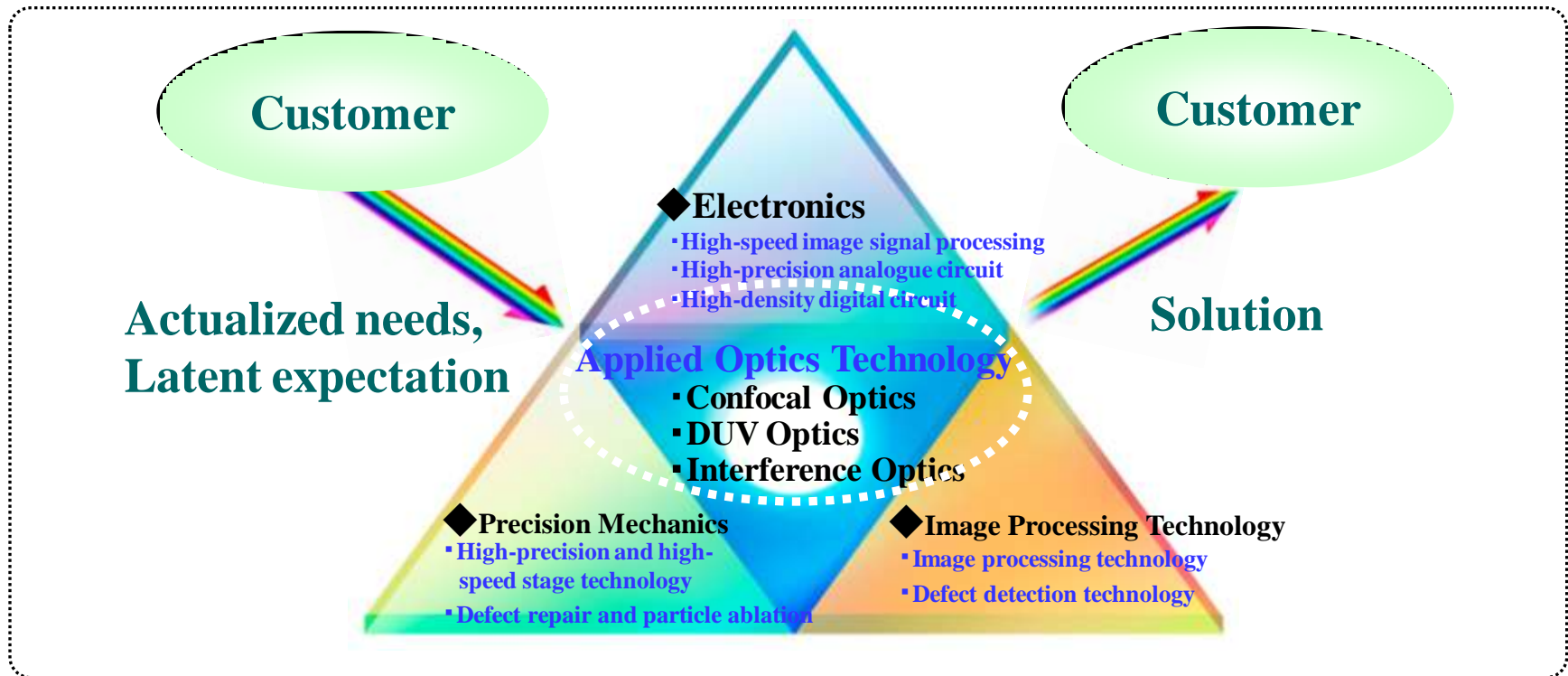


**Contribute to customer’s problem
resolution by presenting solutions
faster than anybody in the optics
technology field.**

**To be a company customers
around the world consult
with as their first things**

Character, Strength/Core Technology

Strength of Lasertec lies in the creativity to uniquely produce problem solving methods and the development ability to commercialize such problem solving methods faster than anyone else by integrating electronics, precision mechanics, Image processing to the applied optics that is the core technology of Lasertec.

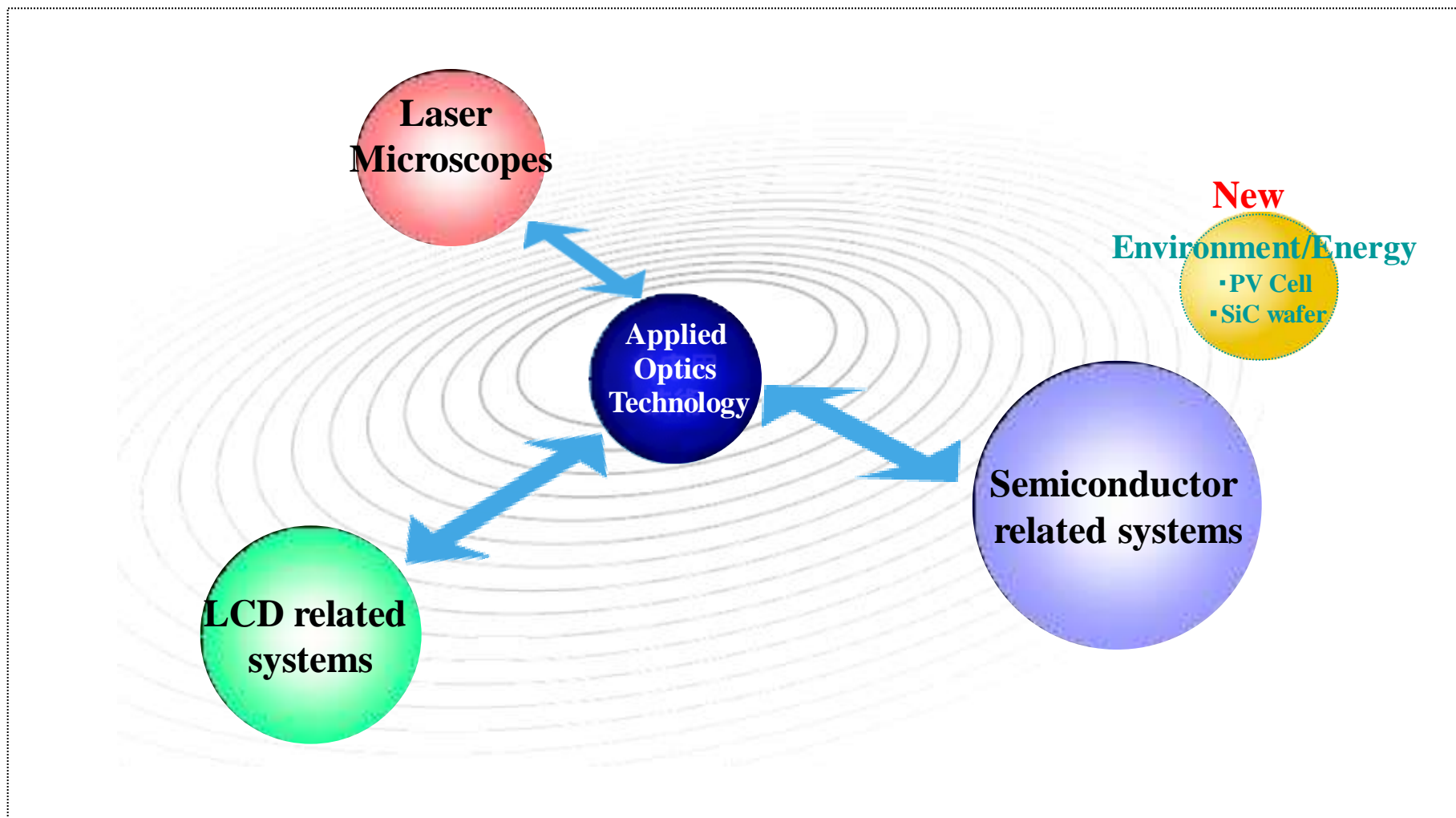


FabLite oriented strategy

Concentrate on development and prototype in its own premises.
Consign mass production to partners with a lot of experiences.

Semiconductor related systems, LCD/PV cell related systems and Laser Microscopes

Entry into the environment/energy related market starting last year as the new field to be reclaimed



Examples of main products



Semiconductor related systems

- Inspection systems for photomasks and wafers

The market share of mask blanks inspection system is 100 %.



Mask Blanks Inspection System
MAGICS M6641



LCD/PV cell related systems

- Large size photomask inspection systems and color filter inspection and repair systems

The market share of large size photomask inspection system is 100%.
Commercialized PV cell conversion efficiency distribution measurement systems in May 2009.



Large size photomask inspection system for 10G LI712



Laser Microscopes

- Applied to R&D of semiconductor, FPD, new materials, metals and so on. Also plays an important role as an antenna for finding new markets.

The market share of domestic industrial microscope is 22%.
(reference "Kagaku Kiki Nenkan 2010")



Seamless observation in the range from millimeter to nanometer
Ultra high resolution Microscope H1200

Lasertec's main tools in the semiconductor manufacturing processes

Mask related processes

Wafer/Device processes



Maskblanks Inspection System
MAGICS Series



Phase Shift/Transmittance Measurement System
MPM193EX



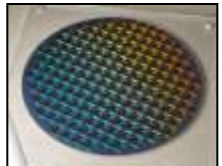
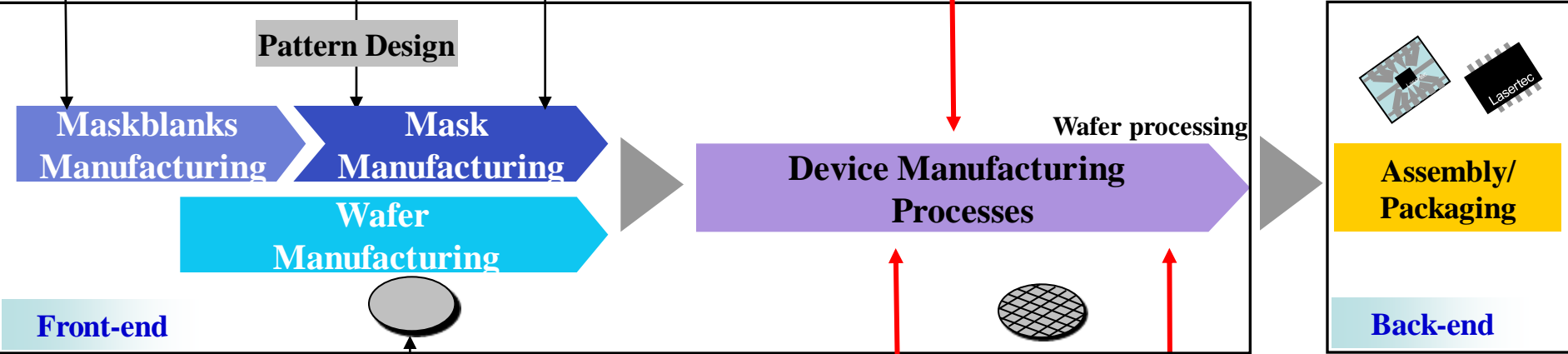
Pellicle/Photomask Particle Inspection System
PEGSIS P100



Photomask Inspection System
MATRICS X700 Series



Mask Sample
(6 inch square, thickness :1/4 inch)



300 mm wafer sample

Wafer Inspection/Review System
M5640



SiC Wafer



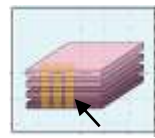
SiC Wafer Inspection Review System
WASAVI Series SICA61



MURA/Film Inspection System
WASAVI Series MR300



TSV Etching Depth Inspection System
WASAVI Series TSV300-IR



TSV

3D Interconnect Device

Lasertec's main tools in the LCD panel manufacturing processes

Mask related products

Panel related products



Large Size Photomask
Substrates/Blanks
Inspection System LB

Large Mask Inspection System
LI712 (for 10G)

LCD/TFT Color Filter Repair
System

Glass for Array

Pattern Design

Mask Blanks
Manufacturing

Mask
Manufacturing

Glass for Color Filter

Array Manufacturing Process

Color Filter Manufacturing Process

Cell Process

Module
Process

Pellicle Inspection/Pellicle
Mounting System PA/PP

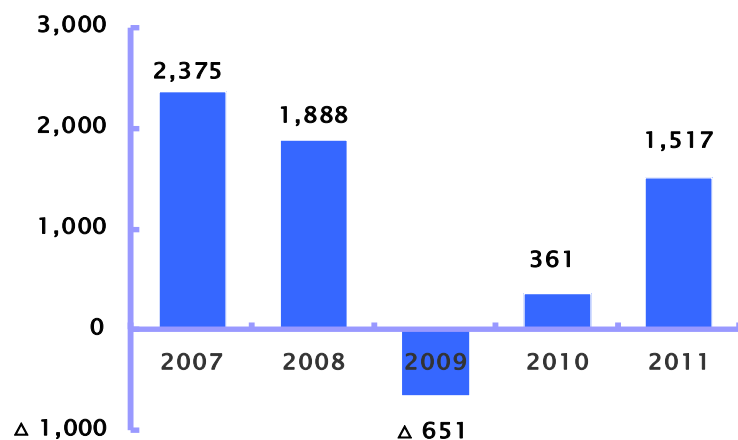


LDC/TFT Color Filter Repair
System RAGNAS Series

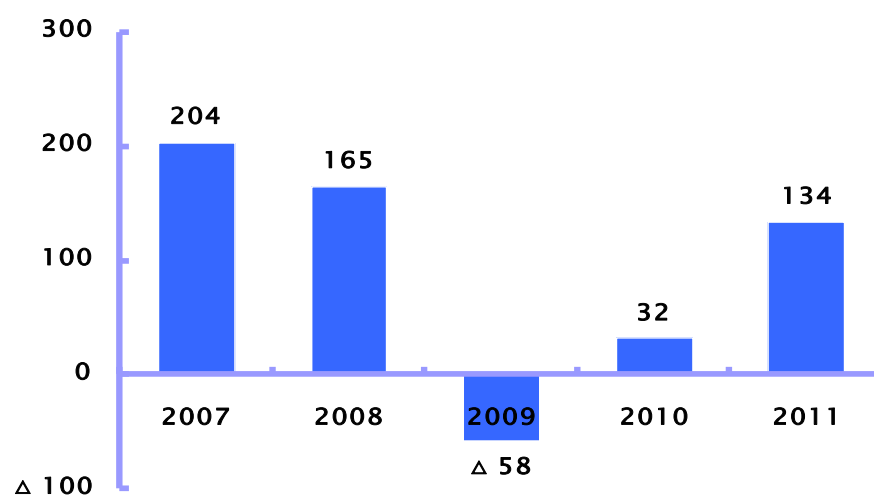


Highlight of consolidated business achievement for the past five years (1)

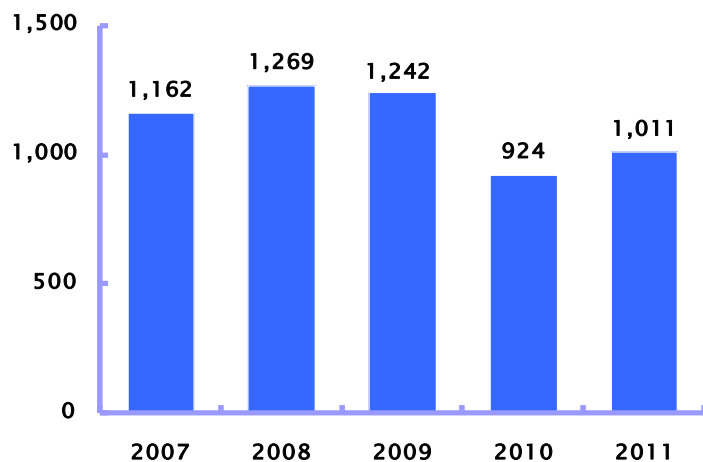
■ Net profit for each term (million yen)



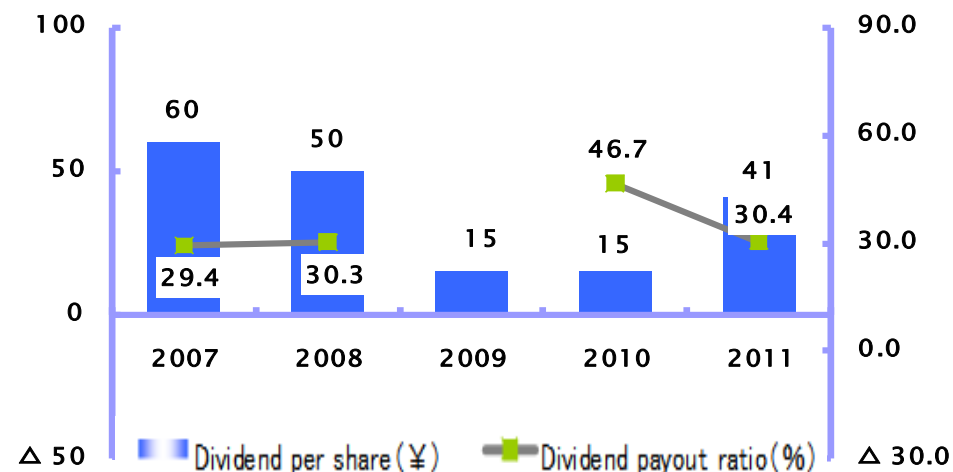
■ Net profit per share for each term (yen)



■ R&D expenditure (million yen)

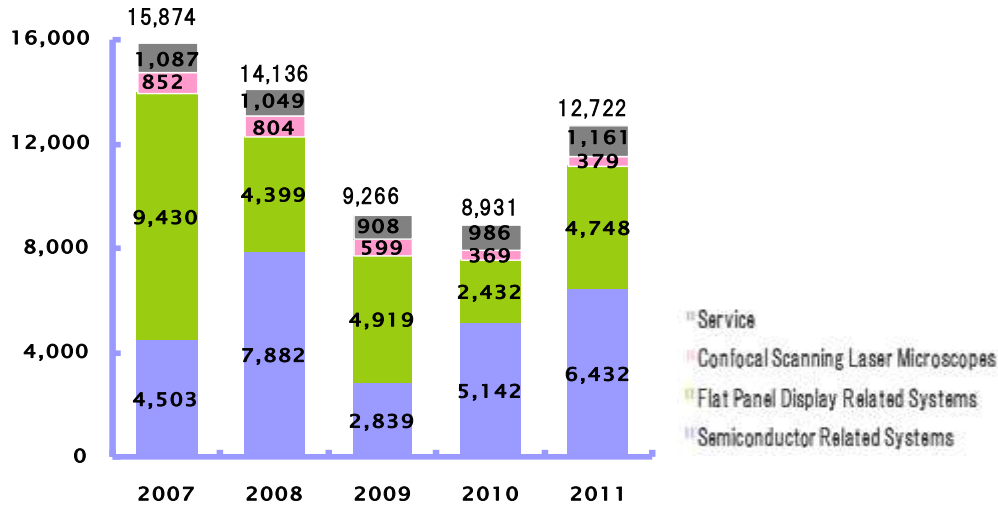


■ Dividend per share (yen) and dividend ratio (%)

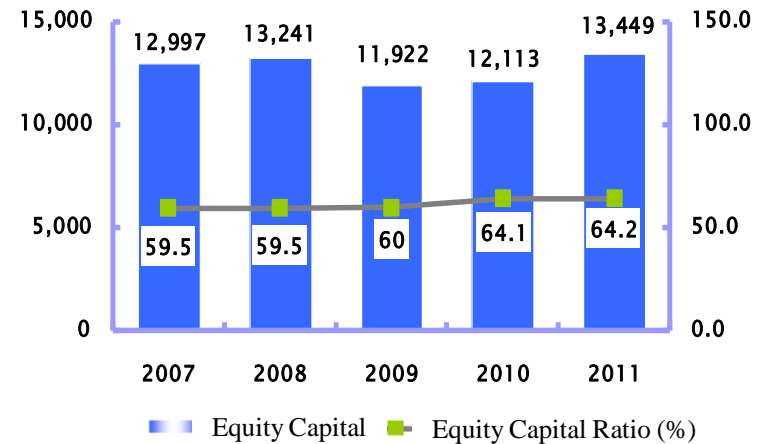


Highlight of consolidated business achievement for the past five years (2)

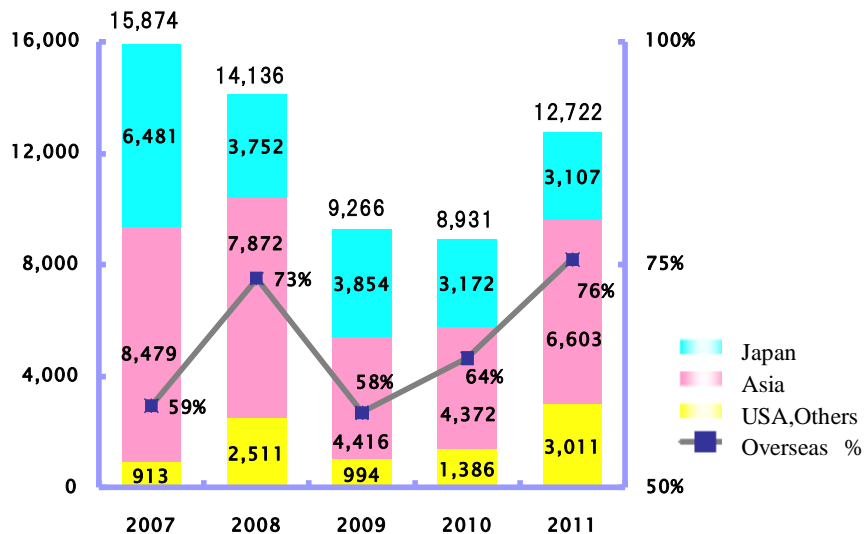
Sales volume by product (million yen)



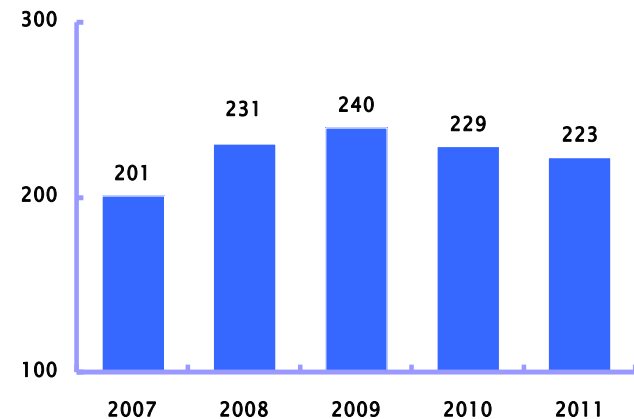
**Equity Capital (million yen),
Equity Capital Ratio (%)**



Sales volume by region (million yen)



Number of employees



Features of main new products for 2010 and examples of core technologies.

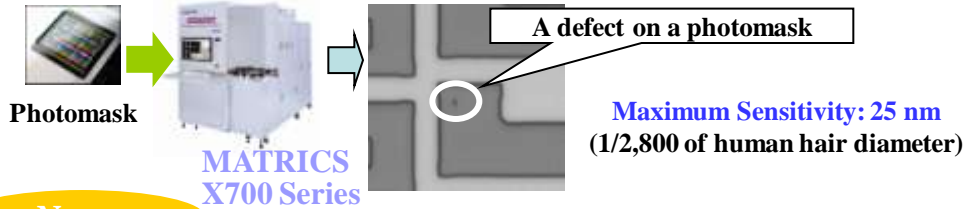
New Products

Higher

Reinforcement of the already existing field.(Development of the next generation tools):

Semiconductor Photomask Inspection System

The most advanced photomask inspection system MATRICS700 Series for coping with finer design rules. Implementation of remarkably improved sensitivity and stability based on the 213 nm laser light source uniquely developed by Lasertec.

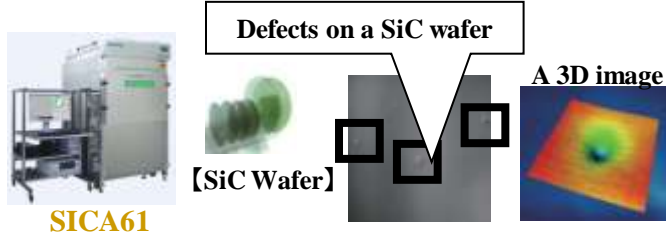


Newer

Accelerate new business development: PV Cell related, SiC wafer inspection system

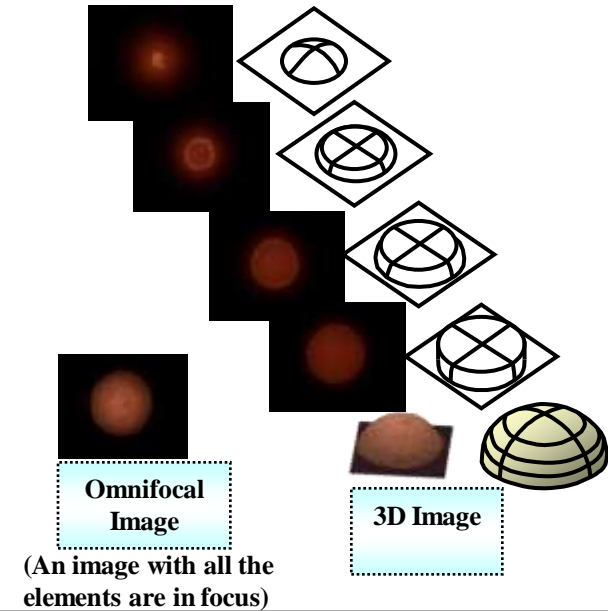
SiC wafer inspection/review System SICA61

Microscopic confocal optics and differential interference are combined for development of SICA61. Various defects that have not been detected can be now detected.

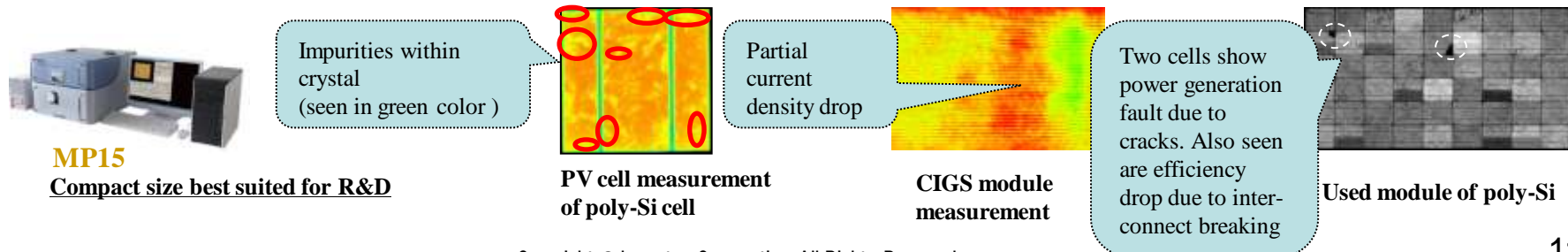


Confocal Optics Technology

It is possible to generate images with all the elements in focus (omnifocal image) by synthesizing all the images in focus. Furthermore, omnifocal images can be displayed in the 3D mode.



PV cell conversion efficiency distribution measurement system MAP Series



For Reference; Outline of semiconductor manufacturing

Maskblanks

Transparent quartz glass substrate for making photomasks (6 inch sq. 0.25 inch thick)

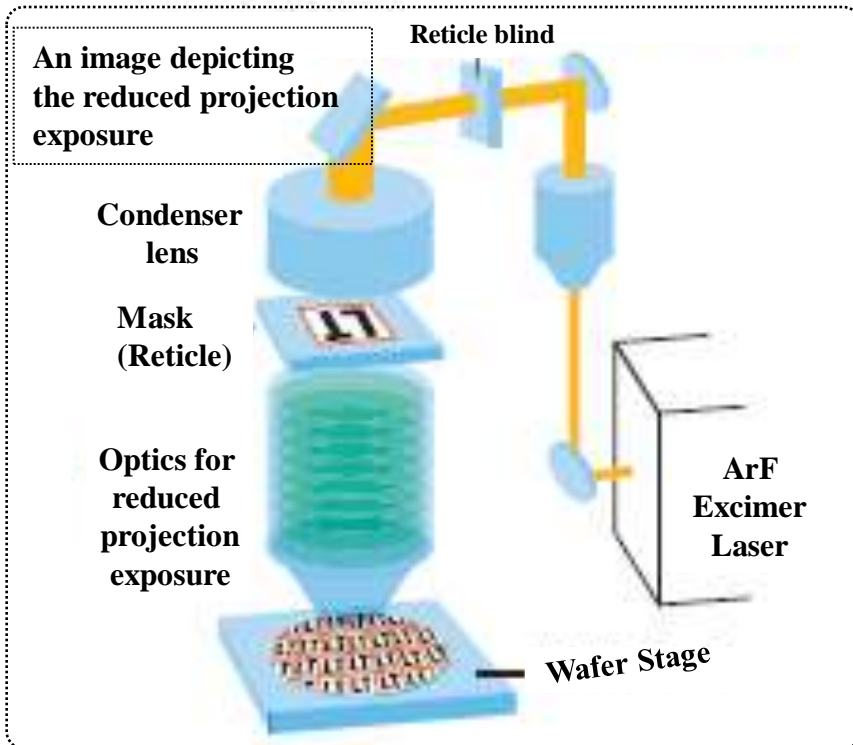
Mask

Mask is made of maskblanks with circuit patterns drawn on the surface. (Also called Reticle)
Several tens of photomasks (circuit patterns) are necessary to manufacture one kind of device.

Semiconductor Device

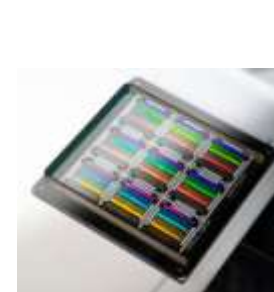
Patterns on masks are transferred and printed on wafers using exposure light (reduced projection exposure)
Then, after going through etching and other processes, semiconductor devices are formed on wafers.

Defects on photomask that places itself at the very front end of the semiconductor manufacturing processes could cause deadliest problems in the semiconductor manufacturing processes.

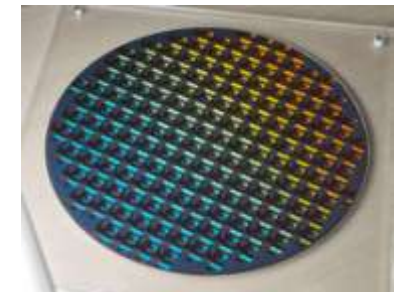


The finer the pattern becomes, the shorter the wavelength of the exposure light needs to be and currently used wavelengths are g-line (wavelength 436 nm) and i-line (wavelength 365 nm) of a high-pressure Hg Lamp, KrF excimer laser (wavelength 248 nm) and ArF excimer laser (wavelength 193 nm).

Note that the mask usage for LCD is principally in the same way. Because the panel size is very large and resolution as high as that of semiconductor is not necessary, accordingly. For that reason, exposure is performed not by the reduced projection but by the same size projection for pattern transfer.



Mask sample



Wafer sample