

## OBJECTIVE LENS IMAGE FORMATION LENS (NUV/VIS/NIR)



NUV/DUV series

Near UV Objective lens



M.PlanAPO/HR series

Visible wavelength Objective lens



PEIR/PEIR-2000HR series

Near IR Objective lens



MS-200-TCD26.5 series

f=200mm Image Circle  $\phi$ 26.5mm



MS-200-TCD33 series

f=200mm Image Circle  $\phi$ 33mm

## MEASUREMENT SOLUTION



MIF series

Interference Objective lens



Differential Interference Optics

DIC series

## LASER SOLUTION



UV Laser Maker

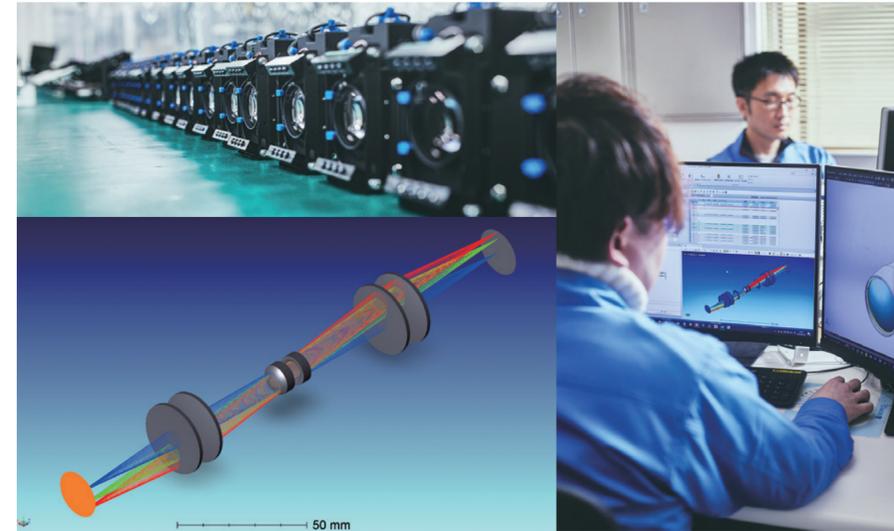


Laser Welding / Processing

## CUSTOMIZE

# THE OPTIMAL SOLUTION BASED ON OUR PROVEN TRACK RECORD

Experience Complete Satisfaction with Our Vertically Integrated R&D and Manufacturing System in Japan.



Our R&D and Total Solution:

### 4 steps approach

We follow 4 steps approach to develop our own products that align with the evolving demands of society and customers. Furthermore, we offer flexible customization of our product designs, allowing us to provide a comprehensive solution that addresses varied customer requests.



株式会社 清和光学製作所



URL <https://www.seiwaopt.co.jp/>

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**OPTICS**  
IS OUR  
**CORE VALUE**

# OPTICAL PRODUCT OVERVIEW

**SEIWA OPTICAL**

## OPTICAL SOLUTION

# EXPLORE OUR EXTENSIVE LENS LIBRARY AND FIND THE PERFECT FIT FOR YOUR NEEDS

## TELECENTRIC LENS



FHL series

$\leq 3\mu\text{m}/\text{pixel}$  25Mega Pixel



SVL-33/44 series

Image Circle= $\phi$ 33mm/44mm



SVL-64 series

Image Circle =  $\phi$ 64mm



FXL series

$3.45\mu\text{m}/\text{pixel}$  5Mega pixel



FVL series

VGA / 2Mega pixel

## ZOOM LENS



MSZ-0745/MS-501

C-mount Zoom



MS-12AZ/MS-12Z

Zoom ratio 12x C-mount



MSZ-APO

Zoom ratio 6x for convince with M.PlanAPO objective lens series.

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## IMAGE FORMATION LENS



MS-100-TCD16.5-C  
MS-150-TCD25-C  
MS-200(400)-TCD26.5-C  
MS-200-TCD33-KLR  
MS-200-IR2000-C  
... and more ! !

Wavelength	VIS	VIS	VIS	VIS	NIR
Focal length (mm)	100	150	200 / 400	200	200
Image circle (mm) (Max)	16.5	19.3(25)	19.3(26.5)	33	20
Camera Mount	C Mount	C Mount	C Mount	F Mount	C Mount

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## OBJECTIVE LENS

Visible Objective Lens  
M.PlanAPO series

Visible Wide Field Objective Lens  
M.PlanAPO series

266/355nm UV Objective lens  
DUV Plan / NUV Plan series

1100-1600nm Near IR Objective lens  
PE IR Plan series

2000nm Near IR Objective lens  
PE IR 2000HR series

Michelson White Interference Objective lens  
MIF series



	DUV 266nm	NUV 355nm	VIS	VIS	NIR 1100 - 1600nm	NIR 2000nm
Series	DUV Plan	NUV Plan APO	M.Plan APO	M.Plan APO HR	PEIR Plan	PEIR Plan 2000HR
Magnification	20× 50×	20× 50×	5× 10× 20× 50× 100×	1.5× 2.5× 5× 10×	1× 2.5× 10× 20× 50× 100×	10× 20× 50×
Image Circle (mm)	Φ24	Φ24	Φ24	Φ33	Φ24	Φ24

## OPTICAL SOLUTION

# LEAVE IT ALL TO SEIWA OPTICAL

## - FROM BENCH TOP OBSERVATION TO FULL AUTOMATION EQUIPMENT

As a microscope manufacturer spanning over half a century, we can provide you with the best solution tailored to your specific requirements.

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## FOCUS UNIT



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## LIGHTING



LED lighting  
LED light source  
Fiber Light guide  
Near IR light source  
Metal Halide Class LED light source

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05

## AREA CAMERA • LINE CAMERA

[ We handle many products from various manufacturers. ]  
\*SEIWA OPTICAL is a special agent of Toshiba TELI.



CMOS Camera  
InGaAs Camera  
CCD Camera

03

01

07

06

## FRAME GRABBER BOARD

[ We handle many products from various manufacturers. ]

CameraLink  
CameraLink HS  
CXP  
GigE  
etc...



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## AUTO FOCUS SYSTEM



**LAF-5S-R2**  
Laser tracking type  
(Built-in microscope)  
670nm semiconductor laser  
Sampling rate max. 5kHz

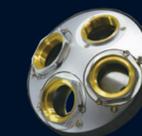


**AFC-300CL**  
Image Contrast type  
Interface : CameraLink

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## OBJECTIVE LENS TURRET

4 noses Manual Turret



5 noses Motorized Turret



Side Motor type

Center Motor type

Center Motor (Tilt) type



Semiconductor Inner Observation Microscope  
**SWIR-5200**

This microscope can observe the inside of semiconductor devices such as silicon wafers, chips, MEMS, and CSP using the transmission and reflection characteristics of infrared light.