

Union

DCM-40



DCM-60



DOUBLE VIEW MICROSCOPE DCM-40/60

For comparison of top & bottom patterns of a wafer

Outline of Product

DCM-40/60 is a special microscope designed to see if the top and bottom patterns of a wafer are identical with each other. With DCM-40/60, it is possible to superimpose the two patterns in one view field (usually on monitor screen) for their comparison. Any differences between them can be easily detected, and the amount of difference can be determined by linear gauge & counter.

Objectives are available in various magnifications (5X, 10X, 20X, 40X), making DCM-40/60 applicable to a variety of materials.

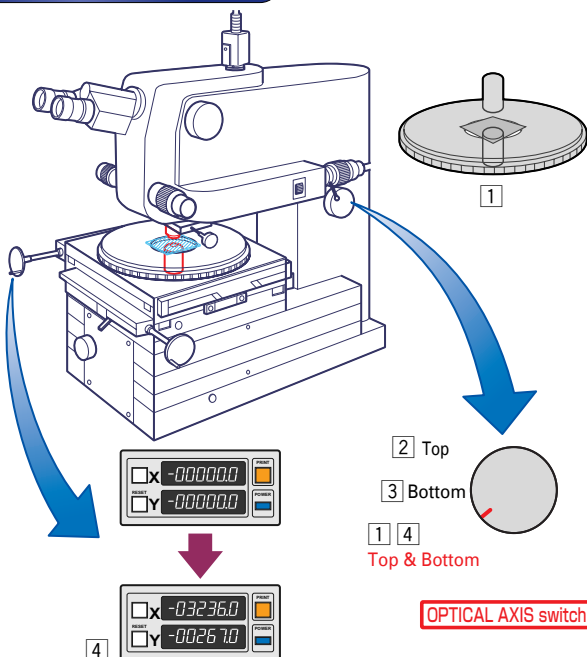
DCM-40 is for wafers of up to 4 inches. DCM-60 is for wafers of up to 6 inches.

- Easy alignment of beam axes of upper and lower objectives.
- DCM-40/60 can come with various types of stages.
- Comes with C mount as standard. TV monitor observation and photographing are possible. (Both CCD video camera and Digital Camera can be used. Digital Camera adaptor is optional.)
- It is possible to observe top or bottom face alone.

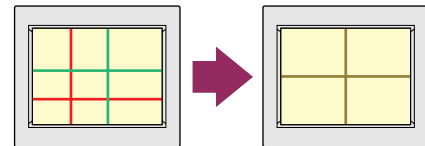
Specifications

	DCM-60		DCM-40		
Objectives (To be selected by customer)	(Total Magnification) Top Bottom	(50X) PLM5X PLM5X	(100X) PLM10X PLM10X	(200X) PLLWDM20X PLLWDM20X	(400X) PLLWDM40X PLLWDM40X
Eyepiece	A pair of SUW10X (including Micrometer Reticle)		A pair of UW10X (including Micrometer Reticle)		
Total Magnification	50X to 400X (Larger Magnifications are available on custom-order basis.)				
Travel Distance of Upper Objective	24mm		30mm		
Travel Distance of Lower Objective	3mm		12mm		
Filter	Top : Green Bottom : Red				
Stage & Counter	150 x 150mm Manual Stage KC-12R Counter (1 μ m reading)		50 x 50mm Manual Stage, Digital Micrometer (1 μ m reading) 100 x 100mm Manual Stage, KC-12R Counter (1 μ m reading)		
Stage Travel	X : 150mm Y : 150mm		X : 50mm Y : 50mm / X : 100mm Y : 100mm		
Wafer Holder	Maximum : 6 inches		Maximum : 4 inches		
	Holder can be supplied in specially designed shape on custom-order basis.				
Stage Rotation	360°				
Illumination	150W Halogen Light Guide Illumination				
Thickness of Material	20 mm or less		30mm or less		
Type of Calibration Chart	Calibration Chart for Optical Axis Alignment				

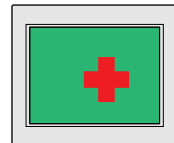
Measurement Procedure



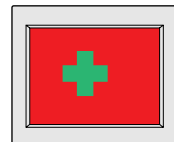
- 1 Set OPTICAL AXIS switch to Top & Bottom. Align the optical axes of upper and lower objectives with calibration chart.



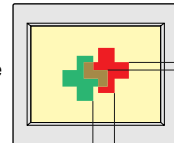
- 2 Place wafer on wafer holder. Set OPTICAL AXIS switch to Top. Focus on the top surface.



- 3 Set OPTICAL AXIS switch to Bottom. Focus on the bottom surface.



- 4 Set OPTICAL AXIS switch to Top & Bottom. See if the two patterns completely fuse into one image. Determine the amount of dislocation, if any, with linear gauge & counter, or with micrometer reticle of eyepiece.



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• All specifications are subject to change without prior notice.