

Optical Measuring & Inspection Comparators

For machinists, toolmakers, inspectors, laboratory technicians, lithographers, printers, photo engravers, etc.

Features:

An optimum quality triple element Kellner/Achromatic Lens of 7x or 10x magnification in a focusing mount gives sharp undistorted images free of aberrations. The scales are photo etched into a glass reticle which is placed in actual contact with the measured object, thus obtaining simultaneous enlarged images of the scale and measured object. Highly accurate measurements are thus obtained. Can be used also as a high grade magnifier. Extra glass reticles are available. These are interchangeable and screw directly to the bottom of the unit. Interchangeable reticles allow measurements of diameter, radius, angle, thickness and thread.



Comparator with 1 Reticle
(only with vinyl case)

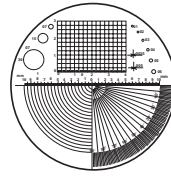
Comparator	Reticles	Order #	Price Ea.
7x	#5 Only	0655718	\$55.94
10x	#5 Only	0655426	80.41

Comparator and Reticle Sets
(All with velvet lined fitted cases):

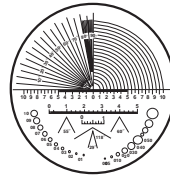
Comparator	Reticles	Order #	Price Ea.
7x	#1,5,7,8,12	0655759	\$101.59
10x	#1,5,7,8,12	0655427	157.28

7x Reticles are approximately 1" diameter;
10x Reticles are approximately 1 1/2" diameter.

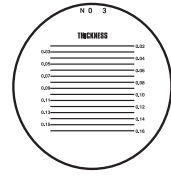
Reticle #	7x Order #	Price Ea.	10x Order #	Price Ea.
1	06555015	\$13.23	06554018	\$16.29
2	06555023	13.23	06554026	16.29
3	06555031	13.23	06554034	16.29
4	06555049	13.23	06554042	16.29
5	06555056	13.23	06554059	16.29
6	06555064	13.23	06554067	16.29
7	06555072	13.23	06554075	16.29
8	06555080	13.23	06554083	16.29
9	06555098	13.23	06554091	16.29
10	06555106	13.23	06554109	16.29
11	06555114	13.23	06554117	16.29
12	06555122	13.23	06554125	16.29
13	06555130	13.23	06554133	16.29



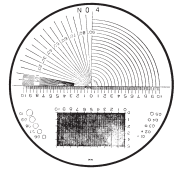
RETICLE #1
Order Number:
7x 06555015
10x 06554018



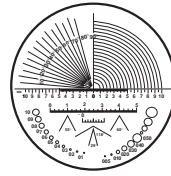
RETICLE #2
Order Number:
7x 06555023
10x 06554026



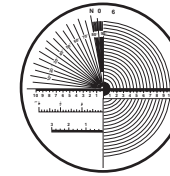
RETICLE #3
Order Number:
7x 06555031
10x 06554034



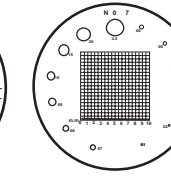
RETICLE #4
Order Number:
7x 06555049
10x 06554042



RETICLE #5
Order Number:
7x 06555056
10x 06554059



RETICLE #6
Order Number:
7x 06555064
10x 06554067



RETICLE #7
Order Number:
7x 06555072
10x 06554075



RETICLE #8
Order Number:
7x 06555080
10x 06554083

Deluxe Microscopes



MADE IN JAPAN

- For surface inspections, centering, measuring small holes, meshes and printed letters
- Knurled knobs for easy focal adjustment
- Photo etched reticle • Removable base
- Illumination light allows use in dark places
- Rack-and-pinion focusing for smooth and simple operation throughout 1 1/2" lens barrel movement
- Measuring scale (can be turned out of focus)
- Removable battery powered light source; adjustable position to vary light intensity
- Operates on one penlight (AA) battery (included). Replacement battery is #76529056, 4 pack
- Supplied with reticle with straight line scale (see chart)
- For optional 90° Crosshair reticle, order #06539423 (fits all 4 models shown)



Light Source

Magnification	Overall Ht. (In.)	Focusing Distance (In.)	Field of View (In.)	Mir's #	Reticle Scale		Order #	Price Ea.	
					L (In.)	Grad. (In.)			
20x	6 1/4	1.7720	0.350	17	0.250	0.0025	06539449	\$275.00	
40x	6 1/4	1.0830	0.155	19	0.100	0.0010	06539464	275.00	
40x	6 1/4	1.0830	0.155	19	0.100	0.0010	102471530	402.11	
60x	6 1/4	0.9840	0.135	21	0.100	0.0010	06539480	365.46	
100x	7 1/4	0.2170	0.070	23	0.050	0.0005	06539506	365.46	
150x	7 1/2	0.2874	0.038	40-134-9	0.035	0.0002	03183688	375.00	
200x	7 1/2	0.2244	0.028	40-135-6	0.024	0.0001	03183696	450.00	
300x	7 1/2	0.1216	0.019	40-136-4	0.016	0.0001	03183704	550.00	
40x	Crosshair Reticle only							06539423	43.64

¹With crosshair reticle ²SPI Brand

Zoom Comparator 816



- Continuous zooming magnification from 8x to 16x with click stops at 8x, 10x, 12x, 14x, and 16x
- Field of view .788" to .394" dia.
- Scale division .005"
- Size 2.56"L x 1.77"W dia.
- Diopter adjustment ring +2.5D to -5D

Desc.	Order #	Price Ea.
SPI Zoom Comparator	06544001	\$254.50



Fiber Optic Illuminator



This illuminator is an ideal light source for: stereoscopes, borescopes, fiberscopes, general inspection and micro-component assembly. Rugged, all metal, 150 Watt quartz halogen illuminator, is designed for use with a variety of fiber optic light guides. A special design feature provides stable mechanical support for "obedient positioning" light guides. Dimensions: 4.5"H x 6.5"W x 7"D. Bulb Life: 40-2000 hours (lamp life is greatly extended when used at lower intensity). Color Temperature: 3350°K. Operates on 110V AC, 2.5 Amps



Desc.	Order #	Price Ea.
150 Watt Illuminator	06558779	\$358.26
(A) 2.0" (50mm) I.D. Annular Ring Light Guide	06558795	488.07
Replacement 21V, 150 Watt Halogen Bulb	06558787	37.92

Fine Centering Scopes



A rugged shop tool containing a 45 power optical system, coupled with a unique runout compensating adjustment feature. Enables unskilled operators to locate work for drilling, boring, etc., on vertical mills, jig borers, or drill presses. Edges, lines or punch marks on workpieces can be located or centered relative to the axis of the machine spindle.

Also used to measure dimensions that are inaccessible to mechanical measuring devices in inspection work. To use, place instrument in machine. Locate cross lines on work to match line(s) in viewing aperture. Knurled sleeve on lower end of scope is turned to compensate for misalignment up to a 1/16" runout.

True position accuracy of +/- .0001" can be obtained in approximately one minute! After alignment, the scope is replaced in the spindle with the cutting tool. The work layout intersection is now in the exact center of the spindle axis. As an inspection tool, the crosshair reticle model is preferred. The reticle lines are used as a reference of movement from point to point of measure along both X and Y axis. This movement can be measured either with the dial of the work table feed screw, or with an appropriately mounted dial indicator. Overall length 3". Shank diameter 3/8". Field of view 1/8". Working distance 1" from end of lens mount. Eye piece angle 60°.



Order #	Price Ea.
06539332	\$233.93