



CO-MM-XY Video Measurement System



**System Includes:**

- ?? Micro Zoom Optics
- ?? Z-Column with fine focus holder
- ?? 6" x 8" XY Table (1-micron encoder)
- ?? 1/3" Color CCD camera
- ?? Fiber optic ring illuminator
- ?? Pentium PC, 17" monitor, keyboard and mouse
- ?? AVM 200 Software and hardware
- ?? Windows XP

Sciencescope has incorporated the newest technology and designs to provide a superior product at a reasonable price. The Sciencescope Video Measurement System combines the inspection capabilities of a video microscope with the measurement capabilities of an optical comparator. System comes standard with a 39x to 248x Micro Zoom Lens with a working distance of 4". A 1/3" format color CCD camera (480 TV Lines) with DSP Technology provides you with clear, distortion-free, and color rich images. The system's ability to remain in focus throughout the entire range of magnification allows you to scan large areas and then zoom in to take a closer look at possible problem areas. 6" x 8" manual XY table with 1 micron encoders (non-contact), mounted onto a Z-Column provide you with a rugged and yet high precision measurement system. System includes a Z-Column with a fine focus rack in order to provide sharp edges for inspection or measurement applications. 150 Watt fiber optic illuminator with annular ring light guide provides "shadow-free" illumination, *optional back lighting available*. Included Pentium-based PC (Windows XP) with 17" monitor is connected to XY table and is fully loaded with the AVM200 Measurement Software. The AVM200 software is user friendly and extremely powerful; uses the latest in edge detection technology to analyze video images for dimensional measurements. It then compares the measurements to nominal values and tolerances to identify conditions of non-compliance. NIST Traceable calibration target for field of view applications included.

## Optical Performance

		CCD Couplers														
		0.35			0.5			1			2					
Aux Lens W.D.	Mag.	FOV (mm)			Mag.	FOV (mm)			Mag.	FOV (mm)			Mag.	FOV (mm)		
0.3x 314 mm	4x - 26x	HI MAG	H: 10.16	V: 7.62	6x - 37x	HI MAG	H: 7.11	V: 5.33	12x - 74x	HI MAG	H: 3.56	V: 2.67	24x - 148x	HI MAG	H: 1.78	V: 1.33
		LO MAG	H: 65.31	V: 48.96		LO MAG	H: 45.71	V: 34.29		LO MAG	H: 22.86	V: 17.14		LO MAG	H: 11.43	V: 8.57
0.5x 189 mm	7x - 43x	HI MAG	H: 6.10	V: 4.57	10x - 62x	HI MAG	H: 4.27	V: 3.20	19x - 124x	HI MAG	H: 2.13	V: 1.60	38x - 248x	HI MAG	H: 1.07	V: 0.80
		LO MAG	H: 39.18	V: 29.39		LO MAG	H: 27.43	V: 20.57		LO MAG	H: 13.71	V: 10.29		LO MAG	H: 6.86	V: 5.14
1x 108 mm	13x - 87x	HI MAG	H: 3.05	V: 2.29	19x - 124x	HI MAG	H: 2.13	V: 1.60	39x - 248x	HI MAG	H: 1.07	V: 0.80	78x - 496x	HI MAG	H: 0.53	V: 0.40
		LO MAG	H: 19.59	V: 14.69		LO MAG	H: 13.71	V: 10.29		LO MAG	H: 6.86	V: 5.14		LO MAG	H: 3.43	V: 2.57
2x 32 mm	26x - 174x	HI MAG	H: 1.52	V: 1.14	39x - 248x	HI MAG	H: 1.07	V: 0.80	78x - 496x	HI MAG	H: 0.53	V: 0.40	156x - 992x	HI MAG	H: 0.27	V: 0.20
		LO MAG	H: 9.80	V: 7.35		LO MAG	H: 6.86	V: 5.14		LO MAG	H: 3.43	V: 2.57		LO MAG	H: 1.71	V: 1.29

\* Magnification based on a 14" Monitor (13" viewable)

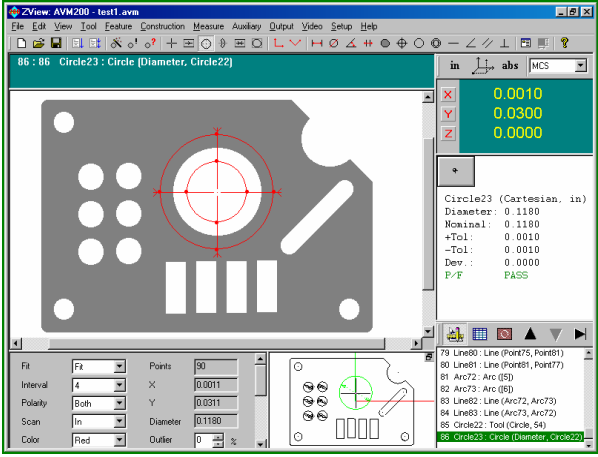
\* FOV based on a 1/3" CCD Color camera

130 Liberty Street Painesville, Ohio 44077  
 TEL: (440) 354-6436 FAX: (440) 639-9983

## Measurement Software

The AVM200 Software uses the latest digital image processing technology to analyze video images for dimensional measurement. It then compares the measurement to nominal values and tolerances to identify conditions of non-conformance. The software can also be integrated to your application.

The software is designed for image documentation, product inspection and quality control, and provides a full range of functions for image capture, measurement, archival, image comparison, image and result output. It is easy to use and will deliver reliable and repeatable precision measurement results on the hardware of your choice.



Display status in Feature view.

Get instant results in DRO view.

Show live or bitmap image in Imageview.

Show step results in Step view.

Setup tool parameters in Tool View

Show CAD-like graphics in Part view.

List part program in Programview.

## Options

IL-88-FOI	Fiber Optic Illuminator (150 Watt)
FGBL-22	2" x 2" Backlight guide
MZ-CP05	0.5x CCD Coupler
MZ-CP10	1.0x CCD Coupler
MZ-CP20	2x CCD Coupler
MZ-20-70	2x Auxiliary lens