



AVEN



Microscope Selection Guide

A step-by-step guide to creating your customized
stereo-zoom microscope setup

Let's Get Started

Binocular Microscopes

Binocular microscopes are an excellent choice for high-volume inspection stations, parts and quality inspections, medical or scientific research, and most applications requiring high quality 3D images. All images are viewed through eyepieces for optimum, field of view, depth of field, clarity, and color. You cannot capture images using binocular microscopes.



Trinocular Microscopes

Trinocular microscopes come have all the advantages of a binocular scope, as well as a trinocular port for attaching a camera. These scopes are ideal for operators who need both the depth of field provided by traditional eyepieces, and the option of capturing a 2D image for further study.



Inspection Cameras

(Trinocular Microscopes Only)

By attaching an inspection camera onto the port of your trinocular microscope, you can view your inspection on a monitor and digitally save images. USB models connect to your computer and require software for image capture, measurement and annotation. HDMI cameras connect directly to an HD monitor and save images to a SD card or USB flash drive. Advanced HDMI cameras have integrated imaging/measurement software.



Microscope Stands

Pole stands require a basic focus mount. They are not tiltable but can be adjusted vertically.



Arm stands require a tiltable arbor or E-arm focus mount, and can be adjusted horizontally and vertically.



Illumination

Next, think about illumination. LED ringlights are ideal for lower range magnifications, while Fiberoptic Illuminators (FOI) provide more intensity and focus of light, and work well with high-range magnifications. Fiberoptic illuminators also save a significant amount of energy, making them better for both the environment and your budget.



Articulating arm stands require a tiltable arbor or E-arm focus mount, and can be adjusted horizontally and vertically. These stands can swivel 360* and provide operators with the greatest range of working space.





Stereo Zoom

Microscopes

The AVEN Advantage

Straight Light Path

Single light path with one bend prevents image distortion



Greaseless Nylon Gears

Industrial strength gears with tight tolerances

Custom Made Prisms







Prisms custom designed to fit precisely, eliminating gaps for dust and contamination

Unibody Construction

Assures constant prism alignment

Single Gear Objective Lens Movement

Keeps the objective lenses aligned for the life of the microscope

Model #	Description	Magnification	Working Distance
SPZ-50 	Best in class magnification range and working distance	6.7x-50x (3.35x-200x with optional lenses)	41mm-240mm
SPZH-50 	Ideal for any inspection application requiring high magnification	21x-135x (180x with optional lenses)	84mm
DSV-44 	Versatile body with large magnification range and working distance	2.5x-140x (45mm-150mm with optional lenses)	45mm-150mm
SPZV-50 	Best in class magnification range and working distance	6.7x-50x (3.35x-200x with optional lenses)	41mm-240mm
SPZHT-50 	Ideal for any inspection application requiring high magnification	21x-135x (180x with optional lenses)	84mm
DSZV-44 	Versatile body with large magnification range and working distance	2.5x-140x (45mm-150mm with optional lenses)	45mm-150mm

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Stereo Zoom Microscope Selection Guide

Bi-Nocular

SPZ-50



6.7x-50x Magnification

SPZH-135



21x-135x Magnification

DSZ-44



10x-44x Magnification

Tri-Nocular

SPZV-50



6.7x-50x Magnification

SPZHT-135



21x-135x Magnification

DSZV-44



10x-44x Magnification

Inspection Cameras



26100-243
Mighty Cam 2.0



26100-244
Mighty Cam 3.0



26100-245
Mighty Cam CCD

USB Cameras



26100-253HD
Mighty Cam HDMI



26100-254
Mighty Cam HDMI
With Built-in
Software

HDMI Cameras

Microscope Stands



26800B-512
Pole Stand
with Focus Mount
& LED Illumination



26800B-570
Heavy Duty
Post Stand



26800B-519
Single Arm Boom Stand
w/Heavy Metal Base



26800B-534
Dual Arm Boom Stand
w/Heavy Metal Base



26800B-511
Pole Stand
with Focus Mount



26800B-555
Light-Weight
Articulating Arm Stand



26800B-560
Standard
Articulating Arm Stand

Focus Mount Adapter



26800B-521
Tiltable Arbor



26800B-518
E-Arm
Focus Mount

Focus Mounts



26800B-207
Focus Mount
With Integrated
LED Ring Light



26800B-517
Focus Mount with Coarse and
Fine Focus for DSZ, SPZ and
NSW Series Microscope Bodies

Illumination



26200B-214
LED Ring Light
w/ Polarizer



26200B-220
Diffuse Axial LED
Illuminator



26200B-217
Pro Series 40 LED
Ring Light



26200B-218
Pro Series 80 LED
Ring Light



26200B-211
LED Ring Light
60 LED



26200B-213
Triple Color
LED Ring Light



26200B-212
LED Ring Light
70 LED



26200A-300
ProLux LED Fiber
Optic Illuminator



26200A-402
FOI Ring Light
For Microscopes



26200A-523
Dual Pipe Light
Guide

Don't Forget



26800B-460
LED Ring Light
Adapter

Eye Pieces (optional)

Auxiliary Lenses (optional)



26800B-448
DHW-10X



26800B-450
DHW-20X



26800B-449
DHW-15X



26800B-455
10x with
10:100mm Scale



26800B-456
10x with 5:100mm
Scale



26800B-459
10x w/10:100mm
Scale Cross Hair

Finished



26800B-461
Auxiliary Lens 0.5x



26800B-462
Auxiliary Lens 0.75x



26800B-463
Auxiliary Lens 1.6x



26800B-464
Auxiliary Lens 2.0x