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Increase your
productivity
and production
quality with the
SX Elite range

Industry experience includes:
Medical, Electronics & Precision engineering

QUALITY

FOCUSED



Whether looking for molding defects, surface finish, machining residue, correct assembly or much more, quality assurance is enhanced. **Reducing cost and increasing quality.**



REDUCED COSTS + INCREASED QUALITY

Nature has designed our visual system to be so dominant that our bodies adapt to accommodate any deficiency in the way we see. By **enhancing the visual sense** we extend the body's capability.



Looking at details

Inspection of small details in finished items or supplied components is made easier and more efficient at the right magnification. Whether looking for moulding defects, surface finish, machining residue, correct assembly or much more, quality assurance is enhanced, reducing cost and increasing quality.

Working with tools

Depth perception is often required when working with tools. This is especially important when working with sensitive or delicate subjects or when working with small components. SX Elite provides the necessary depth perception allowing easier working, increasing efficiency and reducing errors.

Reporting results

Swift and accurate communication is vital in the modern working environment. SX Elite's camera system gives you the ability to quickly and efficiently capture and share images with suppliers, customers and team members, saving money and reducing waste.

Work quicker and easier

Enables easy access for reworking and sample manipulation. View more of the subject with easier location of points of interest, efficient inspecting and working with tools.

See more detail

Different subjects require different illumination. SX Elite offers direct, oblique, quadrant, ultra violet and sub-stage illumination for optimal lighting for each subject type. By lighting subjects correctly more details can be seen clearly, increasing speed and confidence of inspections and rework.

Share information, communicate efficiently and extend ability

Pictures aid accurate and efficient communication. View, capture and annotate images easily and quickly for training, archiving, communicating with colleagues, suppliers and customers.

Communicate effectively with suppliers increasing speed of issue resolution, increasing product quality and reducing down time. The easy-to-use software supports custom overlays and image enhancements, extending inspection capability.

SX Elite's camera option comes complete with ViCapture, Vision Engineering's intuitive imaging software. SX Elite's camera is also compatible with Vision Engineering's entire suite of inspection software.



MAGNIFICATION + FLEXIBILITY

SX Elite's **easy-to-use zoom control** combines speedy access to greater visual data with flexibility of operation. Click stop magnification points allow users to recall magnifications quickly, easily and repeatably. The addition of magnifying eyepieces and external objectives enable precise magnification adjustment to meet user's needs.

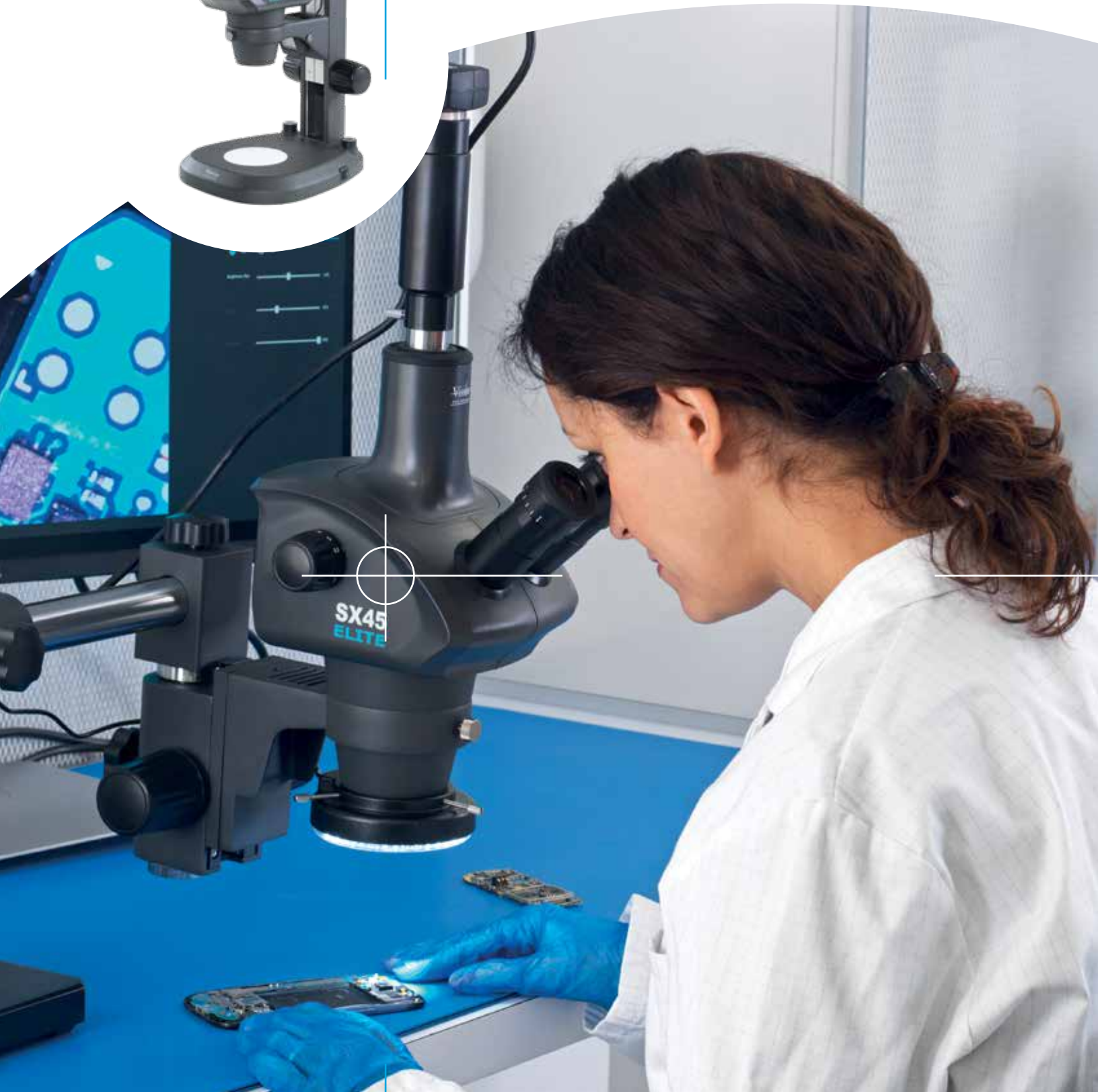


SX45 Elite with bench stand



Key features

- Stereo zoom microscope
- Available magnification range: x4 - x200
- Maximum working distance: 220mm
- Digital imaging option
- Customizable illumination
- Range of stands



STAND OPTIONS

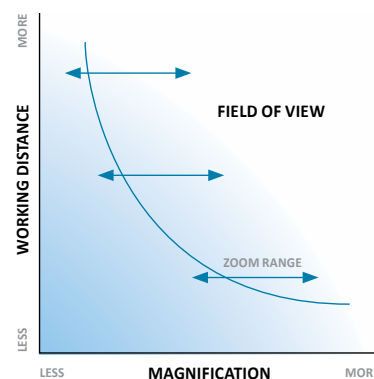
+ TECHNICAL INFORMATION

There are several factors that are inseparable when selecting **working magnification**. As magnification increases, **field of view** and **working distance** decrease.

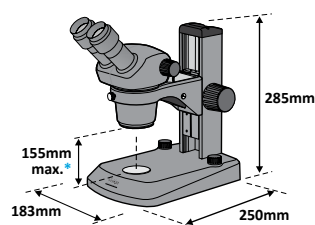
Stand selection

Select the stand that best meets the needs of the task. Require space for large samples, special equipment or clean/clear work area?

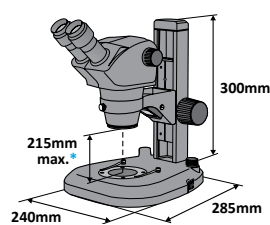
Then select a boom stand or articulated arm. If light from below is required, choose a bench stand.



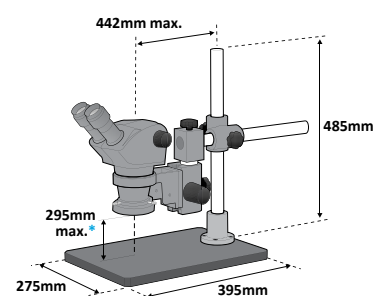
SX25 Elite bench stand



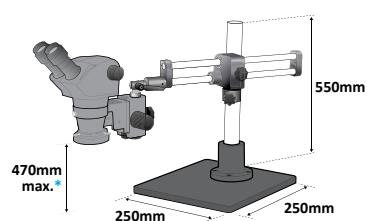
SX45 Elite bench stand



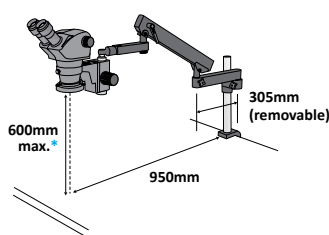
Single arm boom with base



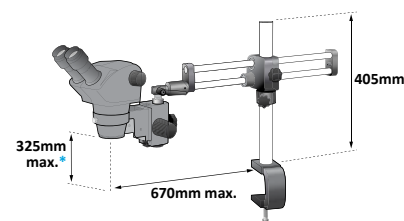
Double arm boom with base



Articulated arm boom with clamp



Double arm boom with clamp



*less working distance, with x1.0 objective

Stand options	SX25 Elite bench stand	SX45 Elite bench stand	Single arm boom with base	Double arm boom with base	Articulated arm boom with clamp	Double arm boom with clamp
SX25 Elite	✓	✓	✓	✓	✓	✓
SX45 Elite	-	✓	✓	✓	✓	✓
Sub stage illuminator	✓	✓	-	-	-	-
Incident illuminator	✓	✓	-	-	-	-
Height adjust	✓	✓	✓	✓	✓	✓
X/Y adjust	-	-	✓	✓	✓	✓
Floating stage compatible	-	✓	-	-	-	-
Ring light compatible	✓	✓	✓	✓	✓	✓

TECHNICAL INFORMATION



SX25 Elite



SX45 Elite



SX45-TR Elite

OPTICAL DATA

Standard magnification range	x10 - x45	x8 - x50	x8 - x50
Minimum / Maximum capable magnification	x5 - x180	x4 - x200	x4 - x200
Zoom ratio	4.5:1	6.3:1	6.3:1
Working distance (standard)	97mm	115mm	115mm
Working distance (maximum)	180mm	220mm	220mm
Optical principle	Greenough	Greenough	Greenough

FEATURE DATA

Binocular eyepieces	✓	✓	✓
Trinocular camera port	-	-	✓
Eyepiece options	10x, 15x, 20x	10x, 15x, 20x	10x, 15x, 20x
Additional objective	0.5x, 0.75x, 2.0x	0.5x, 0.7x, 2.0x	0.5x, 0.7x, 2.0x

ACCESSORY OPTIONS

Image capture	-	-	✓
Imaging software	-	-	✓
Floating stage	-	✓	✓
Measurement comparison graticule	✓	✓	✓
Standard ring-light	✓	✓	✓
Quadrant ring-light	✓	✓	✓

SX25 Elite optical configurations

Eyepieces	Objective Lens	Zoom Range	Working Distance
x10/20 E.W.	x0.5	x5 - x22.5	180mm
x10/20 E.W.	x0.75	x7.5 - x33.8	120mm
x10/20 E.W.	x1.0*	x10 - x45	97mm
x10/20 E.W.	x2.0	x20 - x90	30mm
x15/16 W.F.	x0.5	x7.5 - x33.6	180mm
x15/16 W.F.	x0.75	x11.3 - x50.6	120mm
x15/16 W.F.	x1.0*	x15 - x67.5	97mm
x15/16 W.F.	x2.0	x30 - x135	30mm
x20/11 W.F.	x0.5	x10 - x45	180mm
x20/11 W.F.	x0.75	x15 - x67.5	120mm
x20/11 W.F.	x1.0*	x20 - x90	97mm
x20/11 W.F.	x2.0	x40 - x180	30mm

*Standard objective

SX45 Elite optical configurations

Eyepieces	Objective Lens	Zoom Range	Working Distance
x10/22 F.N.	x0.5*	x4 - x25	220.6mm
x10/22 F.N.	x1.0	x8 - x50	115.0mm
x10/22 F.N.	x2.0	x16 - x100	57.5mm
x15/16 F.N.	x0.5*	x6 - x37.5	220.6mm
x15/16 F.N.	x1.0	x12 - x75	115.0mm
x15/16 F.N.	x2.0	x24 - x150	57.5mm
x20/13 F.N.	x0.5*	x8 - x50	220.6mm
x20/13 F.N.	x1.0	x16 - x100	115.0mm
x20/13 F.N.	x2.0	x32 - x200	57.5mm

*Stand extension required when using x0.5 objective lens with bench stand model to accommodate increased working distance

Increase your
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visioneng.us

Vision
SX80

Industry experience includes:
Medical, Electronics & Precision engineering

QUALITY

FOCUSED



MAGNIFICATION + FLEXIBILITY

The SX80 and SX100 incorporate over 60 years of proven optical experience in a **high quality CMO-series stereo zoom** microscope. With **exceptional optics**, the modular SX80 and SX100 deliver **superb image quality** at a competitive price, with a wide array of options providing complete flexibility.

SX80

The SX80 provides high quality stereo viewing, ideal for both industry and life sciences, with a long working distance for easy assembly, manipulation, re-work, dissection, or simple inspection tasks. With an 8:1 zoom ratio, the SX80 has a standard

magnification range of x8- x64 (x256 max.) allowing fast and accurate viewing of all subjects. A compact, modular design allows accessories to be added to the configuration, without loss of clarity or contrast through the common main objective.

SX100

The high precision optics of the SX100 provide a 10:1 zoom ratio and a standard magnification range of x8- x80 (x320 max.), providing high performance stereo magnification, while maintaining a long working distance. A fine focus option provides users with advanced capabilities for critical examination, allowing operators to quickly switch between manipulation and high magnification inspection tasks, allowing for parts to be reworked accurately to pass stringent quality standards.

Key features

- High optical quality CMO stereo microscope
- Precision optics deliver high resolution, flat field and high contrast images with long working distances and large depth of field
- SX80: x8- x64 standard magnification range (x256 max.)
- SX100: x8- x80 standard magnification range (x320 max.)
- Modular systems for specific applications



SX SERIES RANGE

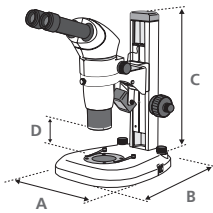


STAND OPTIONS + TECHNICAL INFORMATION



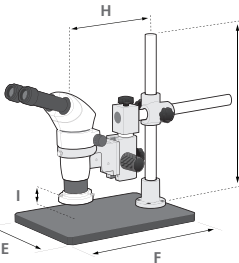
Bench stand

A = 9.45" (240mm)
B = 11.22" (285mm)
C = 13.78" (350mm)
D = 7.68" (195mm) max.
(less working distance) ♦
♦ with x1.0 objective



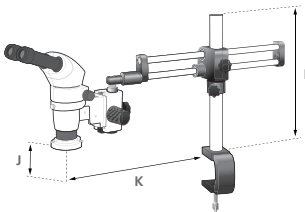
Single arm boom with base

E = 10.83" (275mm)
F = 15.55" (395mm)
G = 19.09" (485mm)
H = 17.40" (442mm) max.
I = 9.06" (230mm) max.
(less working distance) ♦
♦ with x1.0 objective



Double arm boom with clamp

J = 9.65" (245mm) max.
(less working distance) ♦
K = 26.38" (670mm) max.
L = 15.94" (405mm)
♦ with x1.0 objective



OPTICAL DATA

Standard magnification range	x8 - x64	x8 - x80
Minimum / Maximum capable magnification	x4 - x256	x4 - x320
Zoom ratio	8:1	10:1
Working distance (standard)*	3.07" (78mm)	3.07" (78mm)
Working distance (maximum)	5.12" (130mm)	5.12" (130mm)
Optical principle	CMO	CMO

FEATURE DATA

Binocular eyepiece options	10x, 15x, 20x	10x, 15x, 20x
Additional objective	0.5x, 1.0x, 2.0x	0.5x, 1.0x, 2.0x
ACCESSORY OPTIONS		
Camera arm	✓	✓
Image capture	✓	✓
Imaging software	✓	✓
Floating stage**	✓	✓
Polarization filter set	✓	✓
Double iris diaphragm	✓	✓
Measurement/comparison graticule	✓	✓
Fine focus adjustment**	✓	✓

STAND OPTIONS

Bench Stand	✓	✓
Boom Mount	✓	✓
Dual Arm Boom	✓	✓
Articulated Arm	✓	✓

SX80 optical configurations

Eyepieces	Objective Lens	Zoom Range	Working Distance
x10/20 E.W.	x0.5	x4 - x32	5.12" (130mm)
x10/20 E.W.	x1.0*	x8 - x64	3.07" (78mm)
x10/20 E.W.	x2.0	x16 - x128	1.28" (32.5mm)
x15/16 W.F.	x0.5	x6 - x48	5.12" (130mm)
x15/16 W.F.	x1.0*	x12 - x96	3.07" (78mm)
x15/16 W.F.	x2.0	x24 - x192	1.28" (32.5mm)
x20/11 W.F.	x0.5	x8 - x64	5.12" (130mm)
x20/11 W.F.	x1.0*	x16 - x128	3.07" (78mm)
x20/11 W.F.	x2.0	x32 - x256	1.28" (32.5mm)

*Standard objective

** For use with bench stand

SX100 optical configurations

Eyepieces	Objective Lens	Zoom Range	Working Distance
x10/22 F.N.	x0.5*	x4 - x40	5.12" (130mm)
x10/22 F.N.	x1.0	x8 - x80	3.07" (78mm)
x10/22 F.N.	x2.0	x16 - x160	1.28" (32.5mm)
x15/16 F.N.	x0.5*	x6 - x60	5.12" (130mm)
x15/16 F.N.	x1.0	x12 - x120	3.07" (78mm)
x15/16 F.N.	x2.0	x24 - x240	1.28" (32.5mm)
x20/13 F.N.	x0.5*	x8 - x80	5.12" (130mm)
x20/13 F.N.	x1.0	x16 - x120	3.07" (78mm)
x20/13 F.N.	x2.0	x32 - x320	1.28" (32.5mm)

VISION ENGINEERING + OUR DIFFERENCE

Vision Engineering Ltd. has been designing and manufacturing high quality ergonomic microscopes, digital instruments, inspection and non-contact measuring systems for over 60 years.

Innovation

With a philosophy of design innovation, Vision Engineering holds world patents for a number of optical / digital techniques, significantly improving viewing ergonomics and enabling customer quality and productivity improvements.

To see our focused quality, please contact your Vision Engineering branch, local authorized distributor, or visit our website: visioneng.us

Quality

Vision Engineering prides itself on quality products, electronics, mechanics and optics and is certified for the quality management system ISO 9001:2015. Quality is as important to us as our customers. Our systems have proved themselves many times over and are chosen by the world's best companies.

Global

Vision Engineering has manufacturing and design facilities in the UK and USA, plus sales and support offices throughout Europe, the Far East, Asia and the Americas. We support our customers with close technical and service support anywhere in the world.

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Distributor



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