Vision ENGINEERING

FOCUSED | QUALITY

ProteQ VISO
3D Digital Stereo Microscope

SEE MORE. DECIDE SMARTER.

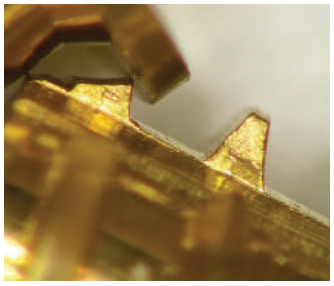
ProteQ VISO delivers the synergy of 3D stereo vision and digital imaging in one system.

ProteQ VISO brings the advantages of stereo vision into a digital platform. Inspection benefits from natural depth perception and instant capture or sharing of findings. VISO gives teams the insight and confidence to guide intricate components through assembly, to detect flaws earlier in inspection and provide clearer feedback to suppliers and customers.

Why 3D matters

See depth clearly

Human vision is naturally stereoscopic. Defects such as burrs, pits, voids, or raised edges are easier to recognise when you can see their true depth relative to the surface. Shadows and highlights in mono views can be misleading, but 3D stereo provides real form and structure in real time.



Spot errors earlier

Some flaws are only visible when seen in three dimensions. Stereo inspection provides multiple perspectives naturally, reducing the chance of missing anomalies.
With the optional Oblique and Direct Viewer (ODV), subjects can be viewed from an oblique angle, making hidden defects easier to detect without repositioning the sample.

Work with precision

3D stereo viewing improves hand–eye coordination for inspection, rework and assembly. Whether soldering microelectronics or polishing fine surfaces, accurate depth perception makes it easier to guide tools in 3D space. The 10:1 zoom makes it possible to move from a wider view of the assembly to a detailed check of small features without changing setup.

Confidence in every decision

Together, these features make inspection clearer, faster and easier to interpret. They set the foundation for practical applications where VISO delivers value across industries from electronics to aerospace, biomedical and beyond.

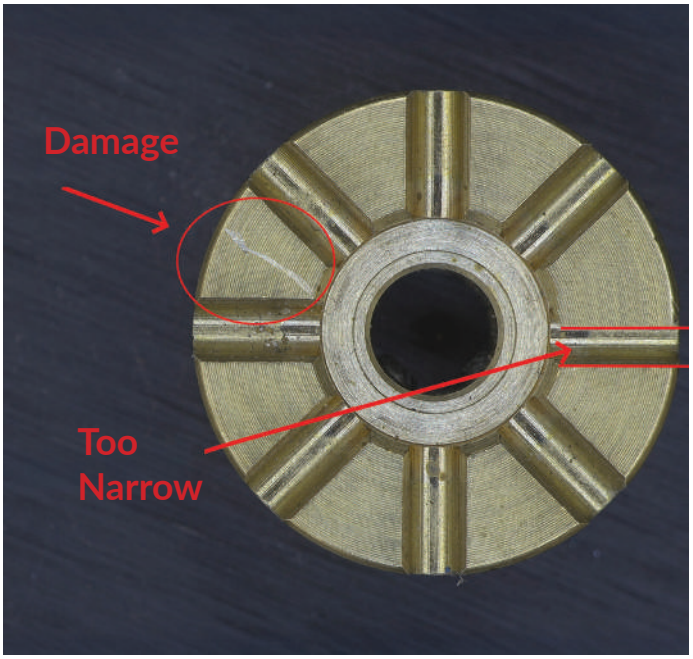
3D INSPECTION WITH CONFIDENCE

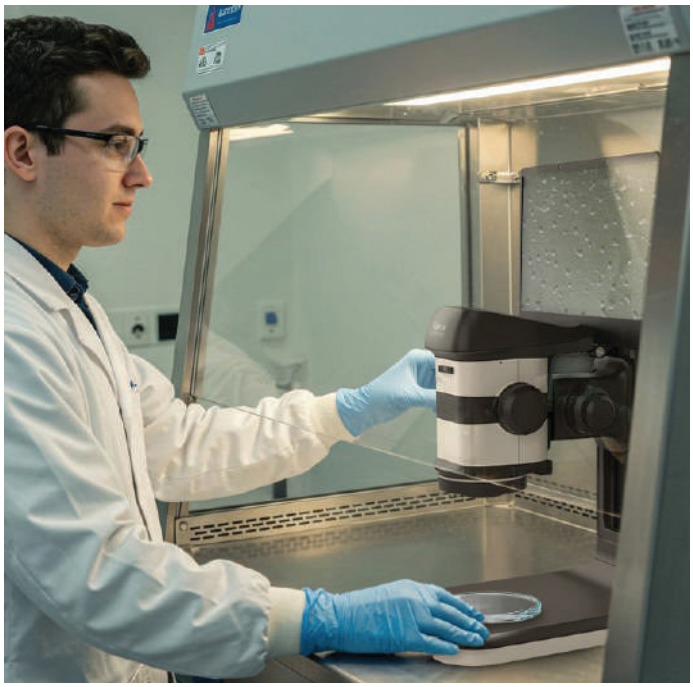
ProteQ VISO is the 3D stereo inspection platform built for precision, compliance and collaboration.

3D viewing in every detail

ProteQ VISO delivers a true 3D stereo image on an auto-stereo display, so depth and form are seen naturally without headsets or glasses. The 2 high-resolution stereo cameras capture detail in Full HD at 60 fps, while the 10:1 zoom enables smooth transitions from assemblies to fine features without losing context.

- 10:1 zoom range from overview to fine detail
- Magnification range up to 314x for flexibility across inspection tasks
- Quick-clip ring light with optimised illumination
- Optional Oblique and Direct Viewer (ODV) for angled inspection around a point of interest
- Stand options to suit different workspaces and inspection needs
- Long standoff distance for safe inspection in laminar flow cabinets
- Specialty software add-ons for measurement and analysis





Compliance you can count on

In regulated industries, reliable documentation is essential. VISO captures and records inspection sessions in 3D, providing clear, auditable evidence that supports traceability and compliance. Side-by-side comparison tools and 3D playback reduce ambiguity, ensuring that findings are accurate and defensible.

- Auditable inspection records in 3D (2D if required)
- Side-by-side comparison with golden samples or reference images
- Export images, video and data to support audit and traceability
- 3D playback to review form and surface detail, resolving ambiguity

Ideal for inspection in medical devices, biomedical applications, aerospace and defence components, and other compliance-critical sectors.

PROTEQ VISO

Built for collaboration

When inspection results need to be shared, VISO makes it simple for teams to see the same detail at the same time. Live streaming, picture-in-picture and headset-free sharing support rapid decisions and effective communication across departments, sites and supply chains.

- Live 3D streaming for instant feedback and approvals
- Picture-in-picture for two-way visual interaction
- Headset-free remote sharing without specialist equipment
- Multilingual interface for international teams

Ideal for collaboration in contract manufacturing approvals, aerospace and defence supply chains, and design reviews across distributed teams.

Adapts and enhances

VISO fits into existing inspection processes, enhancing the quality of reporting. Interface options, reporting tools and workflow controls ensure the system is easy to operate, consistent across teams and flexible enough to support regulated environments. It is equally effective for goods-in checks, supplier reporting and in-process inspection, helping identify issues earlier and supporting faster decisions.

- Kiosk mode provides a locked interface for straightforward, repeatable use
- PC mode offers advanced system control for extended capability
- On-screen overlays and annotation simplify supplier and customer reporting
- Dimensioning and analysis tools integrate inspection data into visual records, audit trails and wider workflows

Ideal for supplier reporting, regulated processes, shared-use labs, training environments, and goods-in inspection.

Ergonomics that eases work stress

Extended inspection sessions can cause eye strain, fatigue and poor posture when using conventional microscopes. 3D stereo viewing on an auto-stereo display supports a natural neck position and relaxed posture, making long sessions more comfortable and less fatiguing. The result is greater accuracy, consistency and productivity throughout the day.

- Glasses-free 3D stereo display reduces eye strain and fatigue
- Natural neck position supports upright posture and long-term comfort
- Stereo depth perception improves hand–eye coordination
- Compatible with safety eyewear and face shields without loss of clarity

High resolution stereo cameras
Digitalises left and right eye view of the subject in Full HD at 60 fps.

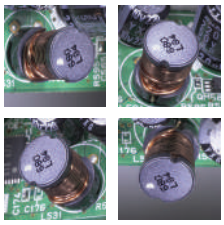
Auto-stereo display
Glasses-free 3D viewing with real depth perception.

18° display tilt
Accommodates operators of different heights.

Magnification
Range of objectives from X0.45 to X2.0.

10:1 zoom
Continuous zoom with depth of field control and user-selectable position lock for repeatable viewing.

360° Oblique and Direct Viewer (ODV)
View at a 34° oblique angle and rotate around subject.



Optimise illumination
Intelligent quick-clip ring light with optional light filters for optimised illumination across different materials.

Keypad
Easy access to controls and presets.

Pilot stage
Smooth XY control for precise sample movement.

Contrast-enhancing base.
Improves visibility of fine features and translucent materials.

Adaptable stand options
Ergo stand: compact, ergonomic setup for bench inspection.
Multi-axis stand: flexible positioning for larger components or working space.

3D View | Glasses Free | 7.1x - 314x Magnification | 10x Zoom | Ergonomic | Overlays | 3D Image Sharing | Measurement

SPECIFICATIONS

Magnification range	7.1x – 314x	Wide range of magnifications for flexibility of different industries and applications.
Zoom	10:1 zoom, with iris control and a user selectable lockable detent position	Iris controls the depth of subject that is in focus allowing greater depth to be seen or features to be visually separated from background and other surroundings.
		Detent gives one customisable lockable zoom position that can be returned to quickly and easily
Screen tilt	18-degrees	User comfort is increased for users of different heights
Resolution	Screen 3840x2160 pixels	Captures and displays images clearly with great level of detail
	Camera 2x 1920x1080 pixels @ (60fps)	60FPS displays moving subjects clearly without motion blur
Viewing distance	380 – 800mm(eye to screen)	Users can sit comfortably at the workbench or maintain a clear area over a large subject
Features	3D Image and Video capture and playback	Capture and share images and videos with 3D detail. Time and date saved to aid traceability.
	Live 3D streaming	Share live 3D view between different locations. Remove the need cost and risk of travelling or shipping samples between sites
	Overlays	On screen overlays of crosshairs, reference marks or golden sample for easier, faster, more accurate working.
	Annotation	Create and capture annotations as part of inspection reporting for clear reporting from the 3D view
	On-board measurement	Integrated dimensioning tools to aid efficient detailed inspection of subjects on one system.
	Kiosk or PC mode	Ease of use in simple kiosk mode or full PC mode allowing more complex operation and add on of additional software.
	Software add-on	Use other software to display, report on and manipulate captured images as required.
Image control	Exposure, and image settings	Get the best image for your subject with set of controls to enable optimisation of the image
Lighting	Keypad control with 3x presets	Optimise lighting for each subject with range of lighting options and lighting
	Save/recall presets	Presets make changing to preferred options quick and easy
Languages:	English, French, German, Spanish, Italian, Brazilian Portuguese, Russian, Chinese, Japanese and Korean.	To allow users easy operation in their preferred language.

Objective lens	Magnification range	Working distance	Min. Horizontal Field of view	Max. Horizontal Field of view
X0.45	7.1x – 70.7x	176 mm	4.7 mm	47 mm
X0.62	9.7x – 97.3x	128 mm	3.5 mm	35 mm
X1.0	15.7x – 157x	75 mm	2.2 mm	22 mm
X1.5	23.5x – 235x	43 mm	1.4 mm	14 mm
X2.0	31.4 - 314x	29 mm	1.1 mm	11 mm

For more information and sales support, please contact your Vision Engineering branch, local authorised distributor, or visit our website: visioneng.com

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Vision Engineering Ltd. has been certified for the quality management system ISO 9001:2015

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