Vision ENGINEERING

HAWK

Non-Contact Measuring Microscopes

For precision measurement and inspection of 3-dimensional parts

- High repeatable accuracy 3-axis non-contact measurements
- Patented optical image clearly defines edges, offering superb resolution and contrast
- Optional video edge detection for higher throughput measurements
- Wide range of system configurations and options, including fully automated CNC control

BSI UKAS QUALITY MANAGEMENT 003

FM 557119

Vision Engineering Ltd has been certified for the quality management system ISO 9001:2008.

The Hawk family of precision non-contact measurement systems

The Hawk family of non-contact measurement systems have been designed for companies who demand the highest levels of manufacturing quality, providing high accuracy, repeatable measurement of complex components of all materials, especially difficult-to-view samples, such as black, or transparent plastics.

One *Hawk family*

The *Hawk* family comprises of a wide range of systems, individually tailored for specific measurement applications.

All *Hawk* systems feature Vision Engineering's patented Dynascope™ viewing head, providing unrivalled image clarity, making accurate measurements easy.

The Hawk difference...

Vision Engineering holds world patents for a number of technologies which optimise optical and ergonomic performance. Hawk's patented Dynascope™ technology enables you to view intricate and low contrast objects with confidence, increasing measurement accuracy and productivity, while reducing costs.

Black-on-black? White-on-white? Transparent subjects? Difficult-to-view features may all be viewed in intricate detail – something not always possible with other measuring devices such as profile projectors or video measuring systems – making it easy to take accurate measurements.

Dynascope™ technology explained

Dynascope™ technology removes the need for conventional microscope eyepieces, offering the user a superior image of the subject.

Hawk is a true optical microscope. Unprocessed, high resolution, true-colour optical images are viewed through the ergonomic eyepieceless viewing head.

Light passes through the patented Dynascope™ optics, exiting the single viewing lens as twin (mono) light paths. The large diameter of these exit rays means that users do not need to precisely align their eyes with the viewing lens in order to see the subject.

> “Hawk is the ideal piece of metrology equipment for us. It is easy to use and flexible enough to gauge nearly all of our components. The reporting capability allows me to capture a data file for every component we measure, which is vital for component traceability.”

Two main variants

Hawk Elite = Optical measurement

When your quality is essential.

Hawk Elite’s success is to combine accuracy with simplicity. High resolution, high contrast images, coupled with industry-leading software make accurate measurement easy, even on difficult-to-view samples, such as black, or transparent plastics, so you can have complete confidence in your results.

The superb optical clarity also allows detailed visual inspection to be performed simultaneously.

Hawk Duo = Optical + Video measurement

When ultimate quality and flexibility is required.

Two measurement systems in one! Hawk Duo combines both optical and video measuring technologies in a single system, so whatever component you are measuring, you can be sure you have the best tools for the job.

Whether you need to make routine, or challenging measurements, Hawk Duo has the power and flexibility to measure all your components, not just the easy ones.

Man vs. Machine

optical vs. video

In the modern era of the computer, it is sometimes assumed that human capabilities cannot compete in a digital world. What can be forgotten is that computers, although capable of many things, rely on pre-programmed parameters to determine results.

Hawk uses a microscope-resolution, pure optical image, together with the best image recognition system known to man - the human brain. Combined together, this provides highly accurate measurements, particularly for difficult-to view components or complex applications, ensuring that you can get accurate results, time after time.

Configurations Summary

Modular construction

Hawk Elite and Hawk Duo are modular systems, so you can build a tailored system specific for your application.

	Hawk Elite	Hawk Duo
1. Measurement		
Optical measurement	■	■
Video measurement		■
2. Data processing		
PC software (multi-touch) ◆	□	□
PC software (advanced)	□	□
Rugged microprocessor	□■	
3. Measuring stage		
150mm x 150mm	M	M
200mm x 150mm	M	M
200mm x 150mm CNC	⚙	⚙A
250mm x 150mm	M	M
300mm x 225mm	M	M
400mm x 300mm	M	M

◆ *Requires touch-screen monitor for multi-touch use.*

Key: ■ Standard
□ Option
□■ Option (for use with manual systems only)
M Manual
⚙ Motorised
⚙A Fully automated

Have a question about your application?

Measurement applications vary greatly. When choosing a measurement system, it is essential to consider the benefits of different measurement technologies. Why not get in touch and discuss your application with our metrology specialists?

For full details, see
System options; Technical specifications

Hawk Elite = Optical measurement

When your quality is essential

Hawk Elite is a revolutionary high accuracy measuring microscope, designed to transform your measurement and inspection capabilities.

For companies who demand the highest levels of manufacturing quality, Hawk Elite excels at measuring difficult-to-view parts, such as black, or transparent plastics.

- High accuracy, 3-axis (X, Y, Z) measurement of precision component parts
- Patented optical imaging clearly defines edges, making accurate measurement easy
- Highly configurable for individual applications

Employing Vision Engineering's patented Dynascope™ optical viewing head, Hawk Elite provides simple, high accuracy measurement of precision component parts, so you can have complete confidence in your results.

From simple single-feature operation, to more complex component part measurement, Hawk Elite combines high resolution, high contrast images with intuitive software to deliver accuracy and simplicity for a wide range of measuring applications.

Success is in the simplicity.

Hawk Elite's success is in the simplicity. In order to take accurate measurements, you need high contrast, high resolution images and an accurate measuring stage. Microscope-resolution images are viewed through Vision Engineering's patented Dynascope™ optical viewing head, providing unrivalled image clarity, so you can see what you want to measure.

See it – Measure it ...

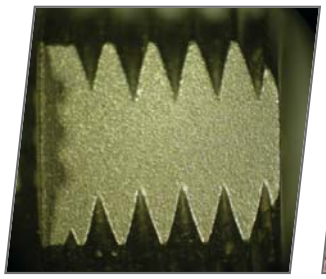
Small, intricate parts, even difficult-to-view samples, such as black plastics, white, or transparent subjects may all be viewed in intricate detail – something not always possible with other measuring devices such as video-based systems, or profile projectors – making it easy to take accurate measurements. The superb optical clarity also allows detailed visual inspection to be performed simultaneously.

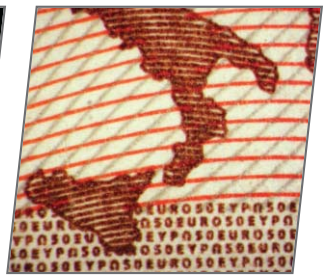
The Hawk difference...

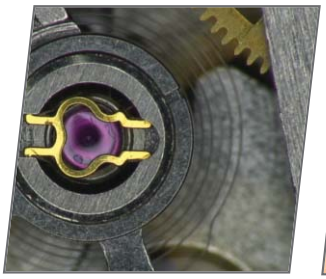
Hawk uses a microscope-resolution, pure optical image, together with the best image recognition system known to man - the human brain. Combined together, this provides highly accurate measurements, particularly for difficult-to view components or complex applications, ensuring that you get accurate results, time after time.

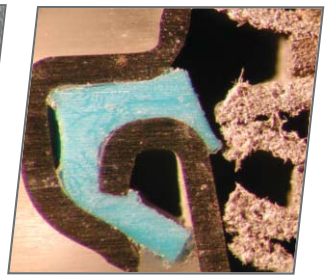
Wide range of applications

Customers around the world use Hawk systems for a wide range of non-contact measurement applications, including:









Plastic parts (e.g. connectors, tubing, moulding), medical device implants (e.g. stents, hearing aids), machined parts for aerospace, automotive and military use, general precision engineering, watchmaking, plus many more applications ...

Optical measurement is ideal for...

- ✓ Critical parts, such as medical devices, military, aerospace, or satellite components.
- ✓ Lower volume, higher value components, including general precision engineered parts, automotive and motorsport components, prototype parts etc.
- ✓ Low contrast components, e.g. coloured plastics.
- ✓ Difficult-to-view features, such as radius edges.
- ✓ Where quick, one-off measurements are required.
- ✓ Where simultaneous visual inspection is beneficial.
- ✓ Plus many other applications where high degrees of confidence is essential.

Have a question about your application?

Measurement applications vary greatly. When choosing a measurement system, it is essential to consider the benefits of different measurement technologies. Why not get in touch and discuss your application with our metrology specialists?

www.utility-trading.com/vision

HAWK DUO

Hawk Duo = Optical + Video measurement

When ultimate quality and flexibility is required.

Two measurement systems in one!

Hawk Duo combines both optical and video measuring technologies in a single system, so whatever component you are measuring, you can be sure you have the best tools for the job.

Whether you need to make routine, or challenging measurements, Hawk Duo has the power and flexibility to measure all your components, **not just the easy ones**.

- Ultimate flexibility with combined optical *and* video measurement technologies
  - View and measure challenging components through the patented 'eyepieceless' microscope.
  - Seamlessly switch to video measurement for routine component features.
- Highly configurable for individual applications

By integrating an ergonomic measuring microscope with a video measuring system, Vision Engineering has created Hawk Duo. No need to switch systems, both video and optical measurements occur seamlessly, in the same routine, without any delays.

Hawk Duo features 'next generation' multi-touch measurement software, making Hawk Duo exceptionally intuitive, easy to operate and easy to learn. The intuitive 'touch-to-measure' software can be used by shift workers or advanced users alike, simplifying work steps, reducing operator error, while minimising training requirements.

Hawk Duo.

Why optical and video measurements?

'Duo' optical **and** video measurement technologies provide the best of both worlds, so whatever component you are measuring, you can be sure you have the best tools for the job, in a single system, without any hold-ups.

Optical measurement

In order to take an accurate measurement, you need to clearly identify the edge of the feature being measured. Hawk Duo incorporates a patented eyepieceless measuring microscope, providing high contrast, microscope-resolution image of your components.

Complex, or difficult-to-view features can be viewed in intricate detail, ensuring you can take accurate measurement of all you components, not just the easy ones! The superb microscope image also allows for high resolution visual inspection.

Video measurement

Video measurement is ideal for routine components where edges of features can easily be identified. 'Next generation' measurement software coupled with a high resolution video camera enables Hawk Duo to measure a wide variety of simple and complex features, quickly and simply.

However components come in all shapes, colours, and textures, so with Hawk Duo, you can choose the ideal technology for the measured feature, seamlessly switching from video measurement to optical measurement in the same routine, without delay, ensuring you have the best measurement tool available all the time.

'Duo' optical + video measurement is ideal for...

As Hawk Elite, **plus**...

- ✓ Components where edges of features can easily be identified, but where there are occasional difficult-to-view features, e.g. mixed material components.
- ✓ For a mix of batch components and one-off parts.
- ✓ When there is a mixture of routine measurements and critical dimensioning.

Featuring touch2measure technology

Hawk features 'next generation' multi-touch measurement software, featuring 'touch-to-measure' technology, making Hawk Duo exceptionally **intuitive**, **easy to operate** and **easy to learn**.

'Touch-to-measure' means that in addition to conventional mouse control, you can 'pinch' to zoom, 'swipe' to pan across an image and 'touch' to take a measurement. You can even trace your finger around a shape to 'see' the feature.

Icon-based touch-screen control provides users with smartphone familiarity, displaying graphic-rich measurement data to visually guide you through the measurement process, with a Windows operating system for simple integration with applications such as Microsoft Excel (not included), or connection with network printers etc.

With **simplicity** at its core, 'touch-to-measure' software can be used by shift workers or advanced users alike, simplifying work steps, **reducing operator errors**, while minimising training requirements.

Have a question about your application?

Measurement applications vary greatly. When choosing a measurement system, it is essential to consider the benefits of different measurement technologies. Why not get in touch and discuss your application with our metrology specialists?

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HAWK DUO

System options

Modular in design, all Hawk systems are individually tailored around your specific application requirements.

Precision measuring stages

A range of high precision measuring stages are available, all manufactured to the highest tolerances, with factory-set NLEC calibration.

*(See **Technical Specifications** for full details)*

150mm x 150mm, manual stage

200mm x 150mm, manual or motorised operation

250mm x 150mm, manual stage

300mm x 225mm, manual stage

400mm x 300mm, manual stage

Software & microprocessor options

Industry-leading software and microprocessor options, for both shop-floor and advanced manufacturing inspection applications.

*'Next generation' measurement software**

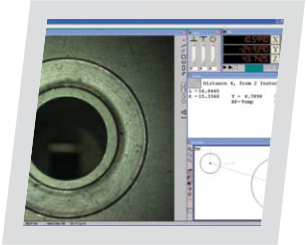
Smart and exceptionally intuitive measurement software, with icon-based smartphone familiarity makes it easy to measure both simple and complex features, quickly and simply.

Flexible reporting capability supports a range of application requirements, from simple to advanced. Custom report headers, footers, and print out graphics can all be included as part of easily generated programme playback routines, or simply printed, or exported as data files.

**Touch-screen option available*

Advanced software option

An advanced software option provides ultimate capability for users who require advanced software features such as custom formulas, conditional programming, Statistical Process Control (SPC) or RUNS databases (for long-term tracking of component performance).



*Rugged microprocessor**

Robust and intuitive microprocessor delivers simple, fast results. Designed with ease of use in mind, ideal for shift workers, or for simple data processing and reporting of routine measurements.

*Hawk Elite only

Illumination

Surface illumination

Bright white, multi-point LED ringlight provides uniform and shadow-free surface illumination for a wide range of applications..

Substage illumination

Provides a sharp edge profile, plus can be used to view through-holes in components, or highlight features in translucent parts.

Includes substage iris adjustment, to provide clearly defined edges.

Available with substage colour filters, for enhanced profile viewing (optional).

Episcopic illumination

Projects light through the lens. Particularly useful for viewing blind bores, deep surface features, or for higher magnifications where the subject is flat, or reflective.

Micro objectives require episcopic illumination.

Combine both ringlight and episcopic illumination for ultimate illumination control.

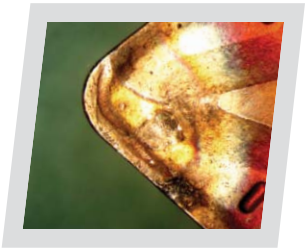


Image capture & archive

A range of multimedia solutions are available for all your imaging and documentation requirements. It has never been easier to share information. Images of non-conforming parts can be marked up and emailed for discussion in no time at all.

Custom graticule

Available with custom-designed pre-centred graticule.

Objective lenses

Choice of both macro and micro objectives.
Single macro objectives include an iris to adjust depth of field. Micro objectives housed in a 4-turret array.

Macro Objective Lenses

Objective Lens	Total Magnification	Working Distance	Field of View (mm Ø)	Depth of Field (µm)
1x	10x	84mm	14.2mm	270µm
2x	20x	81mm	7.1mm	67µm
5x	50x	61mm	2.8mm	10µm
10x	100x	32mm	1.4mm	6µm

Micro Objective Lenses (Standard Working Distance)

Objective Lens	Total Magnification	Working Distance	Field of View (mm Ø)	Depth of Field (µm)
5x	50x	20mm	4.4mm	12.22µm
10x	100x	10.1mm	2.2mm	3.06µm
20x	200x	3.1mm	1.1mm	1.3µm
50x	500x	0.66mm	0.44mm	0.43µm

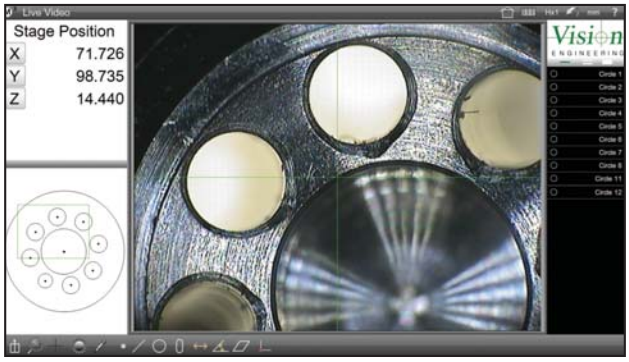
Micro Objective Lenses (Long Working Distance)

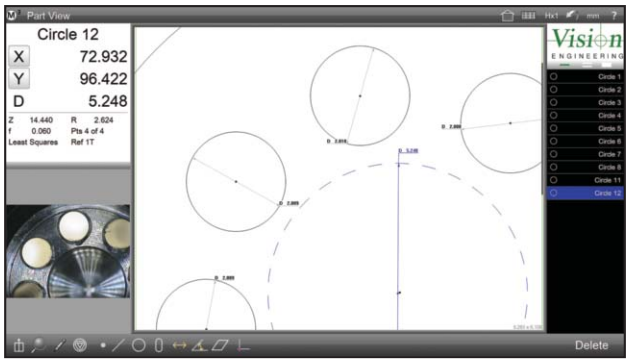
Objective Lens	Total Magnification	Working Distance	Field of View (mm Ø)	Depth of Field (µm)
10x	100x	21mm	2.2mm	4.4µm
20x	200x	12mm	1.1mm	1.72µm
50x	500x	10.6mm	0.44mm	1.10µm
100x	1000x	3.4mm	0.22mm	0.43µm

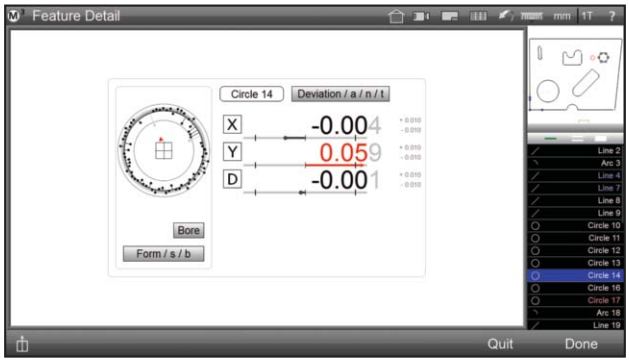
Micro Objective Lenses (Super Long Working Distance)

Objective Lens	Total Magnification	Working Distance	Field of View (mm Ø)	Depth of Field (µm)
20x	200x	21mm	1.1mm	2.24µm
50x	500x	15mm	0.44mm	1.36µm

Software details







M3 - 'Next generation' measurement software

Smart and exceptionally intuitive, M3 measurement software combines simplicity with functionality, to help you meet your measurement requirements. With a full suite of geometric measurement tools, touch-screen control* and icon-based smartphone familirity, M3 software makes it easy to measure both simple and complex features, quickly and simply.

**Requires touch-screen monitor*

Featuring touch2measure technology

Designed for multi-touch control - In addition to conventional mouse control, users can swipe, pan and zoom with a pinch, swipe or press of the screen.

Intersections and constructions - Select two or more features to create intersections or constructions.

Advanced calculations - Perform advanced calculations for special measurement needs.

Part programming - Simplify record and playback measurement routines to simply repeat a sequence of feature measurement steps, printed reports, and exported measurement data.

CAD file import (option) - Allows simple CAD import of overlay drawings to check those complex geometric parts for a simple Go/No Go decision.

Edge detection - A manual teach function allows you to instantly capture edges with poor contrast, or difficult viewing by using a variety of image and lighting conditions.

CAD-like Part View mark-up for easy inspection of the measured data. Record and store graphic measurement results of parts, along with dimensions and other information for up-to-date records for convenient, on-going quality control reference.

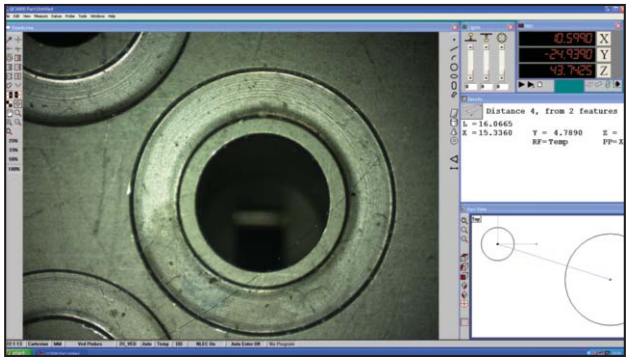
Geometric tolerancing - In just a few seconds you can measure features, set nominals, apply tolerances and view deviation results with either a "feature-to-feature" fashion, or utilise the "place tolerancing".

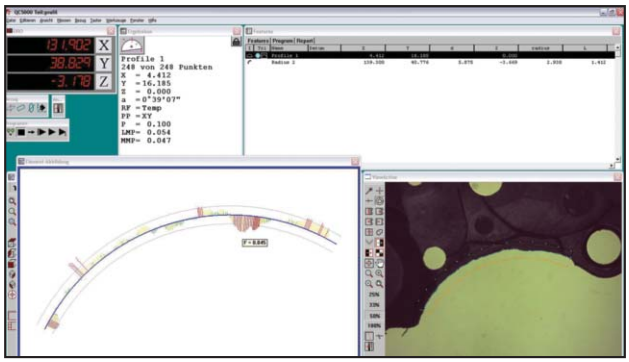
Data export - Conveniently transfer measurement data to CAD via DXF (option) for reverse engineering applications, or to Microsoft applications for enhanced data processing.

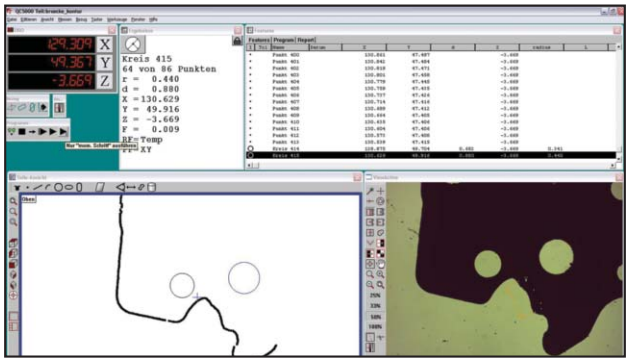
Have a question about your application?

Measurement applications vary greatly. When choosing a measurement system, it is essential to consider the benefits of different measurement technologies. Why not get in touch and discuss your application with our metrology specialists?

Software details







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IK 5300 - Advanced software option*

(formerly QC-5000)*

IK 5300 is the premier control interface within the Hawk family of non-contact measuring systems, providing a commanding solution to empower operators along every step of the measurement process.

Powerful features reduce repetitive measurements and simplify complex work steps, with the ability to utilise video edge detection (VED) for enhanced throughput. IK 5300 features intuitive drag-and-drop data fields, macros and database templates, plus programming and automation tools.

Advanced features

- ✓ Custom formulae and conditional programming.
- ✓ Fitting to DXF files.
- ✓ Drag and drop data fields, macros, database templates, programming.
- ✓ Integrated simple Statistical Process Control (SPC).

Intersections and constructions - Select two or more features to create intersections or constructions.

Part programming - Simplify difficult or repetitive measurement sequences. Programme a measurement sequence once and run it back as often as you need.

CAD file import - Import pre-existing part specifications from part programmes to jump-start the part programming process and eliminate transcription errors.

Part image archive - Record and store graphic measurement results of parts, along with dimensions and other information for up-to-date records for convenient, on-going quality control reference.

Data management - Integrated tools allow capture and archive in a variety of formats and incorporate custom spread sheets to simplify the management of complex calculations.

Geometric tolerancing - IK 5300 translates data-intensive reports into informative graphics, so operators can quickly see the results of tolerances applied to geometric features. Colour-coded results show green/red for pass/fail.

Fitting to DXF files - Quickly and directly compare the actual status and nominal status, by importing parts drawing in DXF or IGS format, then place it over the image.

Custom formulae - Results fields can be customised for special measurement needs and complex calculations by embedding formulas (e.g. automatically calculate area or circumference dimensions with each circle measurement, or perform compound calculations based on coefficients extracted from multiple features).

Conditional programming - Conditional statements provide a powerful tool for many inspection tasks. For example, if a feature fails to meet specifications, a conditional statement can stop the inspection or require a second inspection. Conditional statements used are: If-Goto, If-Then, Else, and Else-If.

Report generator - Build high-quality reports with drag-and-drop report templates to simplify data selection and formatting.

Data export - Conveniently transfer measurement data to CAD for reverse engineering applications, or to Microsoft applications for enhanced data processing.

Quality, Calibration & Support

Worldwide Training, Service & Support

Vision Engineering has a network of international offices throughout Europe, Asia and North America, supported by a network of over 120 fully trained distributor partners. Full user training, application development, service, calibration and support is available for every Hawk system, ensuring the highest levels of accuracy and productivity are maintained at all times. A dedicated applications development facility is also available to help problem-solve technical or application queries.

Systems can be serviced at your premises to minimise any loss of production or returned to a Vision Engineering main service centre if more complex works are required.

Measuring Stage Calibration with NLEC

Measuring stages of all types will naturally display minute mechanical differences due to normal variations in component and manufacturing tolerances. Non-Linear Error Correction (NLEC) is the most accurate correction method available and uses a software algorithm to calculate and correct any errors across the measuring stage. All measuring stages are factory-set with NLEC prior to installation.

The NLEC algorithm can be periodically re-calibrated to ensure conformity with any required quality standards, plus ensure the highest possible levels of accuracy are maintained.

Traceability to International Standards

Vision Engineering's measuring stage calibrations are internationally traceable to National Measurement Standards (NMS) through the Mutual Recognition Agreement (MRA), ensuring full compliance with quality standards, including ISO9000.

FM 557119

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Technical Specifications

	Hawk Elite	Hawk Duo
Optics		
Patented twin pupil monoscopic, infinity corrected optical system utilising patented Dynascope™ technology, with pre-centred crossline graticule to both eyes.	■	■
Custom designed graticule, pre-centred to one eye	□	□
Video		
High resolution colour CCD video camera	-	■
Objective lenses		
Magnification options (macro), system total	10x, 20x, 50x, 100x	10x, 20x, 50x, 100x
Magnification options (micro), system total	50x, 100x, 200x, 500x, 1000x	50x, 100x, 200x, 500x, 1000x
Illumination		
LED ringlight illumination	□	□
Substage LED illumination	■	■
Substage colour filters, for enhanced profile viewing	□	□
Episcopic LED illumination, for use with macro objectives	□	□
Episcopic LED illumination, for use with micro objectives	□	□
Imaging		
Image capture	□	■
Measuring stages		
150mm x 150mm	Manual	Manual
200mm x 150mm	Manual	Manual
200mm x 150mm CNC	Motorised	Fully automated
250mm x 150mm	Manual	Manual
300mm x 225mm	Manual	Manual
400mm x 300mm	Manual	Manual
Data processing		
PC software (multi-touch), M3	□	□
PC software (advanced), QC-5000	□	□
Rugged microprocessor, QC-200	□*	-

Key:

■ Standard

□ Optional

□* Optional, manual systems only.

		Hawk unit with 150mm x 150mm stage	Hawk unit with 200mm x 150mm stage	Hawk unit with 200mm x 150mm CNC stage	Hawk unit with 250mm x 150mm stage	Hawk unit with 300mm x 225mm stage	Hawk unit with 400mm x 300mm stage
Dimensions	(w)	540mm	750mm	750mm	890mm	1100mm	1200mm
	(d)	700mm	750mm	700mm	730mm	980mm	980mm
	(h)	780mm	780mm	780mm	780mm	700mm	700mm
Weight		46 kg	65 kg	65 kg	76 kg	52 kg	58 kg

Measuring stages							
Measuring Range (X,Y)		**150mm x 150mm**	**200mm x 150mm**	**200mm x 150mm CNC**	**250mm x 150mm**	**300mm x 225mm**	**400mm x 300mm**
Measuring Range (Z)		195mm (244mm max.)◊	195mm (244mm max.)◊	195mm (244mm max.)◊	181mm (230mm max.)◊	89mm max.◊	89mm max.◊
Measuring Uncertainty		U_{95}2D = 4+(5.5L/1000)µm♦	U_{95}2D = 2+(4.5L/1000)µm♦	U_{95}2D = 2+(4.5L/1000)µm♦	U_{95}2D = 4+(3L/1000)µm♦	U_{95}2D = 15+(6.5L/1000)µm♦	U_{95}2D = 15+(8.5L/1000)µm♦
Stage Repeatability	(X)	0.004mm	0.002mm	0.002mm	0.004mm	0.010mm	0.010mm
	(Y)	0.004mm	0.002mm	0.002mm	0.004mm	0.010mm	0.010mm
	(Z)	0.004mm‡	0.004mm‡	0.004mm‡	0.004mm‡	0.010mm	0.010mm
Maximum Load (glass plate)		12 kg	12 kg	12 kg	12 kg	12 kg	12 kg
Encoder Resolution	(X)	0.001mm	0.0005mm	0.0005mm	0.001mm	0.001mm	0.001mm
	(Y)	0.001mm	0.0005mm	0.0005mm	0.001mm	0.001mm	0.001mm
	(Z)	0.0005mm	0.0005mm	0.0005mm	0.0005mm	0.001mm	0.001mm

Key:

◊ Configuration dependent.

♦ Where L = measured length in mm (200x system magnification, using controlled conditions).

‡ Based on using 10x macro lens (100x system magnification).

Precision manufactured in the EU.

Note: Although we aim to provide you with the most up to date information, Vision Engineering reserves the right to change Technical Data without notice and cannot be held responsible for the accuracy, completeness, and/or reliability of the contents of the information provided herein.

About Vision Engineering

Vision Engineering

Vision Engineering has built a reputation of innovative design, excellent optical technology and ergonomically advanced products. The Hawk family of non-contact measurement systems represent the very best in industry-proven solutions and leading-edge technologies.

ISO 9001:2008

Vision Engineering Ltd is certified for the quality management system ISO 9001:2008.

Company Profile

Vision Engineering was founded in 1958 by Rob Freeman, a toolmaker who had previously worked as a race mechanic with the Jaguar Racing Team. Since its formation, Vision Engineering has become one of the world's most innovative and dynamic optical system manufacturers, with offices across Europe, Asia and North America.

Engineers and scientists worldwide use our systems for a wide range of general magnification, inspection and measurement applications in both industrial and life science markets.

Research and Technology

Vision Engineering holds world patents for a number of optical techniques which remove the need for conventional binocular microscope eyepieces. Dynascope™ image projection technology is employed in the Hawk family of non-contact measuring systems and offer users advanced ergonomics, superb optical clarity and reduced eyestrain leading to improved accuracy and productivity. Vision Engineering continues to lead the way in optical and metrology innovation, with ongoing research and development programmes.

Swift-Duo 'dual' optical and video measuring system.

Falcon 3-axis video measuring machine.

Other measurement solutions

Measurement solutions

Measurement applications vary greatly. This is reflected in the wide range of measurement solutions provided by Vision Engineering.

Vision Engineering manufacture a range of non-contact measuring systems to complement the Hawk family, including 'workshop' measuring microscopes, dual optical and video measuring systems, plus the latest field of view *instant* measurement systems.

To discuss your application or specific requirement, why not contact us?

On-screen dimensioning

As well as a full range of non-contact measurement solutions, Vision Engineering also has a suite of inspection systems and software solutions, designed for simple on-screen dimensioning.

Inspection solutions

Vision Engineering also manufacture a full range of ergonomic stereo inspection microscopes, including the acclaimed Mantis and Lynx eyepiece-less microscopes.

Xpress 'field of view' video measuring system.

DimensionOne™ mark-up and dimensioning software.

Mantis eyepiece-less stereo inspection microscope.