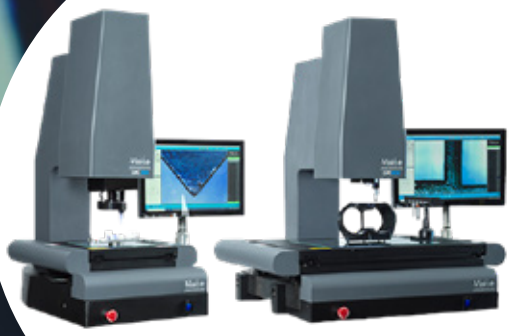
Vision ENGINEERING

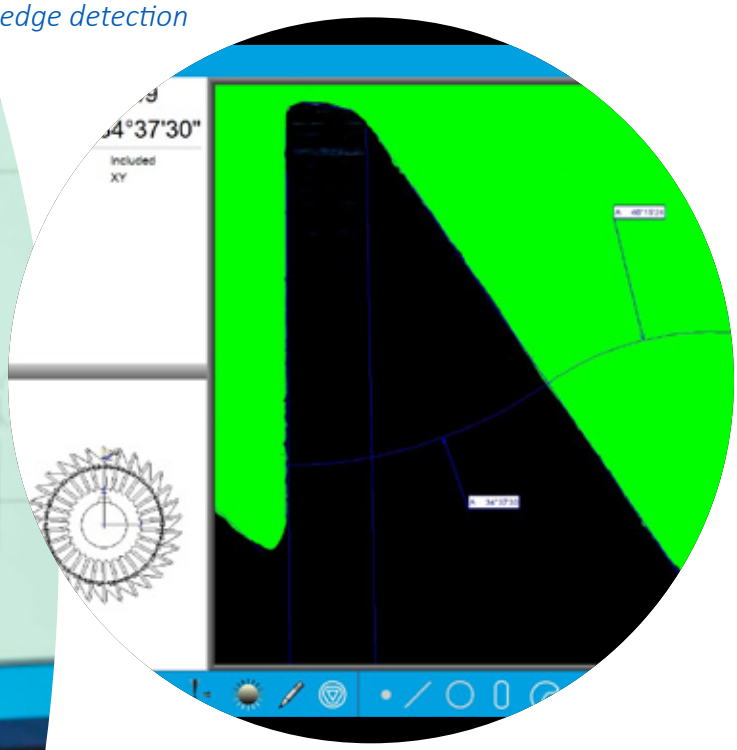
LVC Series
Fully automated video measurement systems



Key features

- Up to 400 x 300 x 200mm measurement
- 5MP USB3 colour camera as standard
- Motorised Navitar zoom lens
- Easy to use M3 software
- 0.1 µm encoder resolution
- Touch probe and probe rack options

High resolution digital image for precise video edge detection



SAVING TIME + REDUCING COSTS

LVC Series measurement systems from Vision Engineering offer high precision and full automation at a competitive price. The uncluttered layout of the software and system performance allow the LVC Series to handle a wide range of modern industrial measurement applications, including precision machining, casting, plastic moulding, electronics and medical device manufacture.

Faster measurement
Measurement routines can be automated on the new LVC Series of 3-axis CNC systems, resulting in a significant reduction in measurement time.

Programmable magnification changes enable uninterrupted faster measurement routines.

Multiple parts can be loaded onto the stage and measured easily and automatically in a single programme.

The system is pre-programmable or can be joystick-driven for quick, one-off measurements. A full set of results and inspection reports are generated simultaneously.

Intuitive software

LVC Series comes complete with trusted Metlogix M-Series software. The user-friendly package delivers advanced functionality and comprehensive reporting capabilities such as:

- Feature measurements and constructions with geometric tolerancing
- Programmable illumination
- DXF import/export and digital overlays
- Advanced edge detection and autofocus
- Simple SPC and data export
- Stitching to improve image reporting and quick measurements in field of view
- Pattern find to automatically locate and align parts
- Multi-feature finder tool
- Formula results via a calculation feature
- Thread measurement option

Introducing LVC+

To complement the premium components already available as standard, LVC+ versions are equipped with a 12:1 motorised zoom, 6.4 MP colour camera and a high-parallelism back light for increased field of view (FOV) and magnification range.

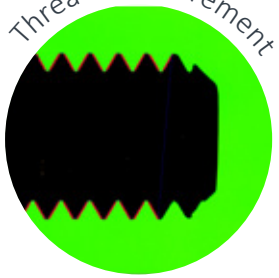
The increased FOV further reduces measurement time, whilst large magnification range going up to 700x helps operators clearly view and measure tiny features, thus enhancing measurement capabilities significantly.

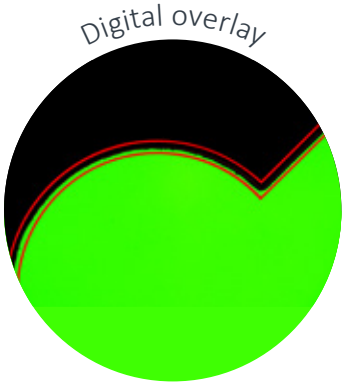
LVC+ Advantages

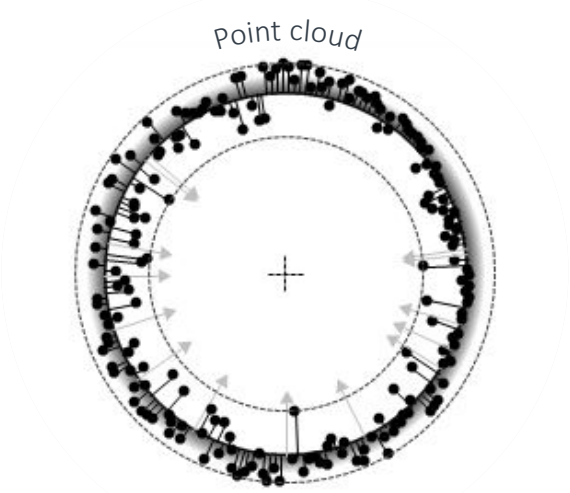
- Increased stitching area
- Greater edge find flexibility
- Improved pattern find functionality
- Easier DXF comparison

VERSATILITY + EASE OF USE

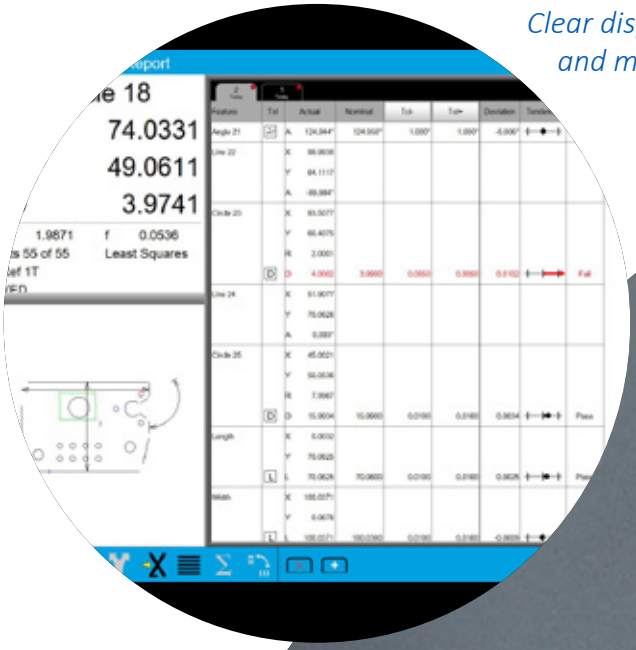
LVC Series measuring systems have the capacity to meet the needs of the most demanding manufacturing environments. With the addition of simple, yet powerful software, LVC Series offers a flexible solution, meeting the requirements of a wide range of measurement tasks.







Clear display of feature details and measurement results

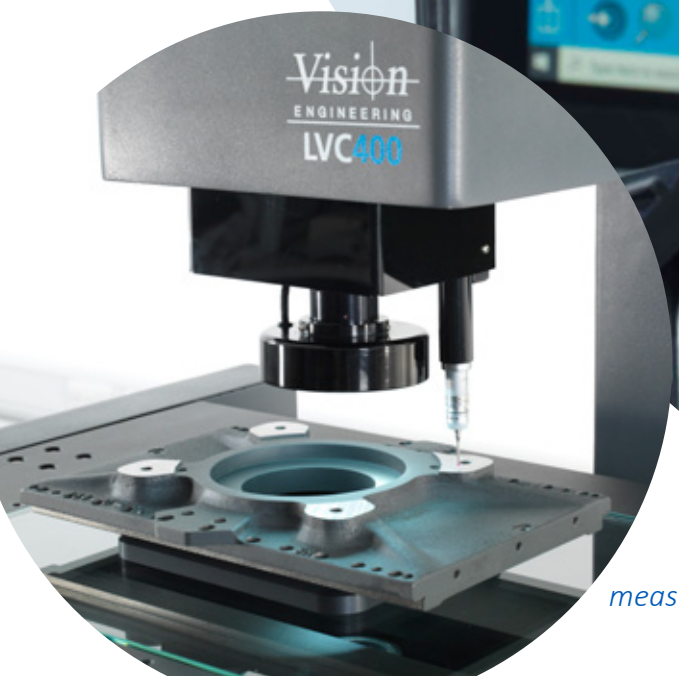


Vision ENGINEERING

LVC400

TECHNICAL INFORMATION

Specifications	LVC400	LVC400+	LVC200	LVC200+
Measuring Capacity	400mm x 300mm x 200mm		200mm x 150mm x 200mm	
Optics	6.5:1, 7-position motorised zoom	12:1, 10-position motorised zoom	6.5:1, 7-position motorised zoom	12:1, 10-position motorised zoom
Camera	5MP colour CMOS	6.4MP colour CMOS	5MP colour CMOS	6.4MP colour CMOS
Maximum Load	25kg		25kg	
Dimensions (W x D x H)	789mm x 915mm x 1087mm		536mm x 705mm x 1096mm	
Machine Weight	350kg		180kg	
Base Material	Granite		Aluminium	
Touch Probe (option)	✓		✓	
Probe Changer Rack (option)	✓		×	
Measurement Accuracy (X - Y)	2.8 + (8L/1000) µm*		2.8 + (8L/1000) µm*	
Measurement Accuracy (Z)	3 + (10L/1000) µm**		3 + (10L/1000) µm**	
Encoder Resolution	0.1 µm		0.1 µm	
Magnification Range †	55x - 370x	30x - 700x	55x - 370x	30x - 700x
Field of View				
Minimum Magnification (X x Y)	6.3mm x 4.7mm	11.8mm x 8mm	6.3mm x 4.7mm	11.8mm x 8mm
Maximum Magnification (X x Y)	1.4mm x 1.09mm	2.56mm x 1.7mm	1.4mm x 1.09mm	2.56mm x 1.7mm
Illumination				
Programmable LED ring light with 4 sectors	✓		✓	
Collimated LED sub-stage light	✓	-	✓	-
High parallelism flat back light	-	✓	-	✓
Notes				
*L = length in mm, using controlled conditions. Increased accuracies may be obtained over shorter measuring lengths and by in-situ system calibration.				
** with optional touch probe				
† on a 25” monitor				



Contact measurement option

Vision ENGINEERING

VISION ENGINEERING + OUR DIFFERENCE

Vision Engineering Ltd. has been designing and manufacturing high quality ergonomic microscopes, digital instruments, inspection and 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 enhancing viewing ergonomics and enabling customer quality and productivity improvements.

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 it is to our customers. Our systems have proved themselves many times over and are chosen by the world's leading companies.

Global

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

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

Sales Partner

PBT Rožnov p.R., s.r.o.
Lesní 2331
756 61 Rožnov pod Radhoštěm
Česká republika

tel.: +420 571 669 311
e-mail: pbt@pbt.cz
web: www.pbt.cz

CE

Vision Engineering Ltd. (UK Manufacturing & Commercial)
The Freeman Building, Galileo Drive, Send, Surrey, GU23 7ER, UK
T +44 (0) 1483 248300
E generalinfo@visioneng.co.uk

Vision Engineering Ltd. (Italia)
Via G. Paisiello 106
20092 Cinisello Balsamo MI, Italia
T +39 02 6129 3518
E info@visioneng.it

Vision Engineering (South East Asia)
P-03A-20, Impian Meridian, Jalan Subang 1, USJ 1, 47600 Subang Jaya, Selangor Darul Ehsan, Malaysia
T +604-619 2622
E info@visioneng.asia

Vision Engineering (Mexico)
T +01 800 099 5325
E infomx@visioneng.com

Vision Engineering Inc. (NA Manufacturing & Commercial)
570 Danbury Road, New Milford, CT 06776, USA
T +1 (860) 355 3776
E info@visioneng.com

Vision Engineering Ltd. (France)
ZAC de la Tremblaie, Av. de la Tremblaie 91220 Le Plessis Paté, France
T +33 (0) 160 76 60 00
E info@visioneng.fr

Vision Engineering (China)
Room 904B, Building B, No.970, Nanning Road, Xuhui Vanke Center Shanghai, 200235, P.R. China
T +86 (0) 21 5036 7556
E info@visioneng.com.cn

Vision Engineering (Brazil)
E info@visioneng.com.br

Vision Engineering (Latin America)
E infomx@visioneng.com

Vision Engineering Ltd. (Central Europe)
Anton-Pendele-Str. 3, 82275 Emmering, Deutschland
T +49 (0) 8141 40167-0
E info@visioneng.de

Nippon Vision Engineering (Japan)
272-2 Saedo-cho, Tsuduki-ku, Yokohama-shi, Kanagawa 224-0054, Japan
T +81 (45) 935 1117
E info@visioneng.jp

Vision Engineering (India)
T + 91 (0) 80-5555-33-60
E info@visioneng.co.in

FM 557119
Vision Engineering Ltd. has been certified for the quality management system ISO 9001:2015 and calibration accreditation ISO 17025:2017.