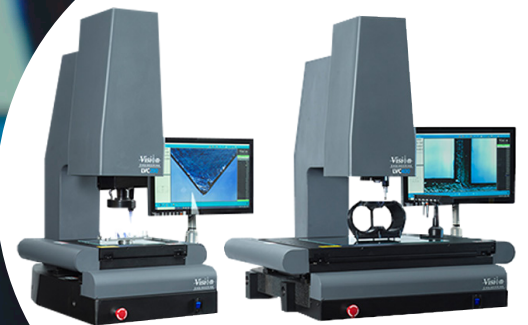



LVC Series  
Fully automated video  
measurement systems





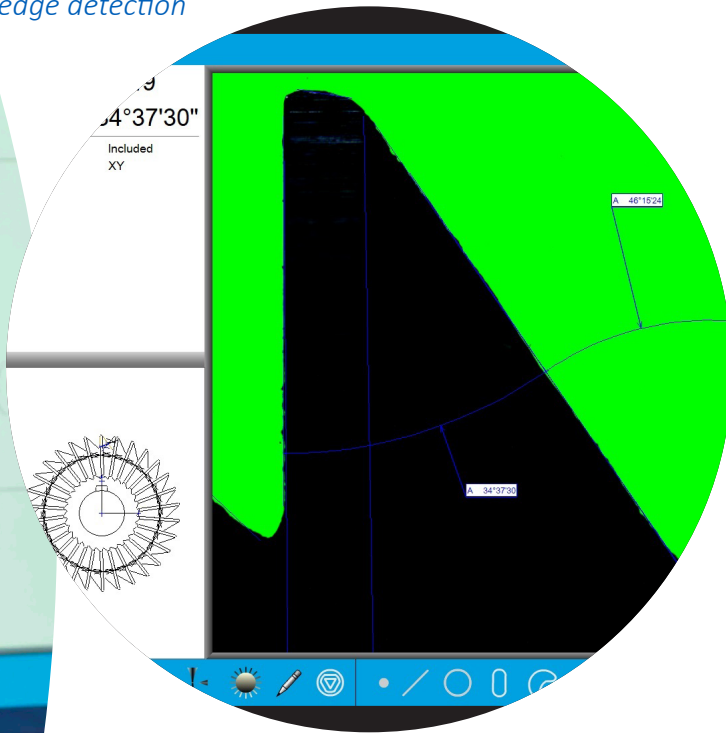
Vision  
ENGINEERING  
LVC200

#### Key features

- Up to 400 x 300 x 200mm measurement
- Motorised zoom lens
- Easy to use M3 software
- 0.1  $\mu\text{m}$  encoder resolution
- Touch probe and probe rack options

High resolution digital  
image for precise video  
edge detection

VISION ENGINEERING FOCUSED ON QUALITY



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

### Intuitive software

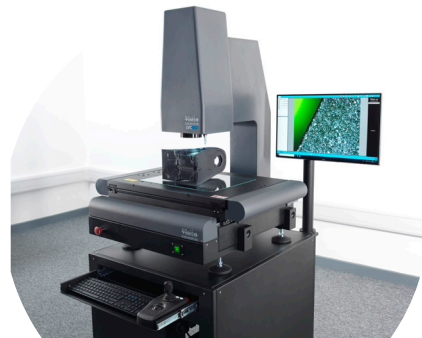
LVC Series comes complete with trusted Metlogix M-Series software. The user-friendly package delivers advanced functionality and comprehensive reporting capabilities such as:

- Feature measurements and constructions with geometric tolerancing
- Programmable illumination
- DXF import/export and digital overlays
- Advanced edge detection and autofocus
- Simple SPC (statistical process control) 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 and gear measurement option

### Made To Measure

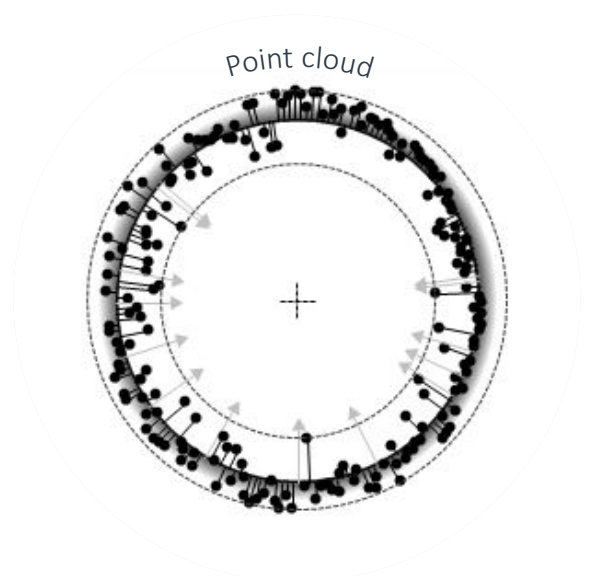
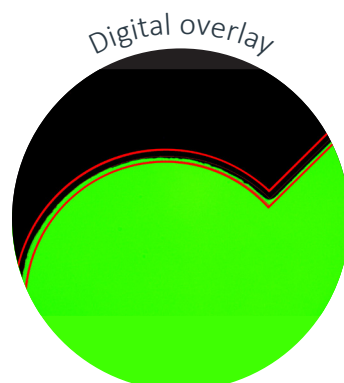
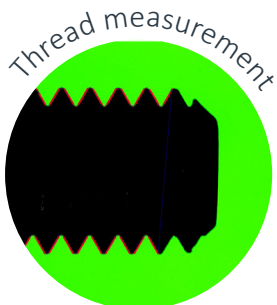
Systems can be configured with different optics and illumination options in order to meet customers' measurement needs.

Higher magnification, a larger field of view, and flat or collimated backlight options allow the LVC series to offer the enhancements that our customers are seeking to achieve.



## 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

Report

Feature 18

74.0331

49.0611

3.9741

1.9871 f 0.0536

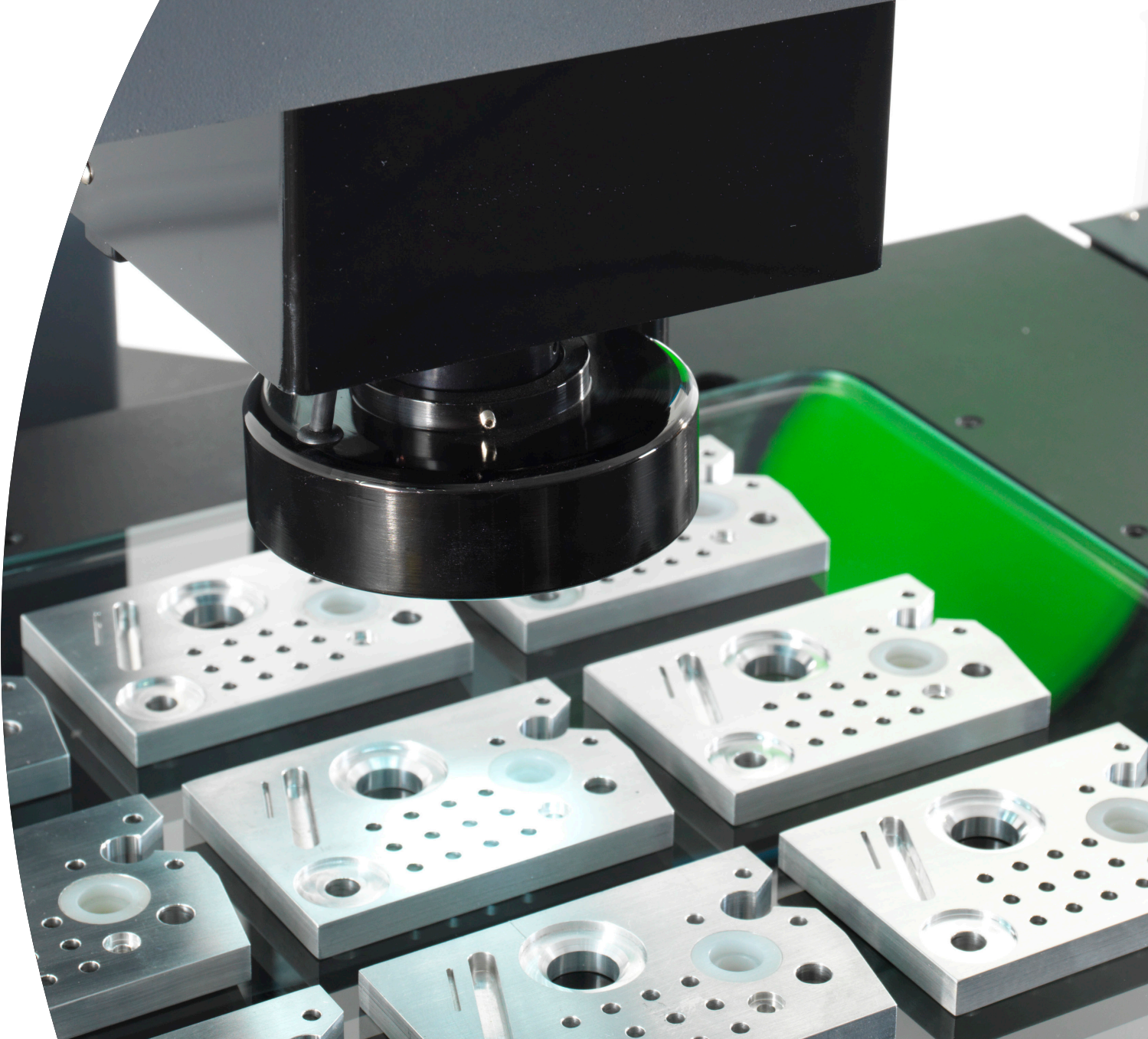
55 of 55 Least Squares

ref 1T

/FD

Feature	Tol	Actual	Nominal	Tol-	Tol+	Deviation	Tendency
Angle 21	A	124.944°	124.950°	1.000°	1.000°	-0.006°	↔
Line 22	X	99.9998					
	Y	64.1117					
	A	-89.984°					
Circle 23	X	93.5077					
	Y	60.4075					
	R	2.0001					
	D	4.0002	3.9900	0.0050	0.0050	0.0102	↔ Fail
Line 24	X	51.9077					
	Y	70.0626					
	A	0.003°					
Circle 25	X	45.0021					
	Y	50.0536					
	R	7.9987					
	D	15.9934	15.9900	0.0100	0.0100	0.0034	↔ Pass
Length	X	0.0032					
	Y	70.0625					
	L	70.0625	70.0600	0.0100	0.0100	0.0025	↔ Pass
Width	X	100.0371					
	Y	0.0676					
	L	100.0371	100.0380	0.0100	0.0100	-0.0009	↔

**Vision**  
ENGINEERING  
**LVC400**



# TECHNICAL INFORMATION

SPECIFICATIONS		LVC400			LVC200	
MODEL	LVB002	LVB003	LVB010	LVB005	LVB007	LVB009
<b>Measuring Capacity (mm)</b>	400mm x 300mm x 200mm			200mm x 150mm x 200mm		
<b>Optics</b>						
7-position motorised zoom	✓		✓	✓		✓
10-position motorised zoom		✓			✓	
<b>Metrology Camera</b>	USB3 Colour Camera					
<b>Maximum Load</b>	25kg					
<b>Dimensions (W x D x H mm)</b>	789mm x 915mm x 1087mm			536mm x 705mm x 1096mm		
<b>Machine Weight</b>	350kg			180kg		
<b>Base Material</b>	Granite			Aluminium		
<b>Touch Probe Option</b>	✓			✓		
<b>Probe Changer Option</b>	✓			x		
<b>Measurement Accuracy (X, Y)</b>	$E_2 = 2.8 + (8L/1000) \mu\text{m}^*$			$E_2 = 2.8 + (8L/1000) \mu\text{m}^*$		
<b>Measurement Accuracy (Z)</b>	$E_1 = 3 + (10L/1000) \mu\text{m}^{**}$			$E_1 = 4 + (10L/1000) \mu\text{m}^{**}$		
<b>Encoder Resolution</b>	0.1 $\mu\text{m}$			0.1 $\mu\text{m}$		
FIELD OF VIEW (FOV)						
<b>Low Zoom (mm)</b>	12.5 x 7.9	18 x 11.4	10.6 x 7.7	12.5 x 7.9	18 x 11.4	10.6 x 7.7
<b>High Zoom (mm)</b>	2.9 x 1.8	1.8 x 1.1	2.8 x 1.8	2.9 x 1.8	1.8 x 1.1	2.8 x 1.8
PROGRAMMABLE ILLUMINATION						
<b>Quadrant LED Ring Light</b>	✓	✓	✓	✓	✓	✓
<b>High parallelism flat back light</b>	✓	✓	-	✓	✓	-
<b>Collimated LED back light</b>	-	-	✓	-	-	✓
NOTES						

Measurement uncertainty is determined in accordance with ISO 10360 - Part 7

\*L = length in mm, using controlled conditions.

\*\* with optional touch probe

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LVC400



*Contact  
measurement option*

# 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.

To see our focused quality, please contact your Vision Engineering branch, local authorised distributor, or visit our website: [visioneng.com](http://visioneng.com)

## 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.

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

Sales Partner



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