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

The instant measurement system

- Rapid, high accuracy 2D measurement system, within the field of view (FOV)
- Place and press functionality
- No need for focus adjustment or sample positioning.
- Exceptional ease of use
Welcome to the world of instant measurement

The field of view (FOV) measurement system

Xpress, from Vision Engineering Ltd. takes the power of high resolution field of view (FOV) measurement to provide high accuracy, 2D measurements of small parts, in an instant.

No need to focus. No need to position your parts. Instantly and accurately measure hundreds of features within the field of view in seconds. Coupled with Go, No Go simplicity, Xpress provides the accurate, fast AND easy measurement you have always dreamed of.

1. No need to position the parts. Just place your sample, or samples... anywhere, within the field of view.

2. No need to focus. Just select your programme.

3. Measure all the features... of all your parts, in seconds. With Go, No Go simplicity.

4. View measurement results, ...in seconds.

Clear display shows pass / fail tolerances.
Rapid, high accuracy 2D measurement system, within the field of view (FOV).

No need to focus, or position sample. Just place, then press to measure.

Exceptional ease of use. – eliminates operator variances.

Reduce measurement time – significantly.

Field of view measurement is ideal for 2D measurement of small components parts, up to 70mm in length. By measuring within the field of view, measurement can be taken in an instant. Plus variance between operators is eliminated, since there is no requirement to position and focus the sample, which not only takes time, but also relies on an individual operator skills and habits.

What can I measure?

Any feature you can ‘see’ within the field of view. Xpress is ideally suited to profile measurement of small, flat components such as pressed parts, washers, gaskets, seals, O-rings, connectors, sectioned extruded materials, low density circuit boards and flexible circuits, as well as thin parts, including bottle tops, medical tubing, small medical devices, housings, syringes, plus much more...

Selection of gaskets.
Watch mechanism.
Circuit board.
How does it work?

Field of view measurement uses a high resolution video camera, coupled with a ‘flat field’ telecentric lens system. The telecentric lens provides a completely flat image, across the full field of view, without any curvature, or distortion, so you can make highly accurate measurements in 2D within the field of view, without having to move the sample.

Not only that, but with an exceptionally large depth of field, your sample is always in focus, regardless of height differences, making Xpress the faster, more convenient, more friendly way to measure.

Operators like...

- Pattern search, for auto location and orientation. No need to position the part, even for batch samples.
- Place and press functionality.
- Go, No Go simplicity.
- ‘Touch-to-measure’ ease of use.

Managers love...

- How Xpress saves a lot of time.
- Complete confidence in results, no matter who uses the system. Go, No Go simplicity.
- Operator training takes minutes, not hours.
- Tolerance reports and other essential data outputs.

How does it work?
‘Next generation’ software

Xpress features ‘next generation’ multi-touch measurement software. With smartphone familiarity, ‘touch-to-measure’ technology makes Xpress 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.

- ‘Touch-to-measure’ operation provides ultimate simplicity.
- Minimises training requirements; reduces operator error.
- Full sample recognition, means you don’t need to position your sample.
- Go, No Go results, with full geometric tolerancing.
- Choice of report formats.
- Windows 7 operating system for simple integration with applications such as Microsoft Excel (not included), or connection with network printers etc.
System details

**Xpress 35**  Xpress 70

<table>
<thead>
<tr>
<th>Optics</th>
<th>Fully telecentric lens system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camera</td>
<td>5.0Mp USB2.0 camera</td>
</tr>
<tr>
<td>Field of view</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>28mm</td>
</tr>
<tr>
<td>Y</td>
<td>21mm</td>
</tr>
<tr>
<td>Diagonal</td>
<td>35mm</td>
</tr>
<tr>
<td>Illumination</td>
<td></td>
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<tr>
<td>Controllable and programmable LED surface illumination</td>
<td></td>
</tr>
<tr>
<td>Controllable and programmable LED substage illumination</td>
<td></td>
</tr>
<tr>
<td>Repeatability*</td>
<td>2µm</td>
</tr>
<tr>
<td>Accuracy*</td>
<td>(±)4µm</td>
</tr>
</tbody>
</table>

**System details**

- Power supply: 100/240V, 50/60Hz
- Weight: 14kg, 15kg
- Dimensions: 270(w) x 375(d) x 665(h)mm

* Measured under controlled conditions.

Precision manufactured in the EU.

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Quality and support

**Quality ethos**

With over 50 years of experience in designing and manufacturing high quality products, Vision Engineering is an established company and a pioneer in its field. The company’s long-standing quality ethos of continual improvement means that processes are constantly refined with a view to providing customers with the highest quality of products and services.

**ISO 9001:2008**


**About Vision Engineering**

Founded in 1958 by Rob Freeman, a toolmaker who had previously worked as a race mechanic with the Jaguar Racing Team, Vision Engineering has been designing and manufacturing leading-technology optical systems for over 50 years.

With a philosophy of design innovation, Vision Engineering holds world patents for a number of techniques which significantly improve microscope optical performance.

**Service & support**

Vision Engineering has a network of international offices throughout Europe, Asia and North America, supported by fully trained distributor partners. Full user training, service, and support is available, ensuring the highest levels of customer support is maintained.

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Measuring within the field of view

Components can be larger than the actual field of view if measuring individual features, or if all the features to be measured are within the field of view.

![Diagram of Xpress 35 and Xpress 70 field of view]

Vision Engineering Ltd has been certified for the quality management system ISO 9001:2008.
Other **inspection 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 Xpress family, including ‘workshop’ measuring microscopes, video measuring machines, as well as dual optical and video measurement systems.

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

**On-screen measurement**

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 & measurement.

**Inspection solutions**

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

*To find out more, visit:*  
www.visioneng.com/ergonomic

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**View the full range at**  
www.visioneng.com
For more information...

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Visit our multi-lingual website:

www.visioneng.com