



The Queen's Award for Export
The Queen's Award for Technology

THE DYNASCOPE *Ultra*



*Fast & Accurate 2 & 3 axis measurement...
...Exceptional optical performance*



Medical parts manufacture



Plastics manufacture

The Need

The increasing demand on engineering companies to manufacture accurate products at low cost means that manufacturers are looking for quality measurement systems that are flexible, fast and easy to use, but at an affordable price. Additionally, users are seeking measurement systems that can add value by being used for visual inspection of cutting edges, surface finishes and colour.

The Equipment

The Dynascope Ultra employs the very latest in optical design, utilising the award winning Dynascopic Technology. The eyepieceless optical system provides a bright, high resolution view of the subject that enables the user to inspect and measure with the clarity normally associated with high quality conventional light microscopes and with the ease of use and repeatable accuracy associated with shadowgraph or video systems.

The ergonomic design is extended to the stage, which has been designed to allow fine movement, such that precise alignment to the part is possible even in the most demanding workshops.

The industry standard QC200 microprocessor or the PC-based QC4000 metrology software provides the user with full geometric capability, at the same time allowing measurements to be acquired very quickly.

The Benefits

Superior optical performance compared to video or shadowgraph based systems, without the fatigue associated with conventional optical technologies. The Dynascope Ultra allows the user to obtain accurate, repeatable results quickly, resulting in an increase in productivity, efficiency improvements and a reduction in scrap.

The Dynascope Ultra can be operated by non-specialists with very little training. The system has the capability to interface with software packages such as CAD and SPC. The output reports can be customised and tailored to suit individual company quality procedures.

PRECISION WITH ERGONOMICS

THE DYNASCOPE *Ultra*



Precision mechanical applications



Inspection of mechanical parts



Copper bush viewed at 10x magnification

Core Configurations

Ultra I - 2 axis

- Dynascopic High Resolution Optical Systems with 20X Magnification
- Shadow Free Illuminator
- 150 Watt/21 Volt Transformer (200 Hour Lamp Life)
- Robust Stand with Coarse & Fine Focus Control
- 150mm x150mm Precision Stage
- 1 Micron Resolution Encoders

Ultra II - 3 axis

- Dynascopic High Resolution Optical Systems with 20X Magnification
- Shadow Free Illuminator
- 150 Watt/21 Volt Transformer (200 Hour Lamp Life)
- Robust Stand with Coarse & Fine Focus Control
- 150 mm x150mm Precision Stage
- 1 Micron Resolution Encoders (X & Y)
- 1 Micron Resolution Z Axis Encoder.

Processor Options

- QC200 Vi 2 Axis Microprocessor with Non Linear Error Correction
- QC4310 Windows based Metrology Software C/W PC
- QC200 Vi 3 Axis Microprocessor with Non Linear Error Correction
- QC4310 Windows based 3 Axis Metrology Software C/W PC

Resolution Accuracy & Technical Specification

- | | | | |
|-----------------------------|---------|-----------------------------|---------|
| • Resolution X-Y | 0.001mm | • Resolution X-Y | 0.001mm |
| • Accuracy better than | 0.006mm | • Resolution Z | 0.001mm |
| • Repeatability better than | 0.006mm | • Accuracy X - Y | 0.006mm |
| • Field of View (at 20X) | 7mm | • Accuracy Z (100X) | 0.008mm |
| • Working Distance (at 20X) | 75mm | • Repeatability X - Y - Z | 0.006mm |
| • Power Consumption | 400W | • Field of View (at 20X) | 7mm |
| | | • Working Distance (at 20X) | 75mm |
| | | • Power Consumption | 400W |

Optional Accessories

* 10X Magnification * 50X Magnification * 100X Magnification C/W Fresnel Lens to Re-Focus Illuminator * Substage Illuminator with 50W/12V Transformer * Full Range of Camera Facilities: 35mm, Polaroid, CCTV and Digital.



Manufacturing:

Send Road, Send Woking, Surrey, GU23 7ER, England

Commercial:

Monument House, Monument Way West, Woking, Surrey, GU21 5EN, England

Tel: +44(0) 1483 238300 Fax: +44 (0) 1483 248317

Email: generalinfo@visioneng.com

Web: www.visioneng.com

This is an archive document from Vision Engineering. For details of our latest products, please visit our website or contact us at the details below.

For more information...

Vision Engineering has a network of offices and technical distributors around the world. For more information, please contact your Vision Engineering branch, local authorised distributor, or visit our website.

Vision Engineering Ltd.
(Manufacturing)
Send Road, Send, Woking,
Surrey, GU23 7ER, England
Tel: +44 (0) 1483 248300
Fax: +44 (0) 1483 223297
Email: generalinfo@visioneng.com

Vision Engineering Inc.
(Manufacturing & Commercial)
570 Danbury Road, New Milford,
CT 06776 USA
Tel: +1 (860) 355 3776
Fax: +1 (860) 355 0712
Email: info@visioneng.com

Vision Engineering Ltd.
(Central Europe)
Anton Pendele Strasse 3,
D-82275, Emmering, Germany
Tel: +49 (0) 8141 40167-0
Fax: +49 (0) 8141 40167-55
Email: info@visioneng.de

Vision Engineering Ltd.
(France)
1 Rue de Terre Neuve, ZA Courtaboeuf,
91967 Les Ulis Cedex, France
Tel: +33 (0) 164 46 90 82
Fax: +33 (0) 164 46 31 54
Email: info@visioneng.fr

Vision Engineering Ltd.
(Commercial)
Monument House, Monument Way West,
Woking, Surrey, GU21 5EN, England
Tel: +44 (0) 1483 248300
Fax: +44 (0) 1483 248301
Email: generalinfo@visioneng.com

Vision Engineering Inc.
(Commercial West Coast USA)
745 West Taft Avenue, Orange,
CA 92865 USA
Tel: +1 (714) 974 6966
Fax: +1 (714) 974 7266
Email: info@visioneng.com

Nippon Vision Engineering
(Japan)
272-2 Saedo-cho, Tsuduki-ku,
Yokohama-shi, 224-0054, Japan
Tel: +81 (0) 45 935 1117
Fax: +81 (0) 45 935 1177
Email: info@visioneng.jp

Vision Engineering Ltd Italia
(Italy)
Via Pelizza da Volpedo 51,
20092 Cinisello Balsamo MI, Italy
Tel: +39 02 6129 3518
Fax: +39 02 6129 3526
Email: info@visioneng.it

Distributor

Visit our multi-lingual website:

www.visioneng.com