



BANBROS ENGINEERING PVT. LTD.

The Precision Measurement People

VERTICAL VIDEO PROFILE PROJECTOR



- **VALUE**
- **VERSATILITY**
- **PERFORMANCE**

iVideo-2010/2515/3020

**DESCRIPTION:**

Solid framework, large LCD touch screen and advanced QM2.0 software; High quality optics for crisp and clear images; Adjustable LED surface and contour illumination; High resolution industrial CCD camera; 6.5X Detented zoom lens changeable within the range of 30-190x magnification.

Extended function of printing, saving and exporting data; Excel, word or txt multi-format report output, and DXF input and output; Non-contact optical height measurement.

TECHNICAL SPECIFICATION:

Model No.	iVideo-2010	iVideo-2515	iVideo-3020
X/Y-axis Travel	200×100mm	250×150mm	300×200mm
Z-axis Travel	200mm		
Accuracy	≤3+L/200(um)		
Repeatability	±2um		
Operation Mode	Manual(with auto edge detection)		
Video Device	1/3" color CCD camera, 0.7~4.5x Detented zoom lens		
Screen Dimension	19" LCD touch screen monitor		
Video Magnification	30X~190X(it can extend to 15X~380X)		
Working Distance	92mm		
Measuring Software	Quick Measuring 2.0		
Max. Load Capacity	10Kg		
Suitable Environment	Workshop and Metrology room		
Power supply	AC110V/60Hz, AC220V/50Hz		
Dimension(D×W×H)	760×650×1760mm		
Net Weight	150Kg		



STANDARD ACCESSORIES:

Measuring Software	Color CCD Camera	Detented Zoom Lens
Calibration Block	Capture Card	Working Cupboard
19" LCD Touch Screen	Built-in PC System	Operation Manual

Measuring Software Quick Measuring 2.0~4.2 Version

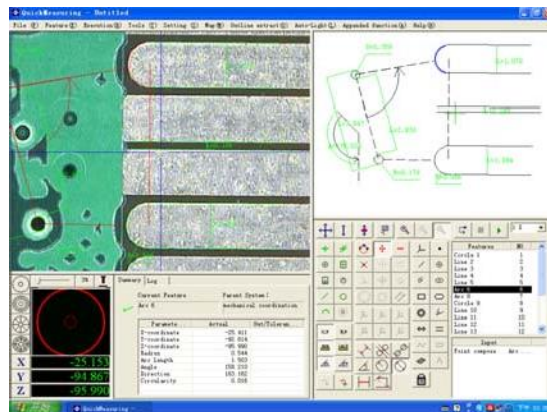
APPLICATIONS:

Video measuring machines, measuring microscopes and other vision measuring systems, etc.

Modern compact Interface Design:

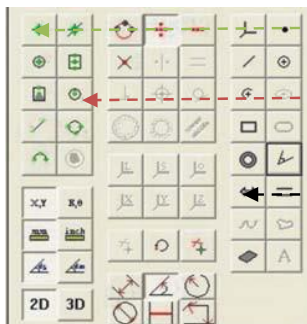
Introduction:

1. Toolbar
2. Video display window
3. Measuring graphic window
4. Illumination control column
5. Measured result display column
6. Measuring tool window
7. Procedure edit window



Friendly compact functional key:

Graph functional key, graph constructive Functional Key and Visual tool functional key is separated by color and grouped tactical, makes the communication between Operator and instrument quickly and it improves the speed, and friendly of measurement efficiency obviously.



1. How can we get wanted?
Re: Visual tool functional key column
2. Is there any advanced tool to measure more complicated graph?
Re: Graph constructive key column
3. What do we want to measure?
Re: Graph functional key column

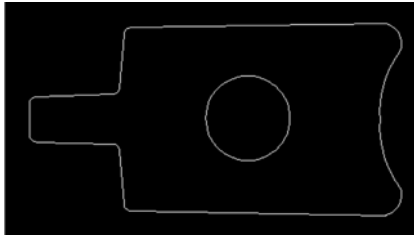


By the touch probe, QuickMeasuring software can make many 3D contact measurement. At the same time, the lively icon can tell you how to do it. For example, point, distance, arc, circle, ball, angle and so on.

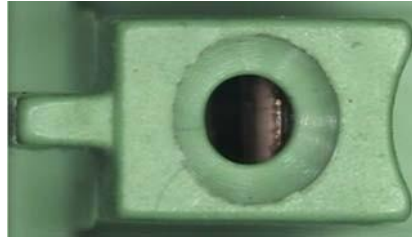


Input CAD file and contrast:

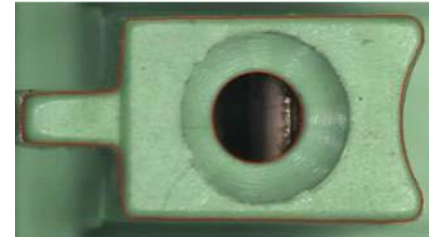
1. Click“DXF“import; 2. Click “Move comparison graph“; 3.Drag mouse and make sure graph and video coincide



CAD drawing



Sample Image



Input CAD drawing and contrast

4-Division and 48-division ring illumination make measurement clearer and accuracy:

USB 5-ring,8-direction and 48-division LED illumination provide multi-choice of illumination brightness, which makes the measurement of edge-detect and deeper hole easily. Besides, the illumination condition also can be saved simultaneously while programming in order to realize the auto-control of illumination. 4-division LED illumination is Low-version lightsource for the manual Video measuring machine.

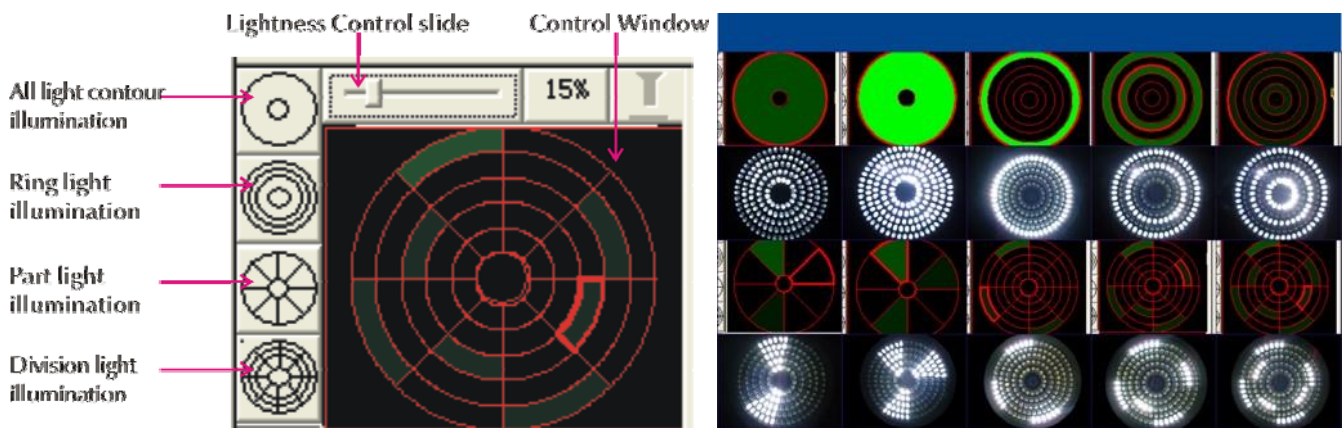
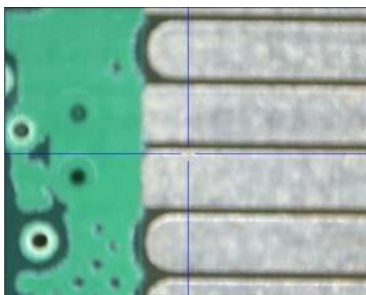
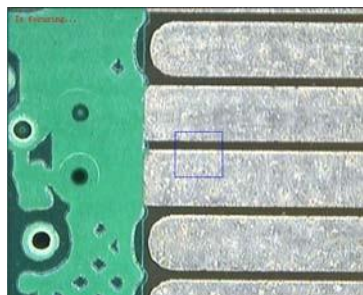


Image auto-focus:

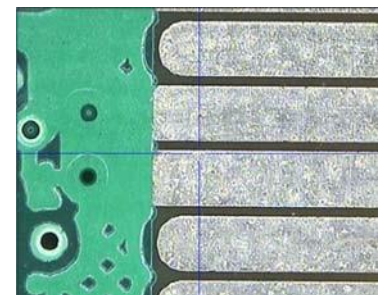
Quick Measuring realizes entire auto-focus, which reduces the visual error caused by eye-focus and improves the measuring efficiency and accuracy.



Before focusing



Focusing



After focusing



Dimension label function:

Quick measuring is able to label dimension with detail data on actual image freely, which reduces the measuring time and improves efficiency obviously. Now, the label is displayed with distance, angle, radius and diameter according, etc.

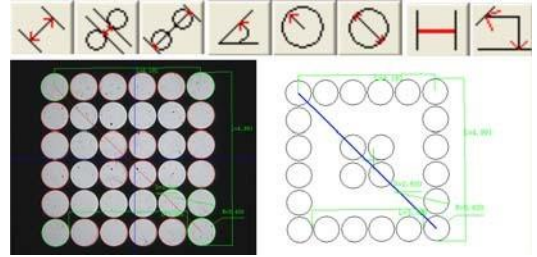
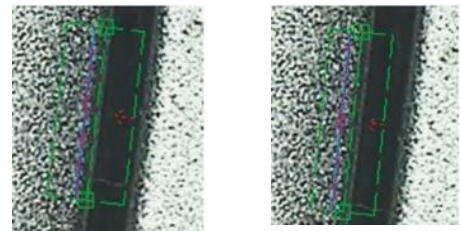


Image sharpening and auto-fringe function: Quick Measuring can contrast the image before and after sharpening, and the sharpening make measurement more convenient when check some complicated and uneasy work-pieces. Auto-fringe function makes the whiteness and blackness of sharpened image clearer and edge-detect result accurate.

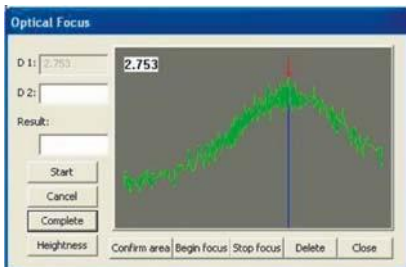


Before Sharpening After sharpening

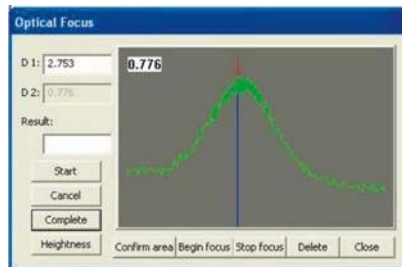
2.5 D Non-contact Optical Height Measurement:

Quick Measuring use auto-focus to achieve accurate height measurement of two plane on manual/CNC Video measuring machine quickly. Through two focusing for different layers of work piece, to obtain height value.

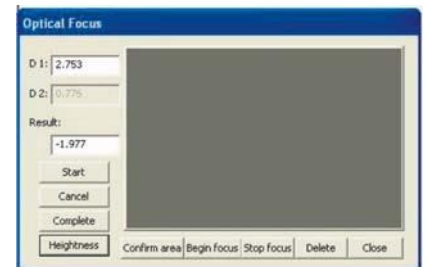
Manual Video measuring machine operation step:



1. Measure one face

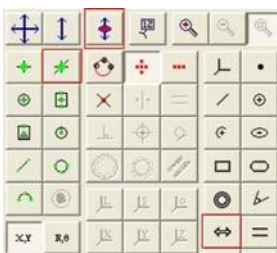


2. Measure another face

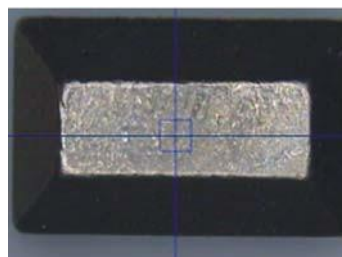


3. Get the height

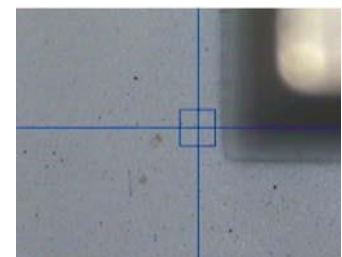
CNC Video measuring machine operation step:



1. Choose Function key



2. Measure one face



3. Measure another face

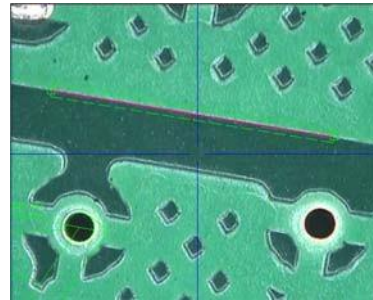


Automatic edge-detecting function:

High-speed, accurate and repeatable. While measurements, it can analyze and dispose the work piece and identify work piece edge automatically.



Edge Contour



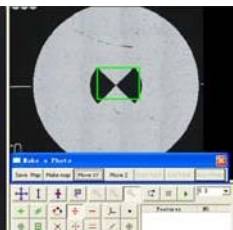
Surface Contour

Map photo & measurement and map navigation:

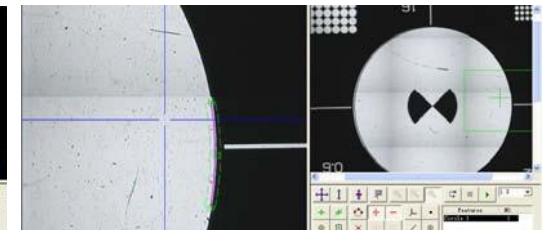
Quick Measuring can take photos for the work piece on work-stage, then automatically combines segment into a full map-photo, which can be saved and measured, the operator also can use this map-photo to make navigation. While clicking any position of picture, software will quickly move forward the Apposite zone, which largely improves the efficiency of measurement. Besides, the photo-map also can be input again and labeled directly. It is better to use this function on CNC or: suggestion CNC machines.



Map photo



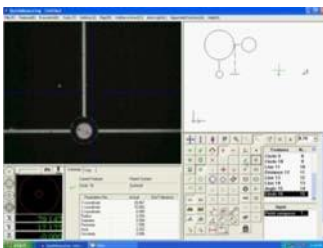
Map navigation



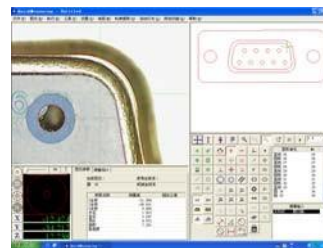
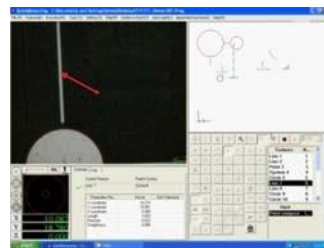
Map measurement

Program simply and directly:

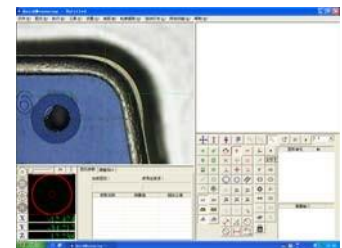
Unlike the traditional measurement programming, quick measuring adopt training style programming, i can record measurement program which can be carried out at any time (measuring order, illumination setup etc.). It is more convenient and quick to measure the same work piece repeatedly. Step No.1. Create a coordinate system Step No.2. Make a program and save the program; Step No.3. Input the program and then auto-run.



Manual video measuring machine



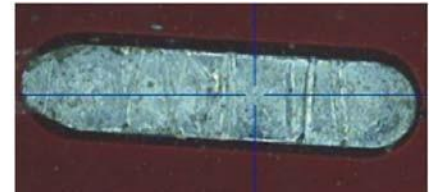
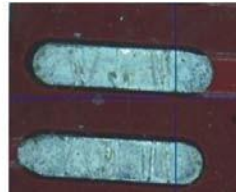
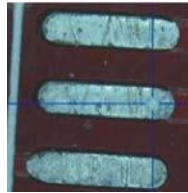
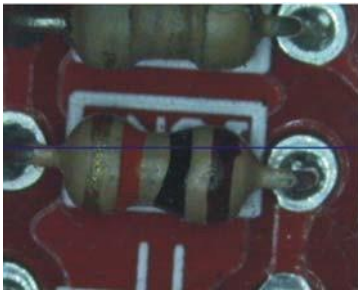
CNC video measuring machine





Multi-magnification Zoom high-resolution CCD Camera:

High-quality 0.7-4.5x zoom lens select and magnify complicated parts within the visual wide field easily and sharply. High resolution CCD Camera, capture card and monitor ensure the output image without any aberration.

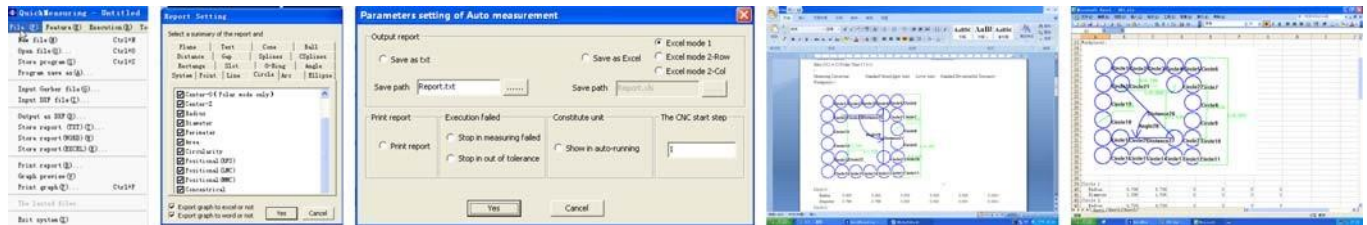


Magnification of Zoom

Min. $\xrightarrow{\hspace{10em}}$ Max.

Multi-format output:

Measured results of quick measuring can be output in multi-formats, such as TXT, Excel. Quick measuring also can input and output the Dxf file, which let the operator make CAD graphic processing easily.



SPC statistical function column

