

KASON-YF Series Manual Video Measuring System

KASONTTEST®



(Picture just for reference)

Usage

KASON-YF Series is the basic type manual Video Measuring System developed by KASON.

It has been widely used in machinery, electronics, aerospace, automotive, military, mould, and other industries for precision measurement.

1. It can measure point, line, circle, arc and oval, rectangular and improve the accuracy with the multi-point positioning function.
2. In metrology terms, the machine can test and dimension width, length, height, thickness, diameter, angel, straightness, flatness, perpendicularity, circular degree, coaxiality, etc.
3. Combination of measurements, center structure and the intersection of structure, the midpoint of construction, line structure, a round structure and structural point of view.

Features

1. It adopts 1.3MP high resolution color camera, the cross-line generator is the measuring aiming system.
 2. Digital measurement and data processing system are made up by the two coordinate's studio, the optical grating and the professional video card.
 3. It has RS-232 interface with a computer and specialized measurement software which can also processes and output circular mapping. Measurement data can be directly transformed into AutoCAD file and make a full work circle. The data also can be exported in Excel, Word to generate reports for statistical analysis.
- Grade 00 JINANQING granite base and column, high stability

Specification

Code		001	002	003	004
Model		KASON-2010YF	KASON-3020YF	KASON-4030YF	KASON-5040YF
Table	Metal Table Dimension(mm)	404*228	500*330	606*466	706*606
	Glass Table Dimension(mm)	260*160	350*280	450*350	550*450
	XY Stroke(mm)	200*100	300*200	400*300	500*400
	Load Capacity	approx. 15 kg	approx. 20 kg	approx. 30 kg	approx. 35 kg
Weight (kg)		180	260	315	500
Dimension (L*W*H, mm)		556*540*860	670*660*950	720*950*1020	800*1040*1020
Measuring Targeting System(Standard Accessories)		Camera: 1.3MP Color Camera			
		Zoom Lens: professional optical lens			
		Magnification of field lens: 0.7~4.5X WD: 92mm			
		Video Magnification: 28-186X FOV:7-1.1mm			
		Scale Resolution: 0.5 μ m			
Z Stroke(mm)	Standard	200			
	Option	250~300	250~350	250~450	
Accuracy E1*		$E_x, y \leq (3.0+L/200) \mu\text{m}$			
Accuracy E2*		$E_{xy} \leq (4.0+L/200) \mu\text{m}$			
Illumination		Surface light and transmission light adopt LED, brightness adjustable			
Power		110/220V(AC), 50/60HZ 30W			

All data is tested according to Standard ISO 10360-7-2011

L is measured length (units: mm)

Specification subject to change without notice

Structure



Z axis equipped with 0.5 μ m linear scale, can achieve high precision focus

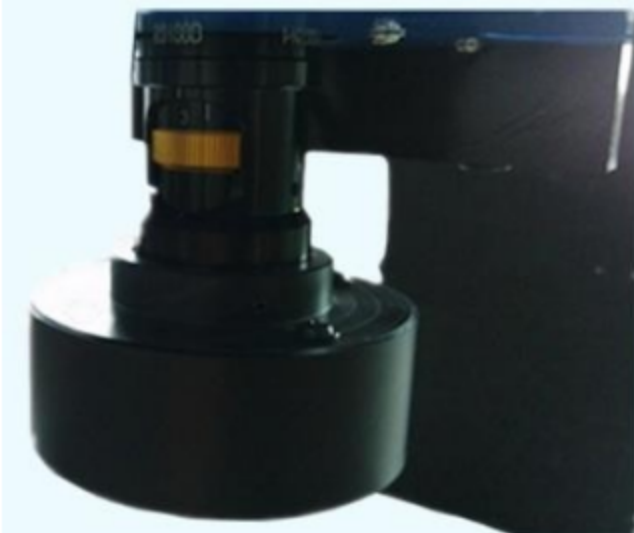
1.3MP

CCD Camera, High Resolution and Clear Image even during Fast Measurement Moving

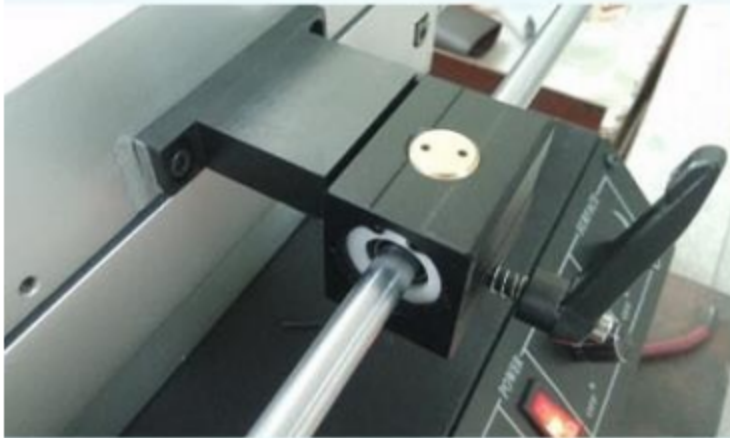


Professional Coaxial Zoom Lens

Choose the right magnification



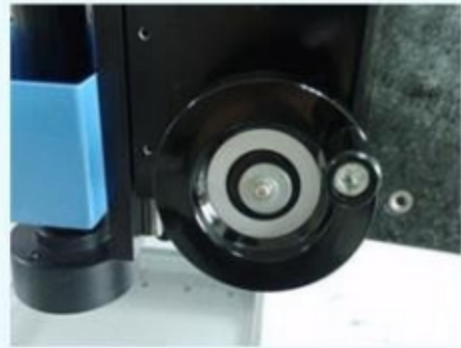
**Natural Aging
Treatment Worktable
X,Y axis equipped with
high precision scale**



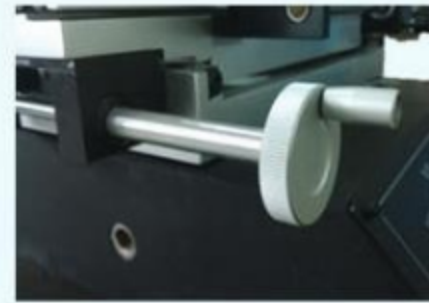
**Low Friction
transmission design,
longer working life.**



LED Surface Light



Focus Knob



Worktable Knob

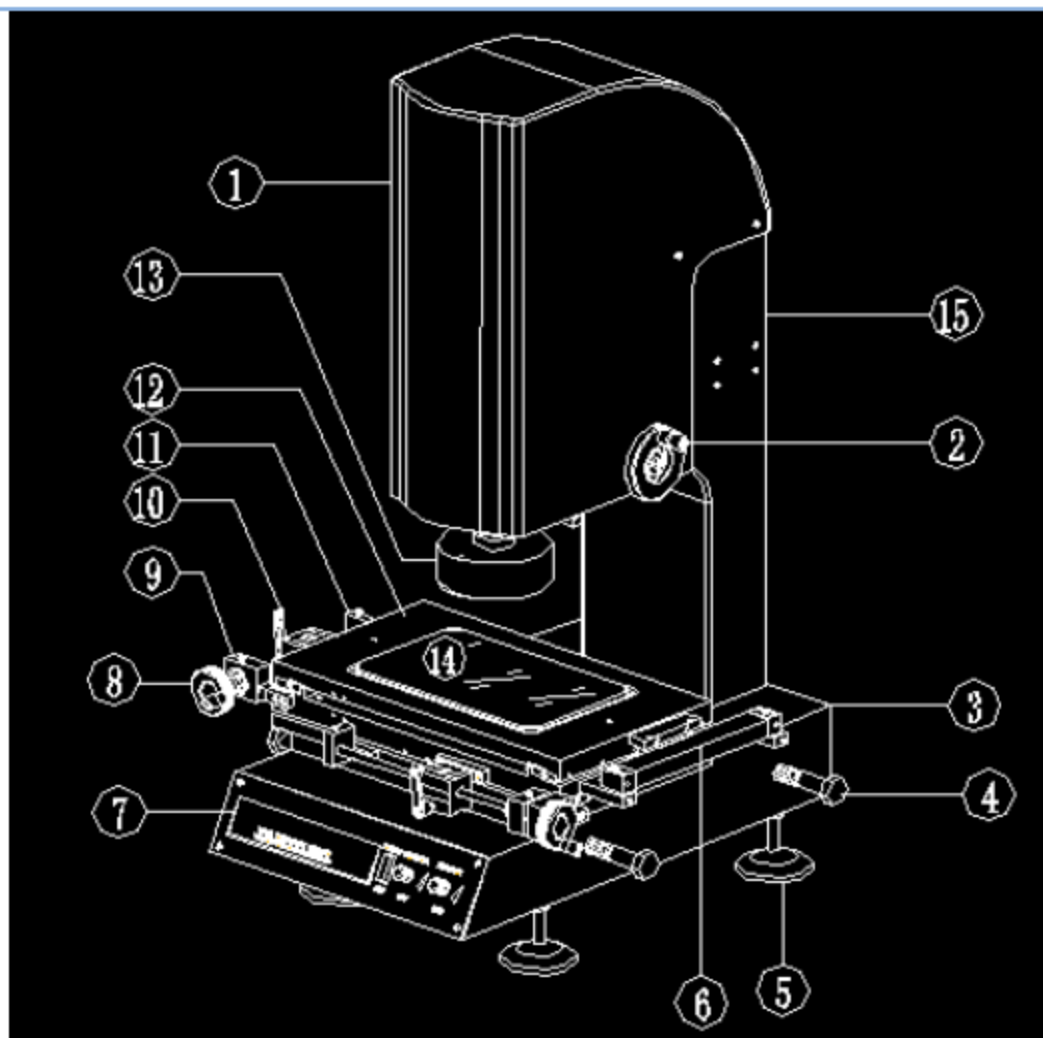
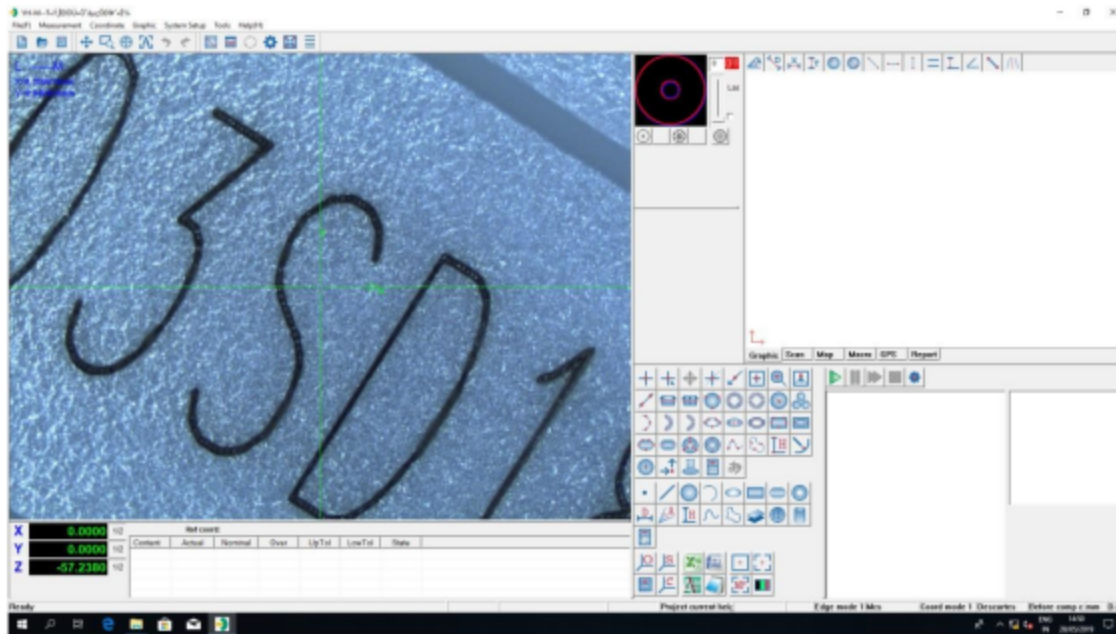


Fig. 1 Overall Structure of Machine

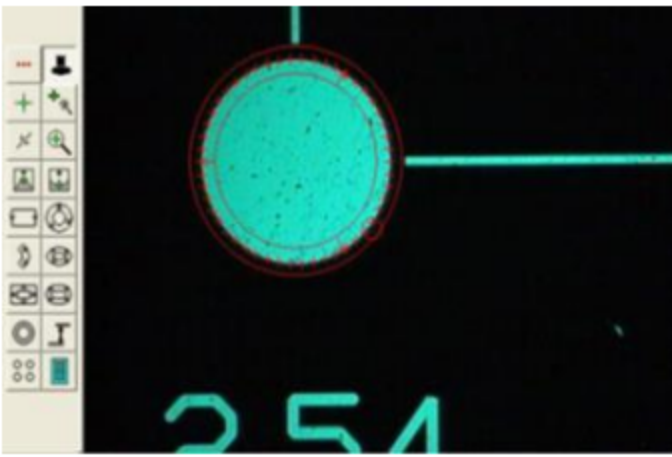
- | | | | | |
|-------------------|--------------------|-------------------|-----------------------|----------------------|
| 1. Z Cover | 2. Z Knob | 3. Granite Base | 4. Carrying Handle | 5. Supporting Legs |
| 6. Grating Scale | 7. Operation Panel | 8. Y Knob | 9. Transmission Shaft | 10. Fast Move Switch |
| 11. Drive Bracket | 12. Work-table | 13. Surface Light | 14. Glass Stage | 15. Column |

Metrology Software



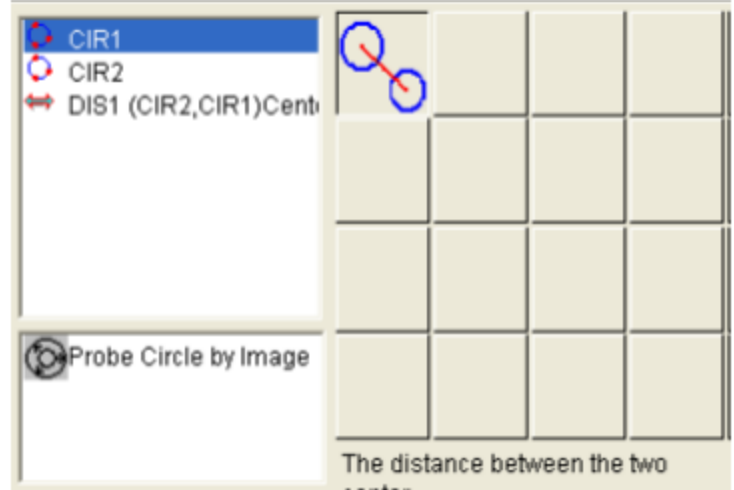
YH-M is a professional manual type metrology software for Video Measuring Systems developed. With user-friendly UI, powerful functions, it allows the users to achieve fast and precise geometry measurement.

1. 2-dimensional measurement: measure height, width, length, both sides of the angle, the cone angle, the diameter of the cylinder, chamfering, straightness, roundness, cylindricity, perpendicularity, parallelism, etc.
2. Max. and Min. Limit: can set max. and min. limits, when the actual size of the product is out of range, the corresponding measurement data will have warning in red background.
3. Reverse engineering: software draws measurement graphics, can have real direct entry in AutoCAD, also can be saved as DXF, dwg. files (can be a fast scanner, more than two times faster than general software speed).
4. Picture output: measurement or observation results can be saved as pictures in various format like BMP, Jpg.
5. Real-time sub-pixel to find the point: the first sub-pixels, advanced image processing technology into video measurement industry, greatly improves the measurement accuracy and measurement efficiency of a pixel, compared to similar software, saves at least 3/5 time, improve the accuracy of more than 2 times (in the same optical magnification).
6. Vector drawing functions: the image or fonts can be zoomed in or out steplessly.
7. Maps measurements: can capture and form a complete picture of large workpiece, and can directly make measurement on the graph.
8. The command line: directly form the command line, enter the coordinate information to generate the point, line, circle, arc, to meet the special needs of virtual measurement.
9. Line position tolerance: roundness, straightness, parallelism, perpendicularity, concentricity, etc.
10. Dimensioning function: radius, diameter, angular dimensions, linear dimensions, alignment annotation, text annotation, coordinate label.
11. Automatic measurement functions: automatically find a straight line, multi-zone automatic find a straight line, click circle marquee round, round multi-zone automatic arc.
12. Report function: measurement results can be directly converted to EXCEL, WORD, CAD.
13. Language: support Chinese, English, Korean and Japanese, Russian.



Automatic Identification

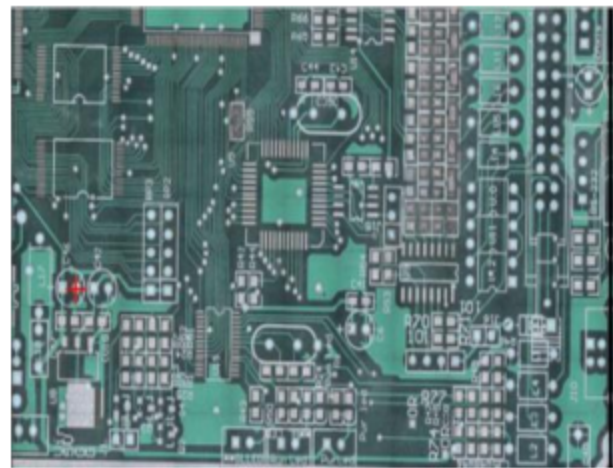
The work-piece can be found fast. Especially the edge line, circle or arc of the work-piece can be automatically and accurately measured quickly.



Macro measurement function

Macro function is measured with some of the measurements. Software provides a measurement of 16 group macro function, users can edit macro button icon.





	21	22	23	24	25
	16	17	18	19	20
A	11	12	13	14	15
T	6	7	8	9	10
c					
U					
c	1	2	3	4	5







Maps measurements






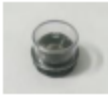


It can capture and form a complete picture of large work-piece and directly measure on the graph. Work-piece can be divided into a number of areas to take photographs. Generate large map, and dimension can be marked on the map.

Standard Accessories:

No.	Name	Picture	Description
1	Data Console		Model: VF-308 RS232 interface, measuring data processing
2	Software Key		
3	Software Disk		
4	Calibration Chart		Model: HC2016 For optical calibration
5	Dust Cover		Protect instrument from dust P.S. Size varies according to VMS model
6	User Files		Equipment Manual (English version), Certificates, etc.
7	Cable		Power cable P.S. Type varies according to the Buyer's region
8	Spare Fuse		
9	Carrying Handle		

Option Accessories:

Code	Name	Photo	Description
8004401	PC for YIHUI VMS		<p>Model: Lenovo™</p> <p>CPU: Intel ≥ 2.80GHz Dualcore</p> <p>ROM: ≥4 GB (DDR41600MHz)</p> <p>Hard drive/Flash drive: Industrial grade hard drive(≥500GB)</p> <p>Graphic card and Display: chipset integrated 2D/3D graphics display, provide an on-board VGA interface, ≥21.5"LCD monitor</p> <p>Network: 865GV/Gon-board 10/100/1000 Base-T interface (adopt Intel82540EM network chip)</p> <p>USB interface :Two sets USB interface, support USB3.0, support USB boot</p> <p>Other I/O interface: Two sets RS-232 serial interface, one set parallel interface, four sets DE interface, support DMA33,66,100, one set floppy disk controller port, support two floppy disk controller, on-board support PS/2 mouse/keyboard interface,13 trough PICMG PCI/ISA baseboard IM247</p> <p>Operation System: Official English ver. Windows 10 OS Pro. i. Installed with AutoCAD, Office software customized</p>
8004201	Glass Ruler		<p>Mechanical calibration</p> <p>Model: GL200, 200mm, 1um accuracy</p> <p>P.S. Recommend for 2010 model</p>
8004202			<p>Mechanical calibration</p> <p>Model: GL300, 300mm, 1um accuracy</p> <p>P.S. Recommend for 3020 model</p>
8004203			<p>Mechanical calibration</p> <p>Model: GL500, 500mm, 1um accuracy</p> <p>P.S. Recommend for 4030, 5040 model</p>
8004412	Rotary Table		<p>Model: RT100, Glass Size: Φ100mm</p> <p>P.S. Available on 2010 size</p>
8004413			<p>Model: RT240, Glass Size: Φ240mm</p> <p>P.S. Available on 3020 size</p>
8004414			<p>Model: RT310, Glass Size: Φ310mm</p> <p>P.S. Available on 4030,5040 size</p>
8004902	Data Console		<p>Model: UWC3200</p> <p>USB interface, coordinate data processing</p>

8004316	Sheet Metal Table		Model: S-130 Dimension(L*W*H): 130*73*68 cm Steel Structure, equipped with wheels P.S. For 2010YF, 3020YF models, supplied with standard export package
8004315	Sheet Metal Table		Model: M-140 Dimension(L*W*H): 140*80*68 cm, Steel Structure, equipped with wheels P.S. For 4030YF model, supplied with standard export package
8004314	Sheet Metal Table		Model: M-130 Dimension(L*W*H): 130*72*66 cm, Strong Steel Structure, equipped with wheels For all instrument, controller placement only. P.S. For 5040YF model, supplied with standard export package
8004311	PC Table		Model: S-97 Dimension(L*W*H): 97*52*77 cm, Strong Steel Structure. For PC, controller placement. P.S. For 5040YF model, work together with model M-130, supplied with standard export package
8004912	Coaxial Light Manual Zoom Lens		Pomeas™ Manual Zoom Lens With coaxial illumination
8004318	Extra lens		Model: 0.5X , Change magnification
8004319			Model: 2X, Change magnification
8004703	Digital Readout		Model DC-3000 P.S. Only available on manual VMS.
8004701	Laser Pointer		Work-piece laser positioning
8004329	Extra Z axis Height	(least)100mm per time	Manual type machine

P.S. For extra part not included in this list, please contact KASON for detail.

KASON reserves the right to modify the technical and stetics characteristics included in this document, without previous notice

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