

Video Measuring Machine VX4230S



Item No.: VX4230S
Product name: Flash Measuring Machine
Image Sensor: 12M CMOS
Field of view : $\varnothing 230\text{mm}$
Depth of Field: 50mm
Working Distance: 400mm
Accuracy: $\pm 5\mu\text{m}$ (Without Stitching)
Resolution: $0.1\mu\text{m}$
Loading Capacity: 15kg
Size (LxWxH): 830×605×2030mm
Weight: 375kg

Details

§ Description §

Based on visual measurement principle with precision image analysis algorithms, equipped with double telecentric optical lens with high depth of field, VX4000 series of Flash Measuring Machines achieve fast dimensional measurement by one-key operation. VX4000 series are suitable for precise dimensional measurement in the fields of machinery, electronics, molds, injection molding, hardware, rubber, low-voltage electrical appliances, magnetic materials, precision stamping, connectors, connectors, terminals, mobile phones, home appliances, printed circuit boards, medical equipment, watches, cutting tools, etc.



§ Parameters §

Model	VX4230S	VX4230
Image Sensor	12M CMOS	
Monitor	24" LCD (XGA:1920×1080)	
Acceptance Lens	Double Telecentric Lens	
Bottom light	Telecentric transmission illumination (White Light)	
Field	Φ230mm	200mm×150mm
Depth of Field	50mm	
Working Distance	400mm	
Repeatability of Image Meas.	±2um	
Accuracy of Image Meas.	±5um	
Z-Axis Travel range	65mm (Motorized)	100mm (Motorized)
Software	Vision X	
Resolution	0.1um	
Loading Capacity	15kg	
Size (LxWxH)	(830×605×2030) mm	
Weight	375kg	370kg
Input	AC220V/50Hz	
Working Environment	Temp.20°C±5°C, Humidity 30%~80%, Vibration<0.002g, Less than15Hz	

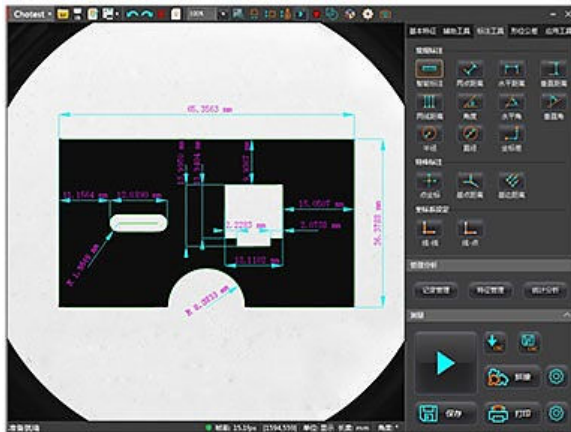
Remark:

*1 In the focus position, the environment temperature is +20 °C ± 1.0 °C

§ Applications

Vision X Pro software provides up to 80 extraction analysis tools, including [Feature Extraction] (such as maximum points, centerlines, arcs, peaks, etc.), [Accessory Tools] (such as any dot & line & circle, fitted straight line, Fit circle, tangent, inscribed circle, etc.), [Smart Labeling], [shape tolerance], special [Application Tool] (such as pitch distance, pitch angle, slot, thread, round cross, down Angle, rounded corners, etc.)

The measurement results and their main statistical values (such as average, σ , 3σ , 6σ , Ca, Cp, Cpk, etc.) will be automatically recorded and archived. Operators can select different filter conditions for history extraction.



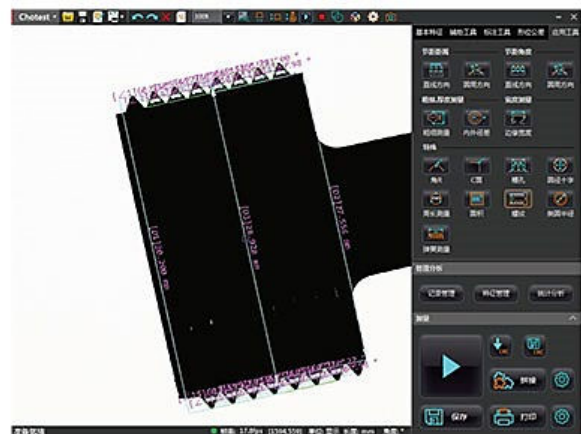
Metal plate



Gear



Metal workpiece

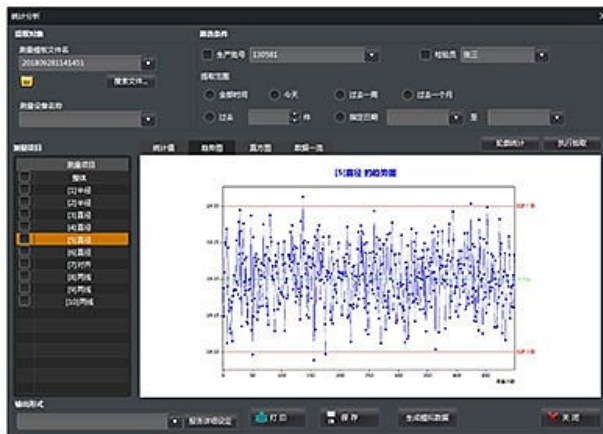


Thread

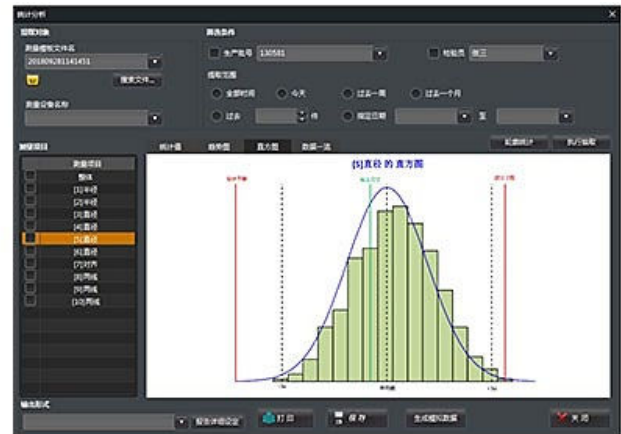
§ Statistics §

The trend graph displays the regular trend of the measured values, such as the monotonic and periodic change of the measured values, which can be used for monitoring the abnormality of the production process of producing equipment. Reflecting the status and distribution of fluctuations in product quality, the histogram can intuitively expose information about the quality situation in producing process, which can be used to predict product quality and failure rate.

Through quality diagnosis and analysis with statistical methods, SPC can monitor the product quality and changing trend of the producing process. With SPC we can find the preventive solution in the producing process, so that the subsequent inspection and repair are reduced. Consequently, the producing process control and product quality improvement are achieved.



Trend Graph



Histogram

§ More Applications §



Metal



Gasket



PCB



Phone accessories



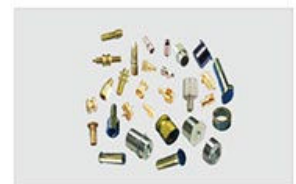
Magnetic parts



Spring



Bearing



Instrument accessorie